

PHSU - Public Health Program  
Final Self Study  
Submitted to the Council on Education for  
Public Health (CEPH)

August 20, 2018



**PONCE HEALTH  
SCIENCES UNIVERSITY**

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## Abbreviations

- AACN (American Association of Colleges of Nursing)
- ABRCMS (Annual Biomedical Research Conference for Minority Students)
- ACCME (Accreditation Council for Continuing Medical Education)
- ACGME (Accreditation Council of Graduate Medical Education)
- AI (Amnesty International)
- AMSU (Arist Medical Sciences University)
- APA (American Psychological Association)
- APC (Area Planning Committees)
- APCP for its Spanish name (Puerto Rican Association of Professional Counseling)
- APE (Applied Practical Experience)
- APPR (Psychological Association of Puerto Rico)
- ARS (Audio Response System)
- ASCO (American Society of Clinical Oncology)
- ASDs (Autism Spectrum Disorders)
- ASTMH (American Society of Tropical Medicine and Hygiene)
- ATSDR (Agency for Toxic Substances and Disease Registry)
- BMJ (British Medical Journal)
- BOD (Board of Directors)
- BRFSS (Behavioral Risk Factor Surveillance System)
- BSN (Bachelor of Science in Nursing)
- BSPH (Bloomberg School of Public Health)
- CAIMED in Spanish (Ambulatory Center for Medical Research)
- CDC (Centers for Disease Control)
- CDRH (Center for Devices & Radiological Health)
- CEA (Certified Environmental Auditor)
- CentIT2 (Center for Information Technologies and Telecommunications)
- CEO (Chief Executive Officer)
- CEPH (Council on Education for Public Health)
- CESCO (Certified Environmental and Safety Compliance Officer)
- CFO (Chief Financial Officer)
- CITI (Collaborative Institutional Training Initiative)
- CME (Continuing Medical Education)
- CRECE (Center for Research of Early Childhood Exposure and Development in Puerto Rico)
- CRRT (Caribbean Regional Response Team)
- CSTE (Council of States and Territorial Epidemiologists)
- EIS (Epidemiological Intelligence Service)
- EPA (Environmental Protection Agency)
- ERN (Emerging Researchers National)
- FDA (Food and Drug Administration)
- FETP (Field Epidemiology Training Program)
- FOA (The Fiber Optic Association)
- FT (Full time)
- DrPH (Doctor in Public Health)
- GIS (Geographical Information Systems)
- GPA (Grade Point Average)
- ILL (Reciprocal Interlibrary Loan)
- IRB (Institutional Review Board)
- LC (Library of Congress)
- LCME (Liaison Committee on Medical Education)
- LRC (Learning Resource Center)
- MBRS (Minority Biomedical Research Support)
- MCC (Medical Cadet Corp)
- MD (Doctor of Medicine)
- MPH (Master of Public Health)
- MS (Master of Science)
- MSCHE (Middle States Commission on Higher Education)

- MSMS (Master of Science in Medical Sciences)
- NCBDDD (National Center on Birth Defects and Developmental Disabilities)
- NCI (National Cancer Institute)
- NGO (Nongovernmental Officials)
- NLM (National Library of Medicine)
- NNLM (National Network of Libraries of Medicine)
- NP (Neuropsychology)
- NPDES (National Pollutant Discharge Elimination System)
- NSL (Neuroscience of Learning)
- OPAC (Online Public Access Catalog)
- ORD (Office of Research and Development)
- PAC (Public Access Catalog)
- PAHO (Pan-American Health Organization)
- PCEC (Puerto Rico Council on Education of the Commonwealth)
- PCUPR (Pontifical Catholic University of Puerto Rico)
- PhD (Doctor of Philosophy Degree)
- PHP (Public Health Program)
- PHP-EAC (Public Health Program External Advisory Committee)
- PHSU (Ponce Health Sciences University)
- PMSF (Ponce Medical School Foundation)
- PRCE (Puerto Rico Council on Education)
- PRCTRC (Puerto Rico Clinical and Translational Research Consortium)
- PRDOH (Promotion at the Department of Health)
- PREPA (Puerto Rico Electric Power Authority)
- PRI (Ponce Research Institute)
- PRIDCO (Economic Development Corporation of Puerto Rico)
- PROTECT (Puerto Rico Test site for Exploring Contamination Threats)
- PSM (Ponce School of Medicine)
- PSMHS (Ponce School of Medicine and Health Sciences)
- PsyD (Doctor of Psychology)
- PWSS (Public Water Supply Supervision)
- RCMI (Research Centers in Minority Institutions)
- RECs (Regional Extension Centers)
- REM (Registered Environmental Manager)
- RTRN (Translational Research Network)
- S/CP (School and Clinical Psychology)
- SON (School of Nursing)
- SPSS (Statistical Package for the Social Sciences)
- TEPHINET (Training Programs in Epidemiology and Public Health Interventions Network)
- UPR (University of Puerto Rico)
- USDA United States Department of Agriculture
- USEPA (United States Environmental Protection Agency)
- VP (Vice President)
- WHO (World Health Organization)
- ZIP (Zika in Pregnancy)

## **Introduction**

### **Intro 1 Describe the institutional environment, which includes the following:**

**1-a - Year institution was established and type.**

#### **University Overview**

Ponce Health Sciences University (PHSU), formerly Ponce School of Medicine (PSM) and Ponce School of Medicine and Health Sciences (PSMHS), is a private for-profit institution of higher education located in Ponce, a city on the southern coast of the tropical island of Puerto Rico, 70 miles/1000 kilometers from the capital city, San Juan. The university is dedicated to graduating bilingual, culturally-competent physicians and health professionals. PHSU is authorized by the Puerto Rico Council on Education (PRCE) to operate in Puerto Rico as a post-secondary institution and to award post-secondary degrees. The University is accredited by the Middle States Commission on Higher Education (MSCHE) since 2003.

#### **History and Evolution of PHSU**

In 1977, the Pontifical Catholic University of Puerto Rico (PCUPR) developed a medical education program in its Ponce campus. In 1979, PCUPR decided to phase out the barely established medical program due to economic reasons. In January 1980, a group of community leaders founded the Ponce Medical School Foundation (PMSF), under the laws of the Common Wealth of Puerto Rico, and assumed responsibility for the administration of the medical program; leading to a creation of a private, free standing and independent school of medicine in Ponce. This transition was managed successfully by the Foundation maintaining the integrity and continuity of the medicine program. Under the new administration, the now, private, freestanding School of Medicine graduated its first class of 23 students in 1981. Since then, the school has successfully operated without interruption.

In July 1980, the Puerto Rico Council on Education (PRCE) approved the Foundation to operate Ponce School of Medicine (PSM), a community-based medical school. In 1981, the Liaison Committee on Medical Education (LCME) granted accreditation to its Doctor of Medicine (MD) Program.

In 1983, PSM received a Minority Biomedical Research Support (MBRS) program grant and established the RCMI (Research Centers in Minority Institutions) program. The RCMI program, now fully established, includes several public health research projects. The addition of these research activities made it possible for the school, in 1988, to institute a graduate program in biomedical sciences. Students in this program graduate with a PhD in biomedical sciences.

The new campus for Ponce School of Medicine was inaugurated in January 1995. The facilities include a research building, a library building, classrooms, a teaching laboratory, and the Gross Anatomy building.

A decade later, in 1999, PSM began a doctoral level program in clinical psychology conferring a Doctor of Psychology (PsyD) in Clinical Psychology for its successful graduates. The Program also offers a PhD in Clinical Psychology; both are accredited by the American Psychological Association, APA. In addition, the Psychology Program offers two professional certificates, the Certificate in Family and Couples Therapy and the Postgraduate Certificate in Neurosciences of Learning, and a Master of Science degree in School Psychology with specializations in Neuropsychology or Neuroscience of Learning.

In 2001, the school initiated the Ambulatory Center for Medical Research (CAIMED in Spanish); it is presently participating in over forty clinical studies aimed at improving the quality of healthcare being offered to our population. PHSU Wellness Center, an intramural multispecialty ambulatory healthcare center, was also inaugurated in 2001. This Center also serves as a teaching site for clinical clerkships.

In its continuing effort to prepare highly qualified professionals, Ponce School of Medicine began offering a Master of Public Health (MPH) with a general track emphasis in 2002. The purpose of this new program was to meet the public health needs of southern Puerto Rico, which had been underserved by existing academic institutions. In 2007, the Public Health Program (PHP) added MPH tracks in epidemiology, environmental health and a doctoral program

in epidemiology leading to a Dr.PH degree. Since July 2010 the concept of “Health Sciences” was added to Ponce School of Medicine name to cover the other health sciences disciplines, Biomedical Sciences, Clinical Psychology, and Public Health. Reflecting this broadened academic offering, the school’s name was changed to Ponce School of Medicine and Health Sciences (PSMHS). The Public Health Program moved to its new facilities in 2011.

In 2006, the institution established a partnership with the Moffit Cancer Center in Tampa, Florida with a grant from the National Cancer Institute (NCI) to focus on cancer health disparities in four target areas: research, education, bio banking and community outreach aimed at reducing cancer-related health disparities in the Hispanic/Latino populations. Faculty of the Public Health program participate in this initiative. This grant was renewed until 2022.

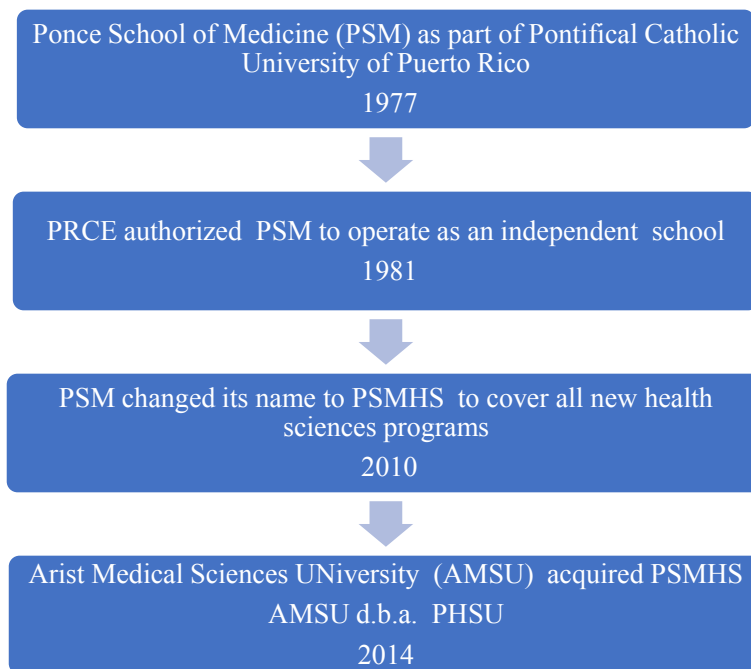
In 2010, the University was chosen by the Federal Department of Health and Human Services, Office of the National Coordinator for Health Information Technology, to operate one of 62 Regional Extension Centers (RECs) in the United States, to assist 4,000 primary care physicians in Puerto Rico and the Virgin Islands to successfully adopt and implement the electronic health records technology.

Also, in 2010 the institution was invited to participate in the Puerto Rico Clinical and Translational Research Consortium (PRCTRC), a collaborative partnership with UPR-Medical Sciences Campus and the Universidad Central del Caribe to integrate existing infrastructure for clinical and translational research to support and expand health disparities research and to facilitate the translation of knowledge from the bench to the community. Public Health faculty participate in this consortium. The PRCTRC was renewed until 2019.

In 2013, economic uncertainty, rapid advances in technology, increased competition and aging facilities required the school to seek alternatives that would allow it to navigate and overcome its fiscal and academic challenges. In its search, the institution identified Arist Medical Sciences University (AMSU), an investment firm focused exclusively on the global higher education sector. On September 5, 2014, AMSU, Public Benefit Corporation, acquired Ponce educational infrastructure to operate as Ponce Health Sciences University (PHSU). This acquisition created the structure and investment needed to push forward the vision and long-term goals of the University.

The figure below summarizes the evolution of Ponce Health Sciences University:

Figure 1: Evolution of Ponce Health Sciences University (PHSU)



**1-b - Number of schools and colleges at the institution and number of degrees offered by the institution at each level**

The academic units of the University include three schools with their respective degree programs and programmatic accreditations. These are: School of Medicine, the School of Education and Health Sciences, and the School of Behavioral and Brain Sciences. The School of Medicine includes the following programs: Doctor of Medicine, Doctor of Philosophy in Biomedical Sciences, and the Master of Science in Medical Sciences. The Public Health Program and the Bachelor of Science in Nursing are under the School of Education and Health Sciences. The School of Behavioral and Brain Sciences contains the PsyD and PhD in Clinical Psychology, Master of Science in School Psychology with specialization in Neuropsychology or Neuroscience of Learning, Postgraduate Certificate in Neurosciences of Learning, and the Professional Certificate in Family and Couples Therapy.

Below are the descriptions of the programs by school:

**School of Medicine**

Medicine Education Program

The Medicine Education Program is a 4-year program with emphasis in primary care and a duration of 166 weeks. The Program consists of two years of pre-clinical (basic science) courses in the core disciplines of Gross Anatomy, Biochemistry, Histology and Cell Biology, Microbiology/Immunology, Neurosciences, Pathology, Pharmacology and Physiology. The pre-clinical years provide integration of clinical content and early clinical experiences through Introduction to Clinical Skills, Pathophysiology, Behavioral Sciences and Basic Psychiatry. In addition, longitudinal programs in Community Medicine, Problem-Based Learning, Geriatrics, and Medical Ethics are integrated in the educational program of the first two years.

The third year provides the core clinical clerkships: Family Medicine, Internal Medicine, Obstetrics and Gynecology, Pediatrics, Psychiatry and Surgery. The fourth year complements these core clinical experiences with advanced rotations in Internal Medicine, Emergency Medicine, Clinical Radiology, and Primary Care Selective. Five months of elective rotations provide additional clinical experiences in several subspecialty fields. A five-year program may be available for students who need to proceed at a slower pace during the basic sciences. Within this program, the first two years are extended to three.

The Medical Education Program is accredited by the Liaison Committee on Medical Education (LCME), the Middle States Commission on Higher Education (MSCHE), and licensed by the Puerto Rico Council on Education (PRCE)

Biomedical Sciences Program

The Doctor of Philosophy Degree (PhD) in Biomedical Sciences is an integrated, interdepartmental program in the basic biomedical sciences that seeks to provide students with a broad-based two-year core curriculum followed by advanced courses and dissertation research leading to a PhD degree. The Program reflects the interest of the Institution to promote the formation of professionals in the biomedical sciences. The degree is awarded after successful completion of an interdisciplinary core curriculum in the biomedical sciences, which includes Histology, Biochemistry, Microbiology, Physiology, Pharmacology, and electives in special topics. Students must also complete an original research project that significantly contributes to the scientific knowledge in a field. Most faculty in this program have dual appointments with the Medical Education Program.

Master of Science in Medical Sciences (MSMS)

Recently (2014) the University incorporated a Master of Science in Medical Sciences (MSMS) for those students who want to supplement the undergraduate record with an enhanced science preparation to be eligible for admission to any of the health professions, including medicine.

The MSMS is an integrated, multidisciplinary interdepartmental program in the basic medical sciences that is designed to provide trainees with a broad-based one-year core curriculum followed by a comprehensive examination leading to the Master of Science (MS) degree in Medical Sciences. PHSU is committed to the development of independent, competitive and well-trained professionals with strong interpersonal communication skills. The major goals of the MS



Program in Medical Sciences are to further develop students who have the necessary skills and knowledge to pursue competitive research and academic careers.

## **School of Education and Health Sciences**

### Public Health Program

#### MPH Program

In the year 2000, the Puerto Rico Council on Higher Education accredited the Public Health Program at PHSU. The MPH is a multi-disciplinary program that provides education, research and community service to develop skills of ethical and competent public health practitioners and researchers, who will excel in disease prevention, health promotion and health protection in the local and global communities. The two-year 55-credit program is offered in the evening.

#### D.Ph. in Epidemiology

The goal of the D.Ph. in Epidemiology is to educate professionals with knowledge, skills, and abilities in the development of epidemiological methodology that will be applied to health needs including the identification of risk factors, clinical research, programs assessment, prevention, protection, and treatment of diseases. The D.Ph. is awarded after the successful completion of an interdisciplinary 63-credit curriculum offered in the evening.

#### Bachelor of Science in Nursing (BSN)

Ponce Health Sciences University (PHSU) has developed a Bachelor of Science Degree in Nursing (BSN) Program offering Direct Entry and Upper Division Entry Options. The 121-credit hour BSN Program is sequentially structured and can be completed in approximately three to four calendar years. The Program, based in the American Association of Colleges of Nursing (AACN) Essentials of Baccalaureate Education for Professional Nursing Practice (October 20, 2008), prepares nurse generalists to be providers, designers, leaders, managers, and coordinators of care as well as accountable members of the nursing profession, and to pursue graduate level education.

## **School of Behavioral and Brain Sciences**

### PsyD in Clinical Psychology

The PsyD in Clinical Psychology program was created in 1998, begun during the Academic Year 2000 after authorization from the PRCE. In January of 2000, the Program was accepted as Associate Member of the National Council of Schools and Programs in Professional Psychology. The American Psychological Association (APA) granted the program its accreditation in 2004. The Psychology Program seeks to develop a new generation of Clinical Psychologists capable of performing with excellence in different clinical settings. The Program ascribes to a bio-psychosocial systemic model and follows a practitioner/scholar educational model. It prepares Clinical psychologists able to competently integrate the professional knowledge, skills attitudes, and values that serve as the foundation of clinical practice in evidence-based training experience.

#### PhD in Clinical Psychology

The PhD in Clinical Psychology program is based on the Scientist-Practitioner Model of Professional Psychology as articulated by the Boulder Conference in 1949. The program aims at fostering the development of both research and clinical competencies in the training of clinical psychologists. The PhD program trains students for the delivery of evidence-based psychological services when assuming the contemporary roles of the profession in diverse clinical situations.

### Master of Science in School Psychology with specialization in Neuropsychology or Neuroscience of Learning

The Master of Science (MS) in School Psychology is a Terminal Master's Degree Program that will concomitantly provide students the foundations of the School and Clinical Psychology (S/CP) profession. The program will prepare its graduates to engage in competent practice of the profession at the Master level. As part of the program, students have an option of completing a specialization in Neuropsychology (NP) or in Neuroscience of Learning (NSL). With this degree, students will be able to seek licensing in PR and in most states within the USA. They may also pursue doctoral studies in School Psychology, Clinical Psychology, and Neuropsychology or in Clinical Neuropsychology.

### Postgraduate Certificate in Neurosciences of Learning

This certificate program trains teachers, students and professors to comprehend and use principles of neuroscience and neuropsychology in their work with students and for implementing learning environments based upon these principles. This includes specific instructions to teach children with learning disabilities and neurodevelopmental disorders such as Autism, Asperger, Attention Deficit Disorder, and Mental Retardation. The program also addresses the needs of Psychologists and other school personnel interested in developing advanced and extended knowledge on the application of neuroscience of learning principles to their clinical work with children.

Psychologist accepted to the program who already have a solid background on the biological bases of behavior may directly register in an elective, NSL 0503 Pediatric Neuropsychological Assessment course providing advanced assessment competencies in school and clinical settings.

### Professional Certificate in Family and Couples Therapy

This certificate is geared to Psychologists, Psychiatrists, Social Workers, Professional Counselors, Family Medicine/Primary Care Physicians, and other professionals holding a professional license and at least a master's degree in areas related to family interventions. The primary goals of this certificate program are: to develop or enhance the competencies of licensed mental health or health professionals in therapeutic interventions with couples and families and to develop or enhance the competencies of licensed mental health or health professionals in the knowledge of systemic interventions and in the cultural, ethical and legal implications of couples.

**1-c - Number of university faculty, staff and students.**

Faculty, staff and student's distribution by PHSU Schools is as follows:

**School of Medicine:**

Medical Program:

Currently has 480 total faculty (Basic Science Faculty + Clinical Faculty) some of them with dual appointment with the Biomedical program and/or other institutions; and 305 students.

Biomedical Program:

Currently has 49 total faculty (Basic Science Faculty) some of them with dual appointment with the Medical Program and/or other institutions; and 22 students.

Master of Sciences in Medical Sciences:

Currently has 49 total faculty (Basic Science Faculty) some of them with dual appointment with the Medical Program and/or institutions; and 58 students.

\*Currently the School of Medicine has 34 staff.

**School of Health Sciences**

Public Health Program:

As of August 2017, the PHP has a total of 14 primary and 31 secondary faculty members, 3 staff and 136 students. (Primary faculty as defined by full time at PHP, and secondary as contract or part time faculty at PHP)

Bachelor of Science in Nursing:

Currently has an Associate Dean of Nursing, 2 full-time nursing faculty, 2 part-time nursing faculty, 6 adjunct faculty, 1 Nursing Clinical Coordinator, 1 administrative assistant and 10 students.

**School of Behavioral and Brain Sciences**

PsyD in Clinical Psychology Program

Currently has 31 total faculty and 211 students.

PhD Clinical Psychology

Currently has 22 total faculty and 108 students

Master of science in School Psychology with specialization in Neuropsychology or Neuroscience of Learning

\*Currently has 2 full time faculty and 19 students

Postgraduate Certificate in Family and Couples Therapy

\*Currently has 1 full time faculty and 8 students

Post Certificate in Neurosciences of Learning

\*\*Currently has 2 full time faculty and 13 students

\* The Master and Certificates use PsyD and PhD Faculty

\*\* Currently the School of Behavioral and Brain Sciences has 3 staff

## **1- d - Brief statement of distinguishing university facts characteristics.**

1. The University serves minority students, low socioeconomic groups and first-generation college graduates. PHSU students are mainly Puerto Ricans and Hispanics/Latino. Most students (67%) are female. Currently, students from the University of Nicosia, Cyprus, participate as international exchange students in the School of Medicine.

2. PHSU has played a vital role in the history of medicine and health-related professions in Puerto Rico. During its 40+ years of history, the University has graduated 2,027 physicians, 72 biomedical scientists, 368 PsyD clinical psychologists, 55 PhD clinical psychologists, 50 master in clinical psychology, 340 master's in public health, 34 doctoral epidemiologists, 136 medical sciences master students, 91 graduates with certificates in family and couple's therapy and granted 46 Post Certificates to professionals in Neurosciences of Learning; for a total of 3,219 graduate level health care professionals.

### **Recent developments at PHSU**

The most significant developments since September 5, 2014, include the followings:

#### **Changes and Evolution of Leadership**

Following the acquisition by Arist, Dr. Olga Rodriguez, who until then had served as interim President and Dean of Medicine, was appointed Dean of Medicine and Dr. David Lenihan was appointed President and CEO of the University.

A new leadership position of Provost/Vice President of Academic Affairs was created and filled by Dr. José Torres-Ruiz.

Other new positions that were created and filled included a Chief Financial Officer, VP of Student Affairs, Dean of the School of Education and Health Sciences, Associate Dean of Public Health, Assistant Dean of Medical Sciences, Assistant Dean for Curriculum and Faculty Development.

#### **Strengthening of Fiscal Position**

Since September of 2014, the University has solidified its fiscal resources. PHSU's Tangible Net worth has grown to approximately \$13,721,000. Its Composite Score Rate has increased to 2.78 and its 90/10 Title IV percentage has held steady at 86%.

#### **Improvements in Marketing and Public Relations**

Conscious of the importance of better positioning in a highly competitive educational marketplace, PHSU has contracted a professional Advertising Firm, Adrenaline Group, to assist in re-branding the University. The University is now engaged in a total re-design of its website and marketing materials as well as increasing our public relations outreach.

#### **Improvements in Organizational Structure**

Actions implemented to streamline organizational effectiveness and support data analytics include, but are not limited to:

Reorganization of Centralized Student Services was implemented in the past year and many functions have been improved through technology

Formalization of the Department of Curriculum & Faculty Development and appointment an Assistant Dean

Automation of processes within the Human Resources Department including, but not limited to, access to over 400 online courses to support professional development, an online employee portal and access to a 24/7 benefits support

line for the employees

#### Establishment of the Office of Compliance

Investing and implementation of systems that can streamline operations while providing data analytics. These systems include:

One45 CurricMap  
ExamSoft  
Jenzabar  
NeoMed EHR for the PHSU Wellness Center  
Ekuali Grants Management System  
Office 365

#### Change of the Corporate Legal Name

The Board of Directors of Arist changed the legal name to Tiber Health, Public Benefit Corporation, d.b.a. Ponce Health Sciences University (PHSU) on May 2017.

#### Development of the School of Nursing

PHSU recently developed a School of Nursing (SON) with plans to offer undergraduate to graduate-level nursing programs with the Bachelor of Science in Nursing (BSN) as the first degree beginning on September 2017.

#### Establishment of PHSU San Juan University Center

PRCE and MSCHE approved the substantive change to establish the additional location in San Juan, the capital of Puerto Rico, to offer two degree-programs: the doctoral program in clinical psychology and the master's in medical sciences. Both programs are also offered at the Ponce Campus.

#### Establishment of PHSU- St. Louis, MO Branch

The Board Department of Higher Education of the State of Missouri granted permission to operate a new PHSU Branch Campus in St. Louis Missouri to offer the doctoral program in clinical psychology and the master's in medical sciences. MSCHE granted a provisional accreditation pending the results of the site visit on October 10-12, 2018.

**1-e - Names of all accrediting bodies to which the institution responds.**

The Ponce Health Sciences University (PHSU) is licensed by:

The Puerto Rico Council on Education of the Commonwealth of Puerto Rico (PRCE)<sup>1</sup>.  
Approved the renewal license on April 29, 2016 until April 28, 2024

**Institutional and Programmatic Accreditations:**

Middle States Commission on Higher Education (MSCHE)<sup>2</sup>.

Initially accredited in 2003 and reaffirmed the accreditation in 2013; next site visit is scheduled for 2018-2019

Liaison Committee on Medical Education (LCME)<sup>3</sup>.

Full accreditation of the MD program in 2016 for an undetermined term

Council on Education for Public Health (CEPH)<sup>4</sup>

Accredited the Public Health Program in 2013; next site visit is scheduled for 2018

American Psychological Association (APA)<sup>4</sup>.

The PsyD program has been accredited since 2004; next site visit is scheduled for 2021

The next site visit for the PhD program is scheduled for 2018

**Specialized Accreditations:**

The Psychiatric Residency Program, located at PHSU Wellness Center, is accredited by the Accreditation Council of Graduate Medical Education (ACGME). The next accreditation site visit is scheduled for 2018.

The Continuing Medical Education (CME) Program is accredited by the Accreditation Council for Continuing Medical Education (ACCME). The next evaluation is scheduled for 2018.

<sup>1</sup> Puerto Rico Council for Higher Education, PO BOX 19900, San Juan, Puerto Rico 00910-1900. <http://www.ces.gobierno.pr>

<sup>2</sup> Middle States Commission on Higher Education, 3624 Market Street, Philadelphia, PA 19104. <http://www.msche.org>

<sup>3</sup>The Liaison Committee for Medical Education (LCME) is jointly sponsored by the [Association of American Medical Colleges \(AAMC\)](#) and the Council on Medical Education of the [American Medical Association \(AMA\)](#). Association of American Medical Colleges, 2450 N Street, N.W., Washington, DC 20037, <http://www.lcme.org>; American Medical Association, 515 North State Street, Chicago, IL 60610

<sup>4</sup> Council on Education for Public Health. 1010 Wayne Avenue, Suite 220, Silver Spring, MD 20910, <http://www.ceph.org>

<sup>5</sup>American Psychological Association, Office of Program Consultation and Accreditation, 750 First Street, NE, Washington, D.C. <sup>4</sup>

Accreditation Council for Graduate Medical Education, Suite 2000, 515 North State Street, Chicago, IL 60610-4322, <http://www.acgme.org>

**1-f - Brief history and evolution of the public health program and relate organizational elements, if applicable.**

PHSU Public Health Program is in the southern part of Ponce, a historically important city that is itself located on the south coast of the beautiful island of Puerto Rico. After the capital city of San Juan, Ponce is the second largest city in Puerto Rico, with a population of more than 165,000. It is known variously as “La Perla del Sur” (the Pearl of the South) and as “la Ciudad de los Leones” (the City of the Lions). Ponce is home to multiple other undergraduate and graduate academic institutions, including the Pontifical Catholic University of Puerto Rico, the University of Puerto Rico (UPR) in Ponce, and Inter American University. PHSU’s Public Health Program (PHP) is, however, the only public health program in the southern part of the island and has the only DrPH epidemiology program anywhere in Puerto Rico and the Caribbean Islands. The students at PHSU study and live in a rich and rewarding environment that features the physical beauty of a tropical island coupled with the skills and knowledge of a highly trained faculty.

In the year 2000, the institution submitted the proposal for the implementation of the master’s in public health (MPH) program to the PR Council on Education. PRCE approved the implementation of the newly developed Public Health Program at PSMHS. The MPH Program enrolled its first 30 students in August of 2002 and awarded the MPH degree in 2004. This initial program was completed in two consecutive academic years organized in six trimesters. New MPH tracks in environmental health and epidemiology were added and in 2007 the Public Health program expanded its academic offering to include a DrPH program in Epidemiology. The purpose of the Public Health program was to meet the public health needs of southern Puerto Rico, which had been underserved by existing academic institutions. In April 2013, the PHP was accredited by the Council on Education for Public Health (CEPH).

The Master Program in Public Health was established within the structure of the University; in 2007 was renamed as Public Health Program (PHP). In the past, the PHP administrator, then the Director, had multiple direct reporting relationships: to the Dean of Academic Affairs in subjects related to development, curriculum coordination, and evaluation; and to the Associate Dean of Research in areas related to searching external funding, research projects and research laboratories. The Director also reported to the Dean for Student Affairs in issues related to students’ grievance and policies of admission; to the Associate Dean for Faculty and Clinical Affairs in subjects related to faculty recruitment, retention and promotion and for issues related to clinical affiliations. While these administrators are still available for consultation, the reporting relationship of the Public Health Program has been simplified and clarified with the creation of the School of Health Sciences, a separate school from the school of medicine. Two programs, Clinical Psychology and the Public Health Program, then were re assigned to the new Dean of Health Sciences while biomedical sciences and the medicine education program remained under the Dean of the School of Medicine. In 2015, the School of Health Sciences was renamed as the School of Education and Health Sciences. Now it oversees two programs: Public Health and Nursing education. The chief administrators of these programs hold the position of Associate Dean. The Dean of this school is responsible for all academic aspects of these programs. The Dean responds directly to the Provost/Vice President of Academic Affairs.

In 2014, the institution was acquired by a for profit corporation. While this acquisition created the new organizational structure needed to push forward the mission and vision of PHSU, the Associate Dean for Public Health continues to report to the Dean of Education and Health Sciences. Reporting subjects include those related to the public health strategic plans, changes in curriculum, assessment and metrics processes, students’ issues, faculty recruitment and evaluation, among others.

PHSU administrative units provide support to all programs and schools. This organizational structure retained common access to appropriately shared infrastructure and centralized administrative and student services. The small size of the school and collaborative cultural norms also promotes easy access to other components of PHSU.

The figure below summarizes the history and evolution of the Public Health Program at PHSU:

Figure 2: History and Evolution of the Public Health Program

<b>PUBLIC HEALTH PROGRAM (PHP) HISTORY</b>		
PHSU began offering a Master of Public Health (MPH) with general track in 2002	In, 2007, added MPH tracks in epidemiology, and environmental track and doctoral program in epidemiology leading to a DrPH.	In 2013, the PHP was accredited by the Council on Education for Public Health



**Intro 2. Organizational charts that clearly depict the following related to the program**

**2-a - The program's internal organization, including the reporting lines to the dean/associate dean.**

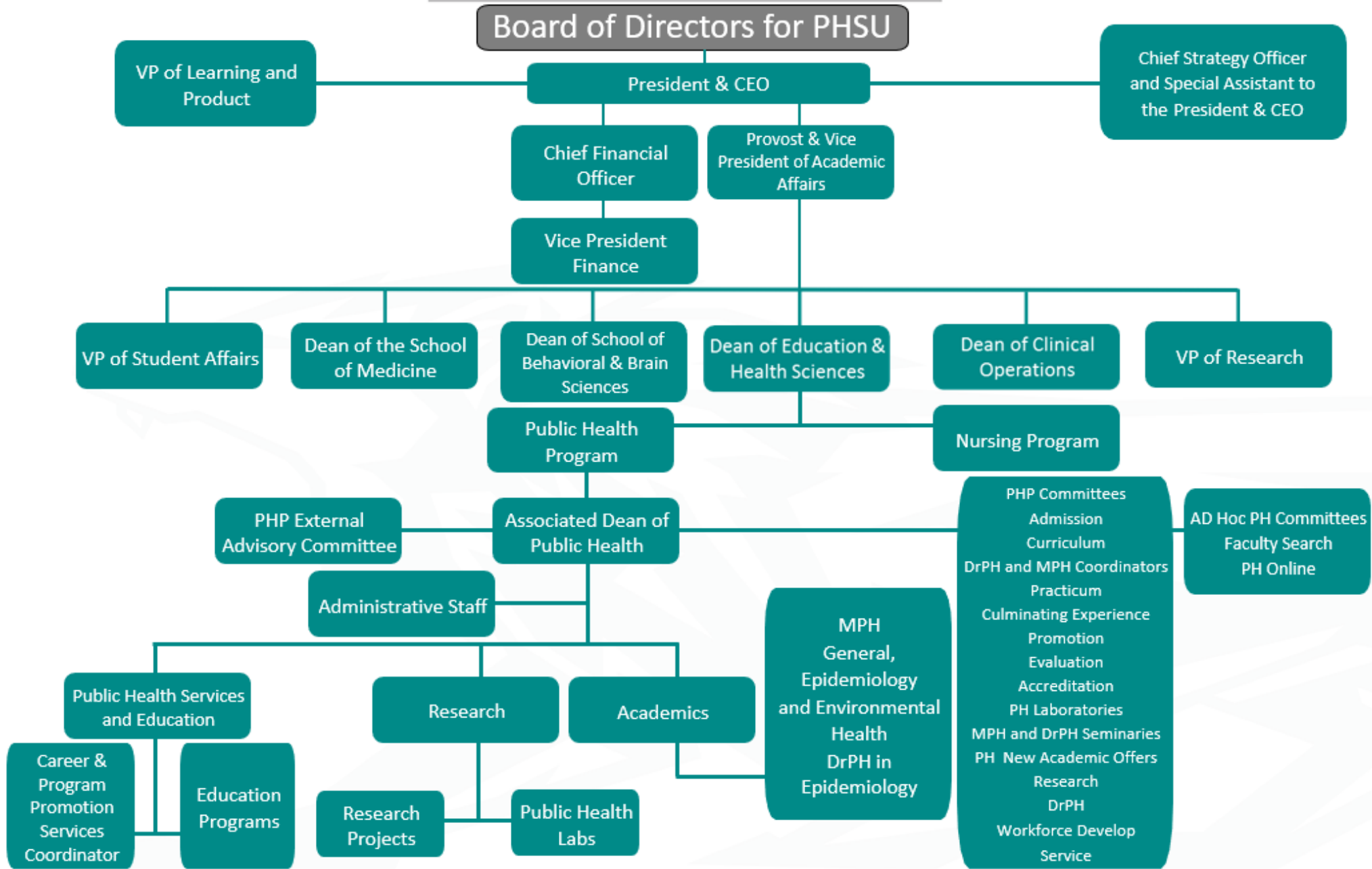
The Public Health Program of Ponce Health Sciences University integrates three general areas, reflecting the primary purposes of the University: Academic, Research, and Service. The Academic area includes the professional public health programs: three master's degrees in Public Health with the following specializations: MPH General, MPH in Epidemiology, MPH in Environmental Health; and the Dr. PH in Epidemiology. Every one of these programs has an assigned coordinator.

The Research area is divided in two parts: Research Projects, and Public Health Laboratories. The Research Projects part encompasses those projects funded with seed money from the Public Health Program, the PRCTRC Consortium and RCMI. The Public Health Laboratories part is devoted to promoting the development of the public health program faculty researchers.

The coordinator of the Career and Program Promotion is within the Service area. This coordinator has the responsibility to assist active students and alumni in job searching, provides information regarding internships, fellowships, and continuing education. In this area we also have the education component of Public Health, including workforce development, seminars, and community services. (Refer to ERF for Responsibilities of the Associate Dean and Coordinators)

Refer to the organizational structure of the PHP below:

Figure 3: Public Health Program Organizational Chart



**2-b - The relationship between the program and other academic units within the institution. For programs, ensure that the chart depicts all other academic offerings housed in the same organizational unit as the program. Organizational charts may include committee structure organization and reporting lines.**

The organizational structure of PHSU and the relationship between the program, the Board of Directors, the President and CEO, the four Deans, the Provost/ Vice President of Academic Affairs, Chief Financial Officer, and the VPs of Students Affairs and Research are shown in the figure above.

PHP has a participation and an active role within the administrative organization. Some examples are described below:

Budgeting and resource allocation, including budget negotiations, indirect cost recoveries, distribution of tuition and fees and support for fund-raising

Annually the Associate Dean of the Program develops a budget that is discussed, sent to the Dean of Health Sciences and reviewed with the Budget Officer (*See section C1. Fiscal Resources*). The Board of Directors has final approval authority over the PHSU institutional budget.

Most of the funds generated by the program are allocated directly to the PHP. Funds generated by tuition, minus the school fees, are used by the Program to cover its expenditures. Research funds are only incorporated into program income revenue if the Primary Investigator is part of the PHP. Otherwise, only the salary component is reflected in the income and expenditures of the program. Allocation of some portion of the research indirect cost recoveries is currently under discussion between the PHP Dean, the Dean of Health Sciences, the budget officer (*see C.1 Fiscal Resources and E.4 Faculty Scholarship sections*).

Personnel recruitment, selection and promotion, including faculty and staff

The Associate Dean of the PHP together with the primary faculty and the PHP curricular committee identify the need for new faculty based on the student- faculty ratio, the course coverage needs and available funding. The chair of the PHP faculty recruiting committee and the Associate Dean of the PHP develop a job description. The Associate Dean requests the position based on the PHP needs and justifies it to the Dean for Education and Health Sciences. Subsequently a search committee is appointed for the selection and recruitment of the new faculty. The recruitment process includes active national and international searches, and advertisement in websites. Sometimes, the PHP may identify faculty with a primary appointment in another department of PHSU with education in public health or with broad experience in public health that may be interested in being part of the Program, usually as secondary faculty. Also, the Associate Dean recruit's secondary faculty with experience in public health from the community to enhance the collaboration in teaching and research.

Once a list of candidates is obtained, curriculum vitae is reviewed, and a list of candidates developed for further evaluation, including personal interviews. Candidates are reviewed for their public health experience, degree qualifications and the extent to which they meet the program needs. During the interview process, the faculty search committee further investigates the candidate's research interests, teaching capability. Candidates approved by the faculty search committee are submitted to the Associate Dean of PHP with the recommendation for hiring. The Associate Dean reviews the candidate qualifications and conducts an interview. The PHP Associate Dean forwards the hiring recommendation from the committee, the position function description, CV and draft offer letter to the Dean of Health Sciences. The PHP Associate Dean consults with her on the final position description, responsibilities and salary to be offered to the faculty candidate. The final decision rests on the Provost/Vice President of Academic Affairs. The offer letter is sent by Human Resources. Office staff is hired by the Associate Dean of the PHP from candidates forwarded from the Office of Human Resources.

Evaluation of Faculty

All faculty members are evaluated annually (*see Electronic Resource file (ERF)*). PHP developed its faculty evaluation sheet, as the previously used evaluation sheet was designed for the evaluation of the medicine faculty and was not adapted to the functions of the public health faculty. The evaluation includes evidence of participation by the faculty member in the following activities: academic, administrative, research and service. The regular annual

evaluation is used for promotion considerations and for recommending contract renewal and/or salary increase. The evaluation must be signed by the faculty member and the Associate Dean and is sent to the Dean of Health Sciences for revision. A copy of the evaluation report and the program's recommendations must be filed within the faculty member's program, and at the Human Resources Department.

Faculty Promotions. All nominations for faculty promotion originate with the Associate Dean. Each program must follow specific instructions as to the method of evaluation and specific criteria to be used within the program for promotion and retention. These methods and criteria must adhere to the general Ponce Health Sciences University guidelines. The recommendation for PHP faculty promotions is submitted to the Dean of Education and Health Sciences and the Provost/Vice President of Academic Affairs. The Vice President of Academic Affairs will then refer the recommendations for promotion to the PHSU Faculty Promotion Committee for their evaluation and recommendation. The committee reviews all submitted recommendations at the next scheduled meeting and forward its recommendation to the Provost/Vice President of Academic Affairs for approval. However, any faculty member whose promotion has not progressed at the Program level may, in writing, request a special evaluation by the PHSU Faculty Promotion Committee. The Provost discusses all recommendations with the President. (*See section E.3 for further details.*)

Academic standards and policies, including curriculum development and oversight

The Public Health Curriculum Committee approves any modifications of the PHP curriculum; the proposed modification is presented to all faculty for its recommendations and then sent for approval to the Associate Dean of the PHP program and subsequently to the Institutional Curriculum Committee, where the chair of the PHP curriculum committee participates as member. There is also a representative public health student in the institutional curriculum committee. The Institutional Curriculum Committee is responsible for ensure that any new program or modification is consonant with the mission of the University. The academic standards are governed by the policies outlined by PHSU in the General Catalog and on the PHSU website. The policies that directly affect the students of the Public Health Program are included in the Student Policy Manual.

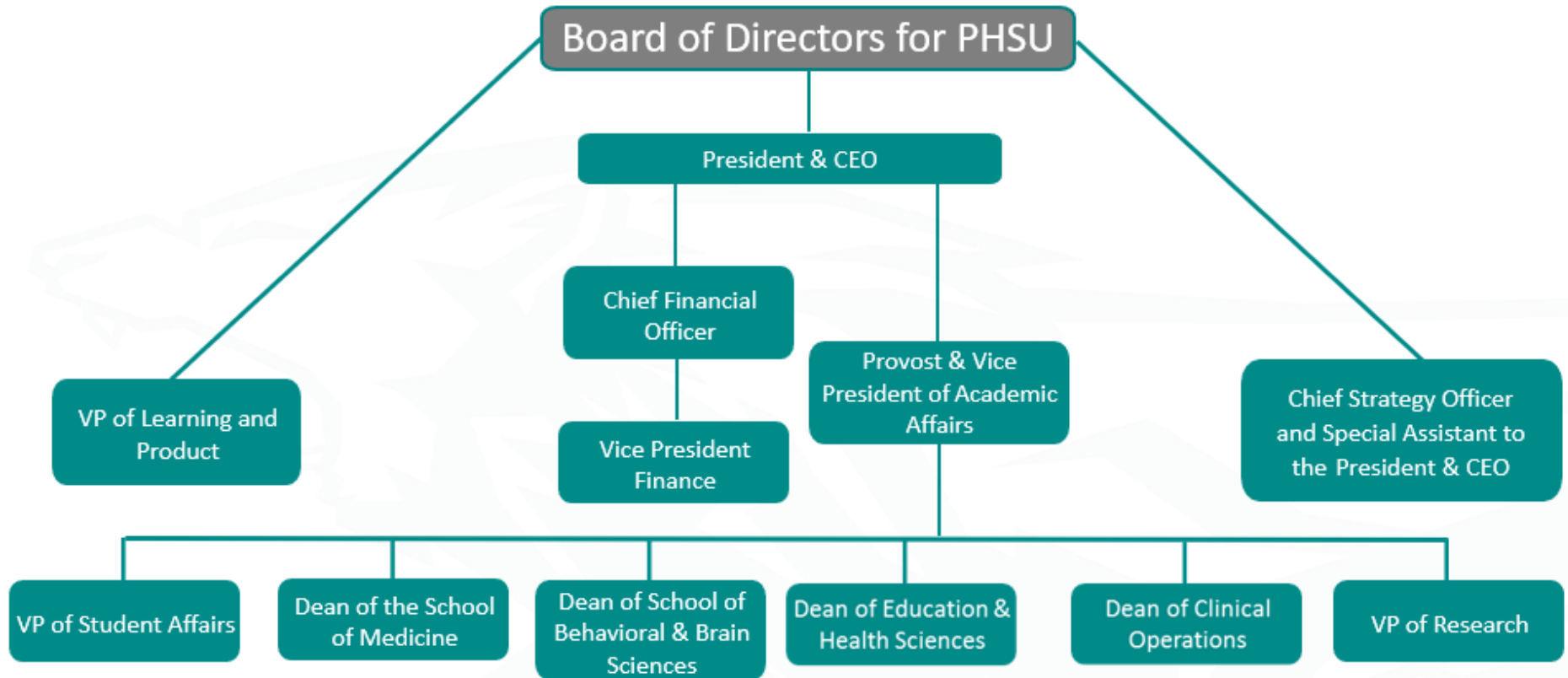
**2-c - The lines of authority from the program's leader to the institution's chief executive officer, including intermediate levels.**

As defined in the *Amended and Restated Bylaws of Tiber Health, Public Benefit Corporation (formerly Arist Medical Sciences University, Public Benefit Corporation)*, the University has a legally constituted governing board (Board of Directors) incorporated to operate in Puerto Rico.

The Board of Directors (BOD) is clearly delineated in the Bylaws with defined roles and responsibilities for all members to assure transparency of operations, policy development and implementation, as well as fiscal viability of the University. The organizational structure of the institution is divided in three distinct sections, with an executive team comprised of the President/CEO, the Provost/VP of Academic Affairs, the CFO and Vice Presidents. All academic programs fall under the purview of the Provost/VP for Academic Affairs. Each academic program has its own organizational structure which delineates reporting lines. The Public Health program responds to the Dean of the School of Education and Health Sciences.

Dr. David Lenihan is the President and Chief Executive Officer (CEO) of the University. The President /CEO has general supervision, direction and control of the University. He has general powers and duties of management usually vested in the office of the President. His duties and responsibilities are clearly prescribed by the BOD and the Bylaws. The figure below presents the line of authority:

Figure 5: Lines of authority from the program's leader to the institution's chief executive officer



**2-d - For multiple-partner schools and programs, organizational charts must depict all participating institutions.**

(Not Applicable)

**Intro 3 - An Instructional matrix presenting all of the program’s degree program and concentration including bachelor’s, master’s and doctoral degrees, as appropriate. Present data in the format of Temple Intro -1**

**Temple Intro-1 An instructional matrix presenting all program’s degrees and concentrations**

<b>Master's Degrees</b>	<b>Academic</b>	<b>Professional</b>	<b>Campus based</b>
Concentration	Degree	Degree	
MPH General Track		X	X
MPH Epidemiology Track		X	X
MPH Environmental Track		X	X
<b>Doctoral Degrees</b>	<b>Academic</b>	<b>Professional</b>	
Concentration	Degree	Degree	
DrPH in Epidemiology		X	X

The Public Health Program of Ponce Health Sciences University offers the following degree programs: three master’s degrees in public health with specializations in general, epidemiology, and environmental health; and a doctoral degree in Public Health with specialization in Epidemiology (Dr.PH). All PHP programs are campus-based and qualified as professional degrees. Currently, PHP does not offer any degree at the bachelor’s level, joint or academic degree programs.



**Intro 4 - Enrollment data for all of the school or program’s degree programs, including bachelor’s, master’s and doctoral degrees, in the format of Template Intro-2. Schools that house “other” degrees and concentrations (as defined in Criterion D19) should separate those degrees and concentrations from the public health degrees for reporting student enrollments. For example, if a school offers a BS in public health and a BS in exercise science, student enrollment data should be presented separately. Data on “other” degrees and concentrations may be grouped together as relevant to the school.**

**Temple Intro – 2 Enrolment Data**

Degree		Current Enrollment
Master's		
	MPH First Year	38
	MPH Second Year General Track	10
	MPH Second Year Epidemiology Track	17
	MPH Second Year Environmental Track	10
Doctoral		
	Dr.PH in Epidemiology	61

During the past admission process, the program identified that many of the students who start their master's studies are not clear about the differences between each of the specialties in relation to their functions, responsibilities and future work outs. For this reason, the first year is general, where students are exposed to the different introductory courses of the specialties. At the end of the third quarter of the first year, each of the coordinators of the second year (general, epidemiology and environmental health) make a presentation of their tracks. During these presentations the first-year coordinator administers a questionnaire to the students for them to select the specialty of their masters. The PHSU-Public Health Program has a total of 136 active enrolled students during Academic Year 2017-2018. These are distributed as follows: 27.9% MPH first year; 27.2% MPH second year, (general, epidemiology, and environmental health); and 44.8% Dr.PH students.

## **A1. Public Health Program Organization and Administrative Processes**

**A.1-1 - List the program's standing and significant ad hoc committees. For each, indicate the formula for membership and list the current members.**

The faculty and students of the PHP participate in the committees listed below:

### Standing Committees

#### **Public Health Student Admissions Committee**

<b>Name</b>	<b>Composition</b>	<b>Affiliation</b>
Brenda Soto, PhD, MPH,ED (Chair)	General Primary Faculty	Associate Professor PHP
Yashira Sanchez, PhD,MS, Lic. Chem, MS, Lic. Chem	Environmental Primary Faculty	Assistant Professor PHP
Jessica Irizarry, PhD, MPH	General Primary Faculty	Assistant Professor PHP
Nicole Munoz, MPH	Student	Dr.PH Student

#### **Public Health Curriculum Committee**

<b>Name</b>	<b>Composition</b>	<b>Affiliation</b>
Mayra Roubert, Dr.PH, MS (Chair)	Environmental Primary Faculty	Full Professor PHP
Elizabeth Rivera, Ed.D (Ex officio)	PHSU Faculty	Assistant Dean of Curriculum and Faculty Development
Luisa Morales, Dr.PH	Epidemiology Primary Faculty	Assistant Professor PHP
Jessica Irizarry, PhD, MPH	General Primary Faculty	Assistant Professor PHP
Melissa Marzan, Dr.PH, MPH, CPH	Epidemiology Primary Faculty	Assistant Professor PHP
Adalberto Bosque, PhD, MBA, REM CESCO	Environmental Primary Faculty	Full Professor PHP
Brenda Soto, PhD, MPHED	General Primary Faculty	Associate Professor PHP
Rafael Bredy, MD, MBE, MScCR	General Primary Faculty	Associate Professor PHP
Clara Isaza, PhD	General Primary Faculty	Assistant Professor PHP
Cristina Sosa, MPH	Student	DrPH Student

#### **Dr.PH Program Committee**

<b>Name</b>	<b>Composition</b>	<b>Affiliation</b>
Mayra Roubert, Dr.PH, MS (Chair)	Environmental Primary Faculty	Full Professor PHP
Juan Carlos Orengo, PhD, MPH, MD	Epidemiology Primary Faculty	Full Professor PHP
Jessica Irizarry, Ph.D., MPH	Epidemiology Primary Faculty	Primary Faculty
Vivian Green, Ph.D., MS, LND (ex officio)	General Primary Faculty	Associate Dean- Full Professor PHP
Judith Torres, MPH	Student	DrPH Student

### Applied Practical Experience Committee

Name	Composition	Affiliation
Rafael Bredy, MD, MBE, MScCR – Chair	General Primary Faculty	Associate Professor PHP
Vivian S. Green, PhD; MSc, LND	General Primary Faculty	Associate Dean – Full Professor
Brenda Soto, PhD, MPHED	General Primary Faculty	Associate Professor PHP

### Public Health Program Marketing Committee

Name	Composition	Affiliation
Adalberto Bosque, PhD, MBA, REM CESCO (chair)	Environmental Primary Faculty	Full Professor PHP
Yashira Sanchez, PhD,MS, Lic. Chem	Environmental Primary Faculty	Assistant. Professor PHP
Ruby Serrano, Dr.PH, MPH	Epidemiology Primary Faculty	Associate Professor PHP
José Soto, Ph.D.	General Primary Faculty	Assistant Professor PHP
María del Mar Pacheco, MPH	Student	DrPH Student

### Public Health Assessment Committee

Name	Composition	Affiliation
Frank Fraticelli, Ph.D., MPHED- Chair	General Primary Faculty	Assistant Professor PHP
Yashira Sanchez, Ph.D.	Environmental Primary Faculty	Assistant Professor PHP
Juan Carlos Orengo PhD. MPH, MD	Epidemiology Primary Faculty	Full Professor PHP
Alejandro Veintidos	Student	DrPH Student

### Public Health Research Committee

Name	Category	Affiliation
Juan Carlos Orengo- PhD. MPH, MD, Chair	Environmental Primary Faculty	Full Professor PHP
Luisa Morales, Dr.PH	Epidemiology Primary Faculty	Assistant Professor PHP
Clara Isaza, Ph.D.	General Primary Faculty	Assistant Professor PHP
Juan A. Santiago Cornier, Ph.D., MD	General Secondary Faculty	Associate Professor PHP
Robert Rodríguez, Dr.PH, MPH	Alumni	Research Assistant

### Public Health MPH and Dr.PH Seminars Committees

Name	Composition	Affiliation
Melissa Marzan, Dr.PH, MPH, CPH, - Chair	Epidemiology Primary Faculty	Assistant Professor PHP
Ruby Serrano, Dr.PH, MPH	Epidemiology Primary Faculty	Associate Professor PHP
Jessica Irizarry, Ph.D. MPH	General Primary Faculty	Assistant Professor PHP
Adalberto Bosque, PhD, MBA, REM CESCO (chair)	Environmental Primary Faculty	Full Professor PHP

### Public Health Workforce Development Committee

Name	Composition	Affiliation
Rafael Bredy MD, MBE, MScCR – Chair	General Primary Faculty	Associate Professor PHP
Juan Carlos Orengo, PhD, MPH, MD	Epidemiology Primary Faculty	Assistant Professor PHP
Mary Carmen Correa, MPH	Student	DrPH Student

### Public Health Service Committee

Name	Composition	Affiliation
Jose Soto, PhD. Chair	General Secondary Faculty	Assistant Professor PHP
Melissa Marzan, DrPH, MPH, CPH	Epidemiology Primary Faculty	Assistant Professor PHP
Ruby Serrano, DrPH, MPH	Epidemiology Primary Faculty	Associate Professor PHP
Clara Isaza, Ph.D.	General Primary Faculty	Assistant Professor PHP
Judith Torres, MPH	Student	DrPH Student

### Public Health Laboratories Committee

Name	Composition	Affiliation
Luisa Morales, DrPH - Chair	PH Laboratories Coordinator Molecular Lab.	Assistant Professor PHP
Juan Carlos Orengo, PhD, MPH, MD	Emergent and Re-emergent Vector Borne Diseases Lab.	Full Professor PHP
Yashira Sanchez, PhD, MS, Lic. Chem	Environmental Lab. Coordinator	Assistant Professor PHP
Mayra Roubert, Dr.PH, MS,	Environmental Lab.	Full Professor PHP
Clara Isaza, PhD	Molecular Lab. Coordinator	Assistant Professor PHP
Juan Alberto Santiago Cornier, Ph.D., MD	Molecular Lab.	Associate Professor PHP
Robert Rodríguez, Dr.PH, MPH	Alumni	Research Assistant

### Ad hoc Committees:

#### Public Health Faculty Search Committee

Name	Category	Affiliation
Adalberto Bosque – Ph.D., MBA, REM CESCO (chair) Chair	Environmental Primary Faculty	Full Professor PHP
Diego Zavala, PhD; MS	Epidemiology Primary Faculty	Full Professor PHP
Students appointed by committee invitation	Student	MPH/Dr.PH Student

### Public Health Accreditation Committee

<b>Name</b>	<b>Composition</b>	<b>Affiliation</b>
Jose Torres, Ph.D. – Chair	Provost Vice - President Academic Affairs	PHSU administrator
Gladys Pereles, Ed.D.	Dean for Education and Health Sciences	PHSU administrator
Vivian S. Green, Ph.D., MS, LND	Associate Dean for PHP	Full Professor
Mayra Roubert, Dr.PH; MS	PHP Curriculum Chair	Full Professor
Brenda Soto, PhD, MPHED	ILE Coordinator	Associate Professor
Linda R. Perez, MPH	Student	Dr.PH student

**A.1-2 - Briefly describe which committee (s) or other responsible parties make decisions on each of the following areas and how the decisions are made: Degree requirements, Curriculum Design, Students assessment policies and processes, Admission policies and/ or decisions, Faculty recruitment and promotion, Research activities, Service Activities.**

**a. Degree requirements**

The following Committees may participate in defining degree requirements for the public health programs: The Curriculum Committee, the Dr.PH Committee and the Applied Practical Experience Committee.

**Curriculum Committee** - This committee is involved in the design, planning, development, implementation and evaluation of the public health curriculum. The recommendations of new courses and tracks are discussed with the Dean of Education and Health Sciences and the Assistant Dean of Curriculum Development of PHSU. Once the decision to modify any component of the curriculum is made, a written report is submitted to the Institutional Curriculum Committee of PHSU. Decisions may include changes in curriculum requirements. After approval by this committee, the report is submitted to the Provost/Vice President for Academic Affairs for final ratification and recommendation to the President. This committee meets once per trimester.

**Dr.PH Committee** - This committee is headed by the coordinator of the Dr.PH Track, Dr. Mayra Roubert. The responsibilities of the committee are to: track the Dr. PH student progression, assess their attainment of the Dr.PH competencies; review the components of the comprehensive exam; analyze and discuss the results of the comprehensive exam; develop an action plan to improve the student outcomes in the comprehensive exam; develop and incorporate strategies to increase the Dr. PH graduation rate; review and update the doctoral dissertation manual. Recommendations may include the revision of the requirements of the Dr.PH degree. Major recommendations of the committee are brought to the full faculty committee for discussion. This committee meets at least once per trimester and additionally as needed.

**Applied Practical Experience Committee**

The Practical Experience Committee (PEC) is the component of the Public Health Program responsible for the structure and organization of the practical experience activities. The PEC is also responsible for the production, design and elaboration of modules, tutorials and communication materials used for the practical experience activity. Forms to be completed by students are placed on the Moodle platform. Another task of this committee is to assist students to meet the requirements and procedures as indicated in the timetables of preceptors and faculty advisors.

The Practical Experience Committee is composed by the Associate Dean, the Practical Experience Coordinator and the Culminating Experience Coordinator. The Practical Experience Coordinator is the student's chairperson.

The PEC is also responsible for the review of submitted forms prior to the practical experience activity period. The forms submitted must be adequately completed, signed and approved by the responsible individual/s. This committee constitutes the third level of appeal in the conflict resolution process, after the Practical Experience Coordinator and the student's assigned faculty advisor. The committee is strongly encouraged to make deliberations and reach consensus decisions based on evidence. However, when consensus can't be reached, decisions will be made based on majority voting.

The structure and organization of the Practical Experience Committee is described in the Practical Experience Handbook. The review of this handbook is conducted during ordinary meetings or during extraordinary situations. Ordinary review will be done one (1) year prior to every CEPH accreditation visit and at the midterm of the accredited time frame period. Extraordinary review will be done as a decision of the Practical Experience Committee in case of

any extraordinary situation related to updated requirements or information from the Puerto Rico Council on Education (PRCE), CEPH, Ponce Health Science University, or the Public Health Program. Amendments to the Practical Experience Handbook will be made whenever the Practical Experience Committee considers appropriate as result of the Practical Experience Yearly Report or any identified need during the practical experience activity. The results of this report are also used in program assessment.

The Handbook as well as its reviews and amendments, must be approved by the Practical Experience Committee and subsequently, submitted for approval to the Public Health Program Curriculum Committee prior to its divulgation.

#### **b. Curriculum Design**

**Public Health Curriculum Committee** - This committee is responsible for the processes of design, planning, development and implementation of the public health curriculum. The recommendations for new courses and tracks are discussed with the Dean of Education and Health Sciences and the Assistant Dean of Curriculum Development of PHSU. Once the decision to modify some component of the curriculum is made, a written report is submitted to the Institutional Curriculum Committee of PHSU. After approval by this committee, the report is submitted to the Provost/Vice President for Academic Affairs for final ratification and recommendation to the President.

#### **c. Students assessment policies and processes**

**Public Health Assessment Committee** - The Associate Dean of the Public Health Program has appointed an Assessment Committee of three faculty members and a representative student to review all assessment processes of the PHP, develop the three-year assessment plan, collect assessment data, assess the effectiveness of the program in achieving public health goals. This Committee will also make recommendations for the improvement of the curriculum, teaching, and student learning. The chair of this committee, Dr. Frank Fraticelli, has recently been asked to be part of the PHSU Institutional Assessment Committee (IAC). The committee is also responsible for the assessment of program's indicators of success as described in section *B5 Defining Evaluation Practices*, prepare the program's annual report and conduct any assessment needed for guiding problem-solving or strategic planning processes. This Committee also monitors student course evaluations. Students evaluate courses at the end of each trimester through the online Moodle platform. Results are used to improve the course and provide developmental activities to teaching faculty. The Committee makes recommendations to the PHP Associate Dean and faculty as needed. Other important responsibilities of this committee are to review and update the assessment manual, to present the results of the assessment to the faculty, to evaluate the effectiveness of the assessment instruments, and to be the custodian for the assessment data and instruments to be used. This committee meets in the summer for the annual review.

#### **d. Admission policies and/ or decisions**

**Public Health Student Admissions Committee** - This Committee is responsible for the recruitment of qualified students following admissions policies. Both policies of admission to the Program and the institution are periodically reviewed. Revisions may include changes in admission policies. This committee meets in the month of February to start the review and approve/reject applications for admission to the PHP.

This committee is also responsible for identifying students who could potentially be classified as "at risk". The committee classifies students at-risk as those students who, during the evaluation of their admissions record, may present an academic deficiency as revealed in their transcripts, while still fulfilling all the admissions requirements. The committee develops a list with the names of these students and sends it to the first-year coordinator and to the PHSU academic counselor so that a work plan can be developed to follow up the student's academic progress. The admissions committee would also give instructions to the institutional admissions office to send an acceptance letter

conditioned to the maintenance of a 3.00 general point average during graduate studies. This proactive approach has worked well for the students who fall in this category.

**e. Faculty recruitment and promotion**

**Public Health Faculty Search Committee - Ad Hoc Committee.** The PHP has a constituted faculty search committee that interviews potential candidates for faculty positions, coordinates lectures presentation and interviews. This committee issues recommendations to the Associate Dean of the PHP who in consultation with the Dean for Education and Health Sciences submits a position request to the Provost/Vice President for Academic Affairs. Meetings are called as needed by the chair of the committee.

The PHP faculty search committee is independent of the faculty promotion committee. The first belongs to the PHP, and is formed by faculty and one student of this program, whereas the faculty promotion committee is an institutional committee formed by members of the different schools and programs within PHSU

**f. Research activities**

**Public Health Research Committee** - The research committee is constituted by three faculty members and one student. The committee was assessed and re-structured during the 2015-2016 academic year. The main responsibilities of the research committee are: 1) to create and maintain a data warehouse, where published work, presentations, and research projects are kept of each faculty member; 2) to convene Seed Money Program (SMP) meetings; 3) to evaluate the projects submitted to the SMP and recommend those with merits; 4) to support the needs of researchers with SMP projects; 5) to evaluate the follow-up reports of approved projects; and 6) to work together with the Laboratory Committee at PHP to identify needs. The research committee meets annually.

**Public Health Laboratories Committee (PHLC)** - The PHP Laboratories Committee is formed by six faculty members and one student. This committee works in coordination with the PHP Research Committee. Main responsibilities are to: 1) evaluate the needs of the PHP laboratories; 2) coordinate with the PHSU MAGIC Core the needs of the PHL; 3) advise the researchers in terms of material and equipment needed for research projects; 4) coordinate and follow up the equipment purchase orders; 5) carry out the necessary equipment safety training; 6) ensure the PHL are up to date. Both the research committee and the lab committee at PHP coordinate an annual meeting with the External Advisory Committee to discuss the direction of research and strategies to follow in the upcoming year.

**g. Service Activities**

**Public Health Service Committee.** This committee is composed of four faculty members and one student. The main responsibilities of the Service Committee are: 1) to create and maintain a data warehouse, where specific community service activities in which the faculty member have participated; 2) to establish an advising committee to work on the requests of the surrounding communities; 3) to evaluate the requests for lectures or talks from the community and assign them to the most appropriate faculty member, 4) to help in the activation and coordination of the EPI AID Team work. This committee meets whenever it is necessary.



There are other committees where faculty have formal opportunities for input in other decisions affecting the program such as:

**Public Health MPH and DrPH Seminar Committee** - The Committee is constituted by four faculty members. Each one of them represents the different master's degrees and doctoral degree (DrPH) tracks. The main responsibilities of the Seminar Committee are to: 1) plan and coordinate, together with the Curriculum Committee, the list of seminars necessary to strengthen or complete the competencies for the masters and doctorate degrees; 2) plan, coordinate, and update the courses for the doctoral students; 3) plan, coordinate, and update topics related to public health. This committee meets annually, usually in the summer period, where the Curriculum Committee decides on the courses to be offered. To be able to reach a consensus over which seminars to be given, a number of factors are taken into consideration, such as the input of the curriculum committee, the needs identified by each one of the tracks and the doctoral program, the recommendations given through the evaluations of the practicum advisors, the recommendations of the program's external committee advisors, and the new tendencies in the field of public health.

**Public Health Program Marketing Committee** - This committee oversees activities related to the recruitment of students and promotion of the PHP at universities, high schools, and other public and community forums. The committee works together with the PHSU institutional recruitment unit in terms of recruitment strategies, development of PHP promotion materials, and on-site visits and conferences as part of community outreach. One of the principal responsibilities of this committee is to organize and plan the PHP Open House, one of our most important strategies for recruitment. It is also responsible for maintaining updated information about the PHP in the PHSU web site and other social media. The committee sends notices on activities that take place within the program using email, the PHSU website, and other communication avenues. During these activities promotional materials are distributed, and all faculty are invited to participate. (*See Section H4. student recruitment and admissions*). This committee meets frequently from January to May during the student recruitment season.

**Public Health Workforce Development Committee** - This committee is composed of two faculty members and one student. The main responsibilities of the Public Health Workforce Development are to: 1) plan, coordinate, and provide training and continuing education to professionals in public health, 2) distribute the questionnaire of education needs to different sites and practice preceptorships, to hospitals in the consortium, and to the university community (**Refer to the questionnaire in the Electronic Resource File (ERF)**), 3) prepare the calendar of training and conferences activities. This committee meets once per year.

**Public Health Accreditation Ad-hoc Committee**. This committee was constituted to guide and oversee the current CEPH self-study process. The accreditation committee and the Associate Dean divided up responsibilities for reviewing the draft of each report. This committee assembles the complete draft report and reviews for coherence and consistency. The draft report is sent to the Provost/Vice President of Academic Affairs for final revision and feedback. The PHP curriculum chair acts as the liaison between the program and the Council. The committee has met on a frequent but ad hoc basis for the last year and a half. It will remain in effect until final CEPH decision and all relevant actions are complete. The committee will be reconstituted about two years prior to the next CEPH Self Study

**A.1- 3 - A copy of the bylaws or other policy documents that determine the rights and obligations of administrators, faculty and students in governance of the school or program. (electronic resources file)**

The policies and procedures of PHSU that affect faculty and administrators are contained in the 2014 Faculty Handbook. Student information and policies are included in the General Catalog and in the Student Policy Manual. *Refer to these publications in the resource file (ERF).*

**A1- 4 - Briefly describe how faculty contribute to decision – making activities in the broader institutional setting, including a sample of faculty memberships and/or leadership positions on committees’ external to the unit of accreditation.**

PHSU has an effective organizational structure that provides mechanisms to allow faculty participation and influence into the governance and policymaking process. The faculty of the PHP are active members, and sometimes preside over, in PHSU committees. They are also integrated in the *ad hoc* constituted committees, which are instituted temporarily by the institution to complete specific tasks. The most recently constituted such committee is the Institutional Assessment Committee. The faculty also participates of external committees such as the Committee of Environmental Health of the Council of South Integral Development of Puerto Rico (DISUR), the Comprehensive Cancer Center Communitarian Advisory Committee and the EPA Sciences Consortium. The institution has a series of permanent committees, all with faculty member participation (see **PHSU committee list in the Electronic Resource File (ERF)**).

The following list provides current Provost/Vice President of Academic Affairs’ standing and ad-hoc committees where faculty participate:

1. Student Council
2. Faculty Council
3. Class Officers
4. Council of Deans
5. Biosafety Committee
6. Reasonable Accommodation Committee
7. Institutional Curriculum Committee
8. Institutional Assessment Committee
9. Faculty Development and Evaluation Committee
10. Faculty Grievance Committee
11. Students Promotions Committee
12. Institutional Review Board
13. PR Clinical and Translational Research Consortium
14. Institutional Faculty Search Committee
15. MSCHE Steering Committee and Working Groups

Primary full-time faculty of the Public Health Program that participate in institutional (PHSU) committees are:

1. Mayra Roubert, DrPH; MS
  - Institutional Curriculum Committee
  - Grievance Committee
  - Faculty Promotions Committee
  - Faculty Council
  - MSCHE Working Group
2. Juan Carlos Orengo, MD, PhD, MPH
  - MSCHE Working Group
  - PRCTRC- PHSU Research and Design and Biostatistics Core (Chair)
  - Internal Review Board

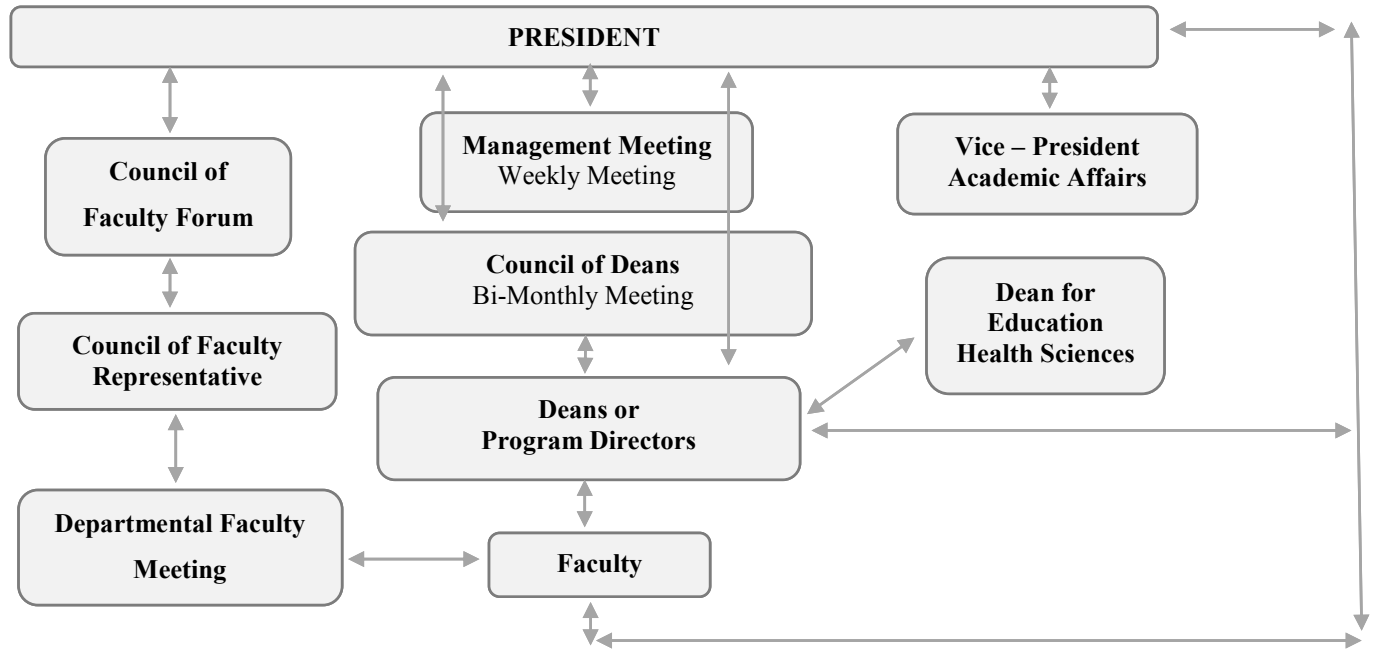
3. Rafael Bredy, MD, MBE; MSc
  - Internal Review Board
  - Diversity Committee
  - Biosafety Committee
  - MSCHE Working Group
4. Frank Fraticelli, PhD
  - Institutional Assessment Committee (New Committee)
5. Adalberto Bosque, PhD, MBA, REM, CESCO
  - MSCHE Working Group
6. Luisa Morales, Dr.PH
  - Students Promotions Committee
  - MSCHE Working Group
7. Brenda Soto, PhD, MPHED
  - Students Promotions Committee
  - Faculty Council
  - MSCHE Working Group, Chair Design and Delivery of the Student Learning Experience
8. Vivian Green, PhD.; MSc; LND
  - Ad-hoc Search Committee for the Dean of the School of Behavioral and Brain Sciences, Chair
  - Ad-hoc Search Committee for the Dean of the Nursing Program
  - Reasonable Accommodation Committee

Some public health faculty also participate in other committees, internal or external, like the following:

1. Juan Carlos Orengo, MD, PhD, MPH
  - Educational Agreement Committee
2. Yashira Sanchez, PhD,MS, Lic. Chem
  - South Integral Development (interagency)
  - EPA Sciences Consortium
3. Rafael Bredy, MD, MBE; MSc
  - Diversity Committee
4. Diego Zavala, PhD; MSc
  - Emergency Preparedness Committee
  - Faculty Grievance Committee

PHP faculty have adequate resources and are provided with mechanisms to allow them reasonable and appropriate influence into the governance and decision- making process of the University, as shown above. The Associate Dean of PHP represents the faculty in the Management Team and in the Council of Deans. The figure below provides some of these mechanisms:

Figure A1-1: Faculty input in governance and decision making



There are institutional processes and procedures that involve faculty and the dean participation, such as:

1. Budget and resource allocation

The Associate Dean for the Public Health Program is responsible for developing the annual budget. In doing so it must consider the needs of human resources (faculty, staff, contractors), as well as equipment, materials, services, accreditation and travel expenses, supplies and other items. Input is requested from all faculty members on non-salary items in the budget. The budget is discussed with the Dean for Education and Health Sciences. Any changes in the PHP budget is negotiated between the PHP Associate Dean and the administration (the Budget Office) before final approval by PHSU President and the PHSU Board. The Associate Dean in consultation with the faculty assigns the time/effort for every faculty member in annual faculty work-plans. (*See Section C.1 Fiscal Resources*)

2. Student recruitment, admission and awarding of degrees

The Public Health Program has a new Program Promotion Committee as described above. The committee develops promotional materials and plans outreach events with the Institutional Recruitment Office. (*See Section H4. student recruitment and admissions*). The Public Health Program also has a Student Admissions Committee (*see A1 above*).

This Committee has the responsibility of maintaining the quality in the recruitment of the students and adhering to the policies of admission of the Public Health Program and the institution.

The Associate Dean for the Program together with the faculty monitors the requirements of admission in coordination with the office of the VP for Students Affairs. At the end of the second year, the VP of Student Affairs solicits student nominees from the PHP as to which students should receive the academic excellence award during the graduation ceremony. The Associate Dean for PHP and the faculty seek information about graduating students' GPA, research, and service in public health during their enrollment in the PHP program, as well as other academic recognitions. The track coordinators make the initial recommendations for the students in their track. Based on these recommendations, the PHP Associate Dean, with agreement from the faculty, selects the most outstanding students, one from each track, to receive the academic excellence award.

3. Faculty recruitment, retention and promotion

The Faculty Handbook, (*see Resource File A1.3 faculty policies and procedures*), includes the procedures of recruitment, retention and promotion of all PHSU faculty. The faculty of the Public Health Program takes part of these procedures. The PHP has a constituted search committee composed of faculty members (*see A.1 above*), that interviews potential candidates for faculty positions. This committee issues recommendations to the Associate Dean for PHP who in consultation with the Dean for Education and Health Sciences issues the recommendation to the Provost/Vice President of Academic Affairs. These procedures are described in Criterion E3.

4. Academic standards, policies and program development

The academic standards are governed by the policies outlined by PHSU in the General Catalog. Policies that directly affect the students of the Public Health Program are included in the Student Policy Manual. These publications are included in the web page. (*See the Resource File*).

The Public Health faculty is responsible for the development of public health programs and the curriculum processes such as planning, implementation, and evaluation. Revisions to course content and competencies coverage or incorporation of learning methodologies are also handled by the faculty through the Curriculum Committee. Individual faculty and track coordinators also participate in the revision of the public health curriculum. More substantive changes require the approval of the Curriculum Policy Committee, where public health faculty participate, and the accrediting

agencies. Quality assurance is provided by faculty during course reviews and tracked by the assessment committee during trimester and annual reviews.

#### 5. Research and service expectations

The Vice President for Research presents the institution research strategic goals every ninety days. All academic programs contribute to the advancement of research goals according to their area of expertise. Joint research initiatives are encouraged and recommended. The Associate Dean discusses the recommendations with the PHP Research Committee, the Public Health Laboratories Committee and the faculty at large. Research involvement as well as service participation are criteria for faculty promotion, so the Associate Dean discusses and with PHP faculty on the research and service expectations to be included in annual faculty plans. The Associate Dean discusses subjects related to the search of research external funds directly with the Vice president for Research.

**A1-5 - Describe how full – time and part – time faculty regularly interact with their colleagues and provide documentation of recent interactions, which may include minutes, attendee lists, etc. (electronic resource file)**

The Public Health Program promotes interaction and participation of all its faculty – full and part time- in faculty meetings, institutional and program committees, the exchange of teaching skills, participation in service activities, and the submission of joint research projects. Additionally, all the PHP faculty participate in the discussion of administrative issues, the outlining and development of an annual strategic plan, and the revision, development and establishment of program policies. This participation occurs: 1) through monthly faculty meetings; and 2) through participation in program committees, working groups, and special assignments. Other participation relates to the discussion of institutional policies of PHSU that could affect PHP, recruitment priorities, and work and actions plans of the different committees.

Regarding faculty interactions in academic activities, the faculty are involved in: 1) group discussions of new teaching techniques and educational technologies; 2) presentation of results of the needs questionnaire administered to students and faculty; and 3) discussion of possible new academic offerings and curriculum changes, among others.

In the research area full and part time faculty receive invitations to apply for Seed Money for research projects. The research committee discusses the status and results of the different research projects to the faculty in full.

In the service area the agenda to be discussed in faculty meetings includes the calendar of activities by the service committee and the mentor of the public health interest group (composed of students) and the lecture calendar provided by the workforce coordinator monthly.



**A1- 6 - If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.**

**Strengths**

- PHP is governed by the PHSU-wide policies and at that policy level has the same rights, responsibilities and ability to contribute to institutional policies as any other department/division. The PHP also has program-specific governance rights and responsibilities for policies, plans and decisions. The bylaws and other policies that determine the rights and obligations of administrators, faculty and students in governance of the program are printed or in electronic format (see ERF)
- PHSU has series of committees that are building the policy, administration, development and procedures of the Institution and of the Public Health Program. The faculty of the Program is active in the committees existing in PHSU and in many cases, hold leadership positions on those PHSU committees. As the PHP has grown it has become easier for greater and stronger representation on institutional committees.
- The PHP Associate Dean of Public Health reports directly to the Dean for Education and Health Sciences, which is one step below the Provost.
- The PHP has internal committees that help maintain the quality of the Program. There are new and active committees for the PHP laboratories, the re- restructured research committee, MPH and DrPH seminars, assessment committee and for CEPH self-study preparation. Full time and part- time PHP faculty has been fully included in all PHP strategic and CEPH related decisions.
- The roles and responsibilities of the PHP leadership positions are well defined and match expertise or skills. The Associate Dean allocates the distribution of work in committees and coordinates roles according to interest, expertise and the needs of the Program. The track and committee responsibilities have been reshuffled to incorporate new faculty, and to more evenly distribute the administrative workload.

**Weaknesses**

- With the continuing growth and development of PHSU as a University, it has been a challenge to maintain an optimal level the participation of secondary faculty in institutional committees. Even when the Program and the Institution invite the secondary faculty to participate in the institutional committees, most of the time they can't accept due to the timing of the committee meetings.
- Because the PHP is aimed at people who hold full time jobs, and our courses are offered beginning at 5 PM, it is a challenge for the program to achieve the full participation of the students in the different program committees, which usually meet earlier than 5 PM.

**Plans**

- The Program is planning to develop a newsletter to inform faculty (full and part time), students, committee members of the status and progress of the projects. The PHP newsletter would also include information related to community-related activities, and workforce development. This newsletter would be sent via email every trimester (a trimester in this discussion is defined as a 12-week period).

**A.2 Multi – Partner Schools and Programs (SPH and PHP – applicable only if functioning as a “collaborative unit” as define in CEPH procedures).**

Not applicable.

### A.3 Student Engagement

**A3-1 - Describe student participation in policy making and decision making at the schools or program level, including identification of all student members of schools or program committee over the last three years, and student organization involved in schools or program governance, if relevant to this criterion. Schools should focus this discussion on students in public health degree programs.**

Committees are a key ingredient to the work and functioning of the PHP program. Each committee includes several faculty members and usually at least one student. The PHP provides students with multiple opportunities to provide input, comments, revisions and to participate in the committees. Each committee has specific tasks linked to the academic calendar year and key events.

Public health students form part of the following PHP committees (*described in section A.2*):

- Public Health Student Admissions Committee
- Public Health Curriculum Committee
- Dr.PH Committee
- Practical Experience Committee
- Public Health Program Promotion Committee
- Public Health Assessment Committee
- Public Health Research Committee
- Public Health MPH and Dr.PH Seminars Committee
- Public Health Workforce Development Committee
- Public Health Service Committee
- Public Health Laboratories Committee
- *Ad hoc* Faculty Search Committee

In addition, PHP students actively participate in the following PHSU institutional committees (*see Electronic Resource File (ERF)*):

- Student Council
- Class Officers
- Institutional Curriculum Committee
- Institutional Accreditation Working Groups (ad-hoc)

In previous years there was no student representation on the faculty search committee and the practicum committee at PHP. At present we are adding students to these committees. The Public Health Program has established new program committees, for example the public health laboratory committee, the service committee, and the assessment committee. It has restructured others such as the research committee. In all newly established or restructured committees a student representative has been added. Some of the decisions that students participate are related to the acceptance of new qualified students to the program, curriculum or seminar content, assessment procedures, students' progress, activities for workforce development and community service, among others. Student representatives inform their student colleagues about committee's decisions.

PHSU has established procedures by which students elect their representatives on institutional committees. The PHP takes recommendations from class officers for the PHP committee position, then the chair of the committee seeks volunteers. Volunteers are reviewed for their interest and skills matched to the committee work. The committee chair chooses the student representative, with input from the committee members. The student representative on the

curriculum committee, is chosen from the students already elected as curriculum representatives for their class. Starting in 2016, these students have participated in the following PHP committees:

**Table A3-1**

<b>PHP Committee</b>	<b>2016 -2015</b>	<b>2017 -2016</b>	<b>2018 -2017</b>
Student Admissions Committee	Merla Rivera	Nicole Munoz	Nicole Munoz,
Curriculum Committee	-	Cristina Sosa	Cristina Sosa
DrPH Committee	Melissa Marzan	Solangie Pagan	Ivonne M Baerga
Practicum Committee	-	-	Maria Pacheco
Program Promotion Committee	-	Cristhian Torres	Maria del Mar Pacheco
<b>New Committee</b> Assessment Committee	-	-	Soreli Santana
<b>Re restructured</b> Research Committee	Luisa Morales	-	Roberto Rodriguez
<b>New Committee</b> MPH and Dr.PH Seminars Committee	-	-	Soreli Santana
<b>New Committee</b> Workforce Develop	-	-	Mary Correa
<b>New Committee</b> Service Committee	-	-	Jania Garcia
<b>New Committee</b> Laboratories Committee		Roberto Rodriguez	Roberto Rodriguez

**A3-2 - If applicable, assess strengths and weakness related to this criterion and plans for improvement in this area.**

**Strengths**

- The students actively participate in the decision-making process of the PHP through their membership in different committees.
- PHP uses different methods of communication, such as email consults, open houses, meetings with different class representatives, (MPH and Dr.PH), meetings with the class presidents, and individual meetings with the Associate Dean, to clear up questions about functions and responsibilities of the different committees and to invite students to participate in the different program committees.
- PHP provides students opportunities for the development of leadership and professional skills through the courses the students take during their years of study.

**Weakness**

- Low attendance of PHP students in committees' meetings. The following reasons may explain this problem:
  - PHP is an evening program, and most of our students hold full time jobs during the day. This makes it difficult for some of them to be present earlier at the committee meetings.
  - Most of the PHP students live far away from the university, and they travel great distances to come to class on time.

**Plans**

- To add Face Time, SKYPE, “Go to Meeting”, and conference calls into the program committee meetings.
- To add the use of email for the distribution of special assignments, and to comment and revise documents, among other uses.

**A.4 Autonomy for Schools of Public Health (SPH only)**

**Not applicable.**

**A.5 Degrees Offerings in Schools of Public Health (SPH only)**

**Not applicable.**

## **B1. PHP Guiding Statements**

**B1.1 - A one to three-page document that, at a minimum, present the Program’s vision, mission, goals and values.**

The original mission, goals and objectives of the PHP were established in the years 2001 and 2002 by the Committee that developed the master program. The mission was revised in 2007 when the new MPH and DrPH tracks were being contemplated, reflecting the growing maturity of the program and capturing that expanding role in the mission, vision and goals. In 2011, the institution revised the institutional mission and vision. The PHP program revised their previous mission, vision and values to reflect the public health contribution to attain the new PHSU mission and vision. The PHP also wanted to ensure the program’s priorities were fully captured in the ongoing mission, vision and values.

### **PHP Mission, Vision and Core Values**

#### **Mission and Vision**

The mission of Public Health Program at PHSU is to provide the highest quality education, research and population-based services. This will be accomplished through an innovative, dynamic, responsive public health curriculum while preparing ethical competent professional public health practitioners and researchers to be able to excel in promoting and protecting health in the community and in a diverse, globalized society.

The vision of Public Health Program commits and aspires to be a leader in preparing public health professionals, by excellence in academia and by building and expanding public health knowledge and competency, to improve the health of communities and populations locally and across the world.

#### **PHP Core Values**

The following core values enlighten the institutional environment and guide us in the fulfillment of our mission and goals:

- **Integrity**  
We value honest, ethical, and transparent practices and determine to have integrity in everything that we do.
- **Respect**  
We value the protection of the individual and collective rights and promote the respect for social and cultural differences that distinguish human beings, as fundamental aspects of those rights and respect them as essential to achieving “Health for all”.
- **Diversity**  
We value diverse perspectives and the unique contributions that result from diversity, and promote caring, support, confidence, compassion, camaraderie and a “can do” attitude.
- **Service**  
We highly value the use of our health expertise and academic abilities, capabilities and resources in service to our students and the whole community.
- **Evidence Based**  
We value evidence as a sound basis for the development, implementation, and evaluation of effective programs and policies in public health. This evidence base is accomplished through the application of the principles of scientific reasoning, including systematic use of data and information systems, behavioral science theory and program Planning models to build effective public health programs and policies.
- **Population Perspective**  
We value integrating a population perspective into all our research, service and teaching; the collective or “public good” is takes priority over the individual good.

- **Community Empowerment**

We value community empowerment, which enables communities to increase control over their lives in their understanding of health and ability to protect their health and seek appropriate care.

- **Balance**

In Public Health, there are many competing “goods”. We value the careful assessment of these competing goods and strive to balance the alternatives to derive the most good for the most people.

### **Program Goals**

The Goals of the MPH Public Health Program are:

- a. To offer a broad education to future health professionals, through which they can provide quality service and assume leadership roles in the education and practice of Public Health, both in the private and public sectors of the community.
- b. To promote through research, the determining factors that affect the health of the population, with the purpose of reducing prevailing mortality rates.
- c. To contribute to the improvement of the population’s health by providing high quality health care services, technical assistance and consulting services.
- d. To provide academic activities in which the student will develop projects and programs geared at promoting health effectively and preventing disease in the community.
- e. To prepare Public Health professionals with the capacity to make fair decisions in different scenarios, while taking into consideration the opinion of the community.

The Goals of the DrPH Public Health Program are:

The principal goal of the doctoral program in Epidemiology is to educate professionals with the knowledge and skills in the epidemiological method as applied to diverse areas of specialization in the identification of health needs and risk factors, and in the evaluation of health programs for the prevention, protection and treatment of illnesses. The specific objectives are the following:

- a. To describe and interpret the principal indicators of health and illness to generate relevant information for making decisions in the formulation of health policies.
- b. To Plans, design, and coordinate research protocols that can be accomplished following ethical principles and safety rules.
- c. To identify and select appropriate epidemiologic designs that can answer the relevant questions of public health problems.
- d. To integrate the epidemiologic method with qualitative and statistical methods in the designs of investigation.
- e. To provide advice on the decision-making process and on public health policies using the epidemiologic method.

**B.1.2 - If applicable, a program-specific strategic plans or other comparable document**

Please refer to the **electronic resource file (ERF)**.



**B.1.3 - If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.**

The Program is guided by statements of mission, vision and values and has developed programmatic goals to achieve them. The mission, vision, goals and values of the PHP reflect the program own purposes and respond to the aspirations of the program to advance the field of public health and its commitment to the success of all public health students. PHP guiding statements are consonant with the mission and goals of the University. The pages that follow present the strengths and weaknesses of the PHP, including an improvement Plans:

**Strengths**

- The mission and vision reflect the public health contribution to the institutional mission and vision.
- The PHP mission drives to ensure compliance with the core values and goals of the PHSU and the Public Health.
- Both the MPH and the DrPH programs have individual goals.
- The goals and objectives of the Assessment Plans for the PHP directly contribute to measuring our achievement of the PHP mission and vision.
- The PHP Diversity Committee developed a Diversity Climate Assessment Survey. This is based in the effort of the Diversity Committee at the University to evaluate our core values: integrity, respect and diversity.
- The faculty has multiple opportunities for to comment and revise the goal and objectives of the program.

**Weaknesses**

- It is a challenge for the PHP to regularly obtain all the data for the indicators chosen in the strategic plans to evaluate our specific goals and objectives.
- It has been difficult for the PHP to get significant external input into the guiding statements.

**Plans**

- The strategic Plans will be reviewed and discussed with faculty and students to ensure their input into PHP mission, vision and goals.
- To develop new tools to obtain data and input of internal and external collaborators to reduce the identified weaknesses
- To conduct annual meetings with leaders in the community and the external auditing committee to obtain input into PHP guiding statements.
- An external Assessment Committee was created to receive external recommendations so that the Public Health Program is most effective in reaching its goals and objectives. The members of the Committee are Dr. José Soto, coordinator, Dr. José Conde (Director of the RCMI Program at the UPR-Medical Sciences Campus, Dr. Raúl Castellano, representative of the Panamerican Organization of Health, Dr. Vanessa Rivera, Associate Professor at Ponce Health Sciences University, and Dr. Carlos Castillo, Coordinator of the DrPH Program of Johns Hopkins University.
- The creation of the Community Relations Committee is in process. This committee is composed by Ms. Judith Torres (Department of Health of Puerto Rico), and representatives of the community and base agencies in the community. This helps us explore the needs of the community and to establish prevention and action Plan's with the help of the community base to accomplish our service and community purposes.
- Creation of the Institutional Development Unit (**Unidad de Desarrollo Institucional**) was established; this unit will support the Institutional Assessment Committee to obtain, process, and analyze pertinent assessment information to determine the effectiveness of the program in reaching its goals and objectives.

**B2. PHP Graduation Rates**

**B.2.1 Graduation rate data for public health degrees**

**Graduation rate data for MPH**

The Public Health Program (PHP) of Ponce Health Sciences University offers a master’s degree in public health (MPH) with specializations in general, epidemiology, and environmental health. Our program also offers a doctoral degree in public health with a specialty in epidemiology (DrPH).

The maximum time for completion of the MPH degree is four years. Graduation rate data for the MPH are as follows:

**Table B2-1 MPH Cumulative Graduation Rate**

Students in MPH Degree, by Cohorts Entering Between 2013 -2014 and 2017 -2018						
	Cohort of Students	2013-14	2014-15	2015-16	2016-17	2017-18
2013-14	# Students entered	46				
	# Students withdrew, dropped, etc.	0				
	# Students graduated	0				
	Cumulative graduation rate	0%				
2014-15	# Students continuing at beginning of this school year (or # entering for newest cohort)	46	27			
	# Students withdrew, dropped, etc.	0	0			
	# Students graduated	44	0			
	Cumulative graduation rate	96%	0%			
2015-16	# Students continuing at beginning of this school year (or # entering for newest cohort)	2	27	29		
	# Students withdrew, dropped, etc.	0	0	0		
	# Students graduated	0	26	0		
	Cumulative graduation rate	96%	96%	0%		
2016-17	# Students continuing at beginning of this school year (or # entering for newest cohort)	2	1	29	32	
	# Students withdrew, dropped, etc.	0	0	0	0	
	# Students graduated	0	0	27	0	
	Cumulative graduation rate	96%	96%	93%	0%	
2017-18	# Students continuing at beginning of this school year (or # entering for newest cohort)	2	1	2	32	35
	# Students withdrew, dropped, etc.	0	0	0	0	
	# Students graduated	0	0	0	31	
	Cumulative graduation rate	96%	96%	93%	97%	

**Graduation rate data for DrPH.**

**Table B2-1 - Cumulative Graduation Grade**

	Cohort of Students	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017-18
2008-09	# Students continuing at beginning of this school year (or # entering for newest cohort)	17									
	# Students withdrew, dropped, etc.	1									
	# Students graduated	0									
	Cumulative graduation rate	0%									
2009-10	# Students continuing at beginning of this school year (or # entering for newest cohort)	16	17								
	# Students withdrew, dropped, etc.	0	0								
	# Students graduated	0	0								
	Cumulative graduation rate	0%	0%								
2010-11	# Students continuing at beginning of this school year (or # entering for newest cohort)	16	17	6							
	# Students withdrew, dropped, etc.	0	0	0							
	# Students graduated	0	0	0							
	Cumulative graduation rate	0%	0%	0%							
2011-12	# Students continuing at beginning of this school year (or # entering for newest cohort)	16	17	6	8						
	# Students withdrew, dropped, etc.	0	0	0	1						
	# Students graduated	0	0	0	0						
	Cumulative graduation rate	0%	0%	0%	0%						
2012-13	# Students continuing at beginning of this school year (or # entering for newest cohort)	16	17	6	7	0					
	# Students withdrew, dropped, etc.	0	1	0	0	N/A					
	# Students graduated	0	0	0	0	N/A					
	Cumulative graduation rate	0%	0%	0%	0%	N/A					
2013-14	# Students continuing at beginning of this school year (or # entering for newest cohort)	16	16	6	7	N/A					
							7				

	# Students withdrew, dropped, etc.	0	1	2	2	N/A	0				
	# Students graduated	2	0	0	0	N/A	0				
	Cumulative graduation rate	12%	0%	0%	0%	N/A	0%				
2014-15	# Students continuing at beginning of this school year (or # entering for newest cohort)	14	15	4	5	N/A	7	0			
	# Students withdrew, dropped, etc.	0	1	0	0	N/A	0	N/A			
	# Students graduated	3	0	0	0	N/A	0	N/A			
	Cumulative graduation rate	29%	0%	0%	0%	N/A	0%	N/A			
2015-16	# Students continuing at beginning of this school year (or # entering for newest cohort)	11	14	4	5	N/A	7	N/A	16		
	# Students withdrew, dropped, etc.	0	2	0	0	N/A	0	N/A	0		
	# Students graduated	2	0	2	0	N/A	0	N/A	0		
	Cumulative graduation rate	41%	0%	33%	0%	N/A	0%	N/A	0%		
2016-17	# Students continuing at beginning of this school year (or # entering for newest cohort)	9	12	2	5	N/A	7	N/A	16	13	
	# Students withdrew, dropped, etc.	2*	0	1	0	N/A	0	N/A	1	0	
	# Students graduated	6	3	0	3	N/A	1	N/A	0	0	
	Cumulative graduation rate	76%	18%	33%	38%	N/A	14%	N/A	0%	0%	
2017-18	# Students continuing at beginning of this school year (or # entering for newest cohort)	1	9	1	2	N/A	6	N/A	15	13	13
	# Students withdrew, dropped, etc.	0	0	0	0	N/A	0	N/A	0	0	1
	# Students graduated	1	3	0	1	N/A	1	N/A	1	N/A	N/A
	Cumulative graduation rate	82%*	35%	33%	50%	N/A	29%	N/A	6%	N/A	N/A

\*One student is in military leave

\*One student is in military leave

The Doctoral Program in Public Health with specialty in Epidemiology (DrPH) at PHSU was established in 2007. The DrPH was designed to take 9 years for completion. Graduation rate data for the DrPH is presented below.

**Table B2-1.1: DrPH Cumulative Graduation Rate**

The table below presents data on the progression of Dr. PH students:

**Temple B2-2: Doctoral Student Data for year 2017-18**

<b>Template B2-2: DrPH in Epidemiology Student Data for year 2017-18</b>	
	<b>DrPH in Epidemiology</b>
# newly admitted in 2017-18	13
# currently enrolled (total) in 2017-18	58
# completed coursework during 2016-17	15
# advanced to candidacy (cumulative) during 2016-17	30
# graduated in 2016-17	16

Table B2-2a presents the actions, objectives, and compliance that took place between the years 2015 and 2018 to increase the graduation rate of DrPH students. The actions and targets established were developed by the same committee that developed the Root Cause Analysis and established the CAPA in March of 2015. The latest revision of the Dissertation Manual includes a guide with expected outcomes for each time period until the doctoral dissertation is finished and defended.

Table B2-2b presents the number of students who withdrew, dropped, after starting their dissertation before and after implementation of CAPA. In the period before CAPA implementation the number of students in this category was 17, representing a 26% of the total number of students registered for dissertation. (N=65), while after CAPA implementation the number was 5, representing 10% of the total number of students registered in dissertation (N=48). Of the students who began their DrPH (N=23), once CAPA was implemented, none has withdrawn, dropped, etc. after starting the dissertation period.

Table B2-2c presents the number of graduate students per each 100 students/year, before and after implementation of CAPA. We observed a faster graduation rate in DrPH students since CAPA implementation, allowing students to graduate within the maximum time allowed.

**Table B2-2a. Measurable improvements to increase the graduation grade (implemented between 2015-2018).**

<b>Actions (Improvements)</b>	<b>Target</b>	<b>Accomplishment</b>
New courses related with the DrPH dissertation as required	At least one	One course implemented: Epidemiological Research Methods Applied (DPH 6011)
Number of DrPH students with a mentor in research at the end of the first academic year	75%	92%
Number of DrPH students in dissertation with Tutor (peer)	100% of those who need help in the statistical analysis component	100%
DrPH students in dissertation at risk referred to the academic counselor	100%	100%
Number of software of epidemiology and biostatistics in the Dry Lab	At least four software of epidemiology/biostatistics and three complementary.	7 Software of Epidemiology biostatistics: (SPSS, Stata, MiniTab, Epiinfo, Epidat, R, Matlab)  7 Complementary software: (Stella, Berkeleymadonna, End Notes, Red Cap, ArcInfo, PASS, 3D printer)
Update of the DrPH Dissertation Manual	At least once every three years	Last update March 2018

**Table B2-2b. DrPH students withdrew, dropped, etc. after starting the dissertation period, by matriculation date before and after CAPA implementation.**

CAPA period	2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		Cumulative <sup>1,2</sup>	
	n	%	n	%	n	%	n	%	n	%	n	%
Before CAPA implementation	10 <sup>3,4</sup>	59%	0	0%	3 <sup>5</sup>	18%	2	33%	2	25%	17	26%
After CAPA implementation	1 <sup>6</sup>	14%	1 <sup>6</sup>	6%	2 <sup>6</sup>	14%	1 <sup>6</sup>	25%	0	0%	5	10%

<sup>1</sup> Number of DrPH students matriculated before CAPA implementation: 65

<sup>2</sup> Number of DrPH students matriculated after CAPA implementation: 48

<sup>3</sup> one student reincorporated in summer 2018

<sup>4</sup> two students were referred to the Promotion Committee.

<sup>5</sup> one student reincorporated in summer 2017

<sup>6</sup>These students were referred to the Promotion Committee



**Table B2-2c. Number of DrPH graduated students per 100 student-years by matriculation date and time of CAPA implementation**

Matriculation date	Number of DrPH graduated students per 100 student-years	
	Before CAPA implementation	After CAPA implementation
2007-2008	0	50
2008-2009	7	41
2009-2010	0	17
2010-2011	0	22
2011-2012	0	25

**B2.3 - Explain the data presented above, including identification of factors contributing to any rates that do not meet this criterion's expectations and Plans to address these factors.**

The PHP of PHSU is under a new administration as of February 2015. One of the main objectives of the new administration was to identify the factors that contributed to the low graduation rates of the doctoral program in public health (DrPH), as observed in Table B2-1.

A Root Cause Analysis and CAPA were performed to identify the factors that affected the graduation rate of the doctoral program, and the corrective actions that needed to be taken to improve the DrPH-Epidemiology cumulative graduation rate. These were implemented in March 2015 and are ongoing. The program identified the following factors as possible cause of not meeting graduation rate expectations: the lack of faculty to support doctoral dissertations committees, lack of opportunities for work-study and to develop new research lines and the lack of knowledge of the faculty about the needs and problems that students encountered during the academic year.

New Recruitment:

- **Root Cause:** Before the new Administration
  - 6 epidemiologists (including 2 seniors) resigned
  - Only one (1) part time epidemiologist in the Program
- **CAPA:** Starting February 2015 (new Administration)
  - Nine (9) new faculty (including five of those who had resigned) were hired
  - 7 on site and 2 on remote sites (Washington DC) with skype modality communication
  - Six (6) other faculty were also hired to support the doctoral dissertations

Development of Research Lines:

- **Root Cause:** Before the new Administration
  - - PHP Research Committee was inoperative
    - Seed Money Program was not efficient
    - No research lines defined
    - There was only one Teaching Lab
- **CAPA:** Starting February 2015 (new Administration)
  - A new Research Committee was established.
  - Seed Money Program was established, and the following actions were implemented:
    - A Protocol to run the program
    - An Evaluation Form
    - A Progress Report of the grants funded
    - Work-study (from 2017-18 only (DrPH)
    - Two (2015-16/2016-17) FOA
- Defined Research Areas, and developed the Public Health Laboratories (Environmental, Molecular and Genetic, Vector Borne Diseases).
- Improvement of the Teaching Lab was improved

Academic

- **Root Cause:** Before the new Administration
  - Administrative barriers to incorporate improvement measures.
- **CAPA:** Starting February 2015 (new Administration)

- A Need Assessment questionnaire was developed and implemented.
- Meetings with thesis directors and with all the student classes were developed
- Seminars to update knowledge and skills taking place
- A new academic workload was implemented
- “Applied Practical Experience” as a step to identify dissertation themes early.
- Pilot Project integrating doctoral students in the faculty research lines developed
- Evaluation and updating of the DrPH curriculum.

**B.2.4 If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.**

The following pages include strengths and weaknesses related to criterion B2 and a summary of the Plans for improving the program graduating rates.

**Strengths**

- Criterion B2 has been substantially improved.
- The number of epidemiology track faculty has increased.
- The doctoral curriculum was updated to reflect new knowledge and skills in the field.
- Faculty research areas were identified.
- The Educational Agreement was established. This consists on institutional financial aid for doctoral students for the purposes of purchasing equipment or materials, travel to present research work, poster preparation (among other uses), during the process of active dissertation.
- The incorporation of Root Cause and CAPA analysis to identify problems and possible actions to correct them.
- Introducing community collaboration as part of doctoral theses.

**Weaknesses**

- We have a group of students that is taking the maximum time for graduation. We attribute this to the deficiencies previously identified with the Root Cause and CAPA analysis.
- We have only five junior faculty members as part of our Dr.PH faculty. For this reason, we are incorporating one senior faculty member to the dissertation committee.

**Action Plans to Improve DrPH Graduation Rates**

Additional Faculty Members:

1. New Recruitment

The program's Plans to improve graduation rates for DrPH degree began in 2015 when the program administration changed. Seven (7) new faculty were hired for the epidemiology track. Skype modality has been incorporated into our program, through which another two (2) epidemiologists offer their courses from Washington, DC. These epidemiologists are also members of some doctoral dissertation committees. The total faculty for the epidemiology track at present is:

**Classroom Teaching**

- Juan Carlos Orengo, Ph.D, MPH, MD - Senior Epidemiologist
- Diego Zavala, Ph.D; MS - Senior Epidemiologist
- Ivan Iriarte, MS, MD, - Senior Epidemiologist
- Jessica Irizarry, Ph.D; MPH
- Melissa Marzán, DrPH, MPH
- Luisa Morales, DrPH
- Ruby Serrano, DrPH, MPH
- Iris Martinez, DrPH, MPH

**Remote faculty, with Skype Modality**

- Manuel Bayona, Ph.D; MPH, MD
- Carolina Álvarez Dr.PH, MD

The program has also hired six (6) other faculty members to support the doctoral dissertations. The new members of the faculty are:

- Yashira Sánchez, Ph.D - Environmental Track
- Clara Isaza, Ph.D - General Track
- Rafael Bredy, MS, MD - General Track
- Frank Fraticell, Ph.D - General Track
- Jose Soto, Ph.D - General Track
- Juan Alberto Santiago Cornier, Ph.D; MD – General Track

## 2. Development of Research Lines

Through the PHP Research Committee and the Seed Money provided by the PHSU, the faculty has developed different research areas. This has helped doctoral students begin to incorporate research through their work study experience. The work study program helps the students identify research topics during the early stages of their academic program.

## 3. Academic Coordination

- a. The DrPH Coordinator coordinated a series of meetings with thesis directors to discuss the status of each student. Other issues discussed were:
  - Development of an individualized work plans for each dissertation student.
  - Determining tentative graduation dates.
- b. The DrPH Coordinator coordinated a series of meetings with all the classes, individually, to know their concerns, needs and recommendations to help them during the dissertation period.
  - Development of a Need Assessment questionnaire to be administered annually.
  - The Need Assessment has been effective, and it has allowed identification of students' problems.
- c. The following Seminars with practical topics, styled as refreshers to update concepts related to how to make dissertations have been implemented:
  - How to select a theme for dissertation
  - How to be successful in graduate studies
  - How to use a library database
  - Writing using the APA style
  - Use of EndNote
  - Use of SPSS
  - Use of Red Cap I (how to build a database)
  - Use of Red Cap II (questionnaires construction)
  - Developing Epi Info
- d. Practicum orientation
  - During this orientation we recommend that the students choose to make their practice in places where they can develop a possible theme for dissertation. This orientation has allowed the students to have background information on the chosen topic prior to enrolling for the first time, to network with professionals, or to find out if the theme of investigation that they wanted to pursue is not viable.
  - The practicum coordinator ensures that doctoral students complete their practicum orientation, which is a graduation requirement, during the earlier stages of the program.
- e. To comply with the new 2016 criteria, an evaluation and updating of the DrPH curriculum took place. This update accomplished the following:
  - Adding courses related to administration of health services, health policy, leadership, teaching and bioethics, among others.

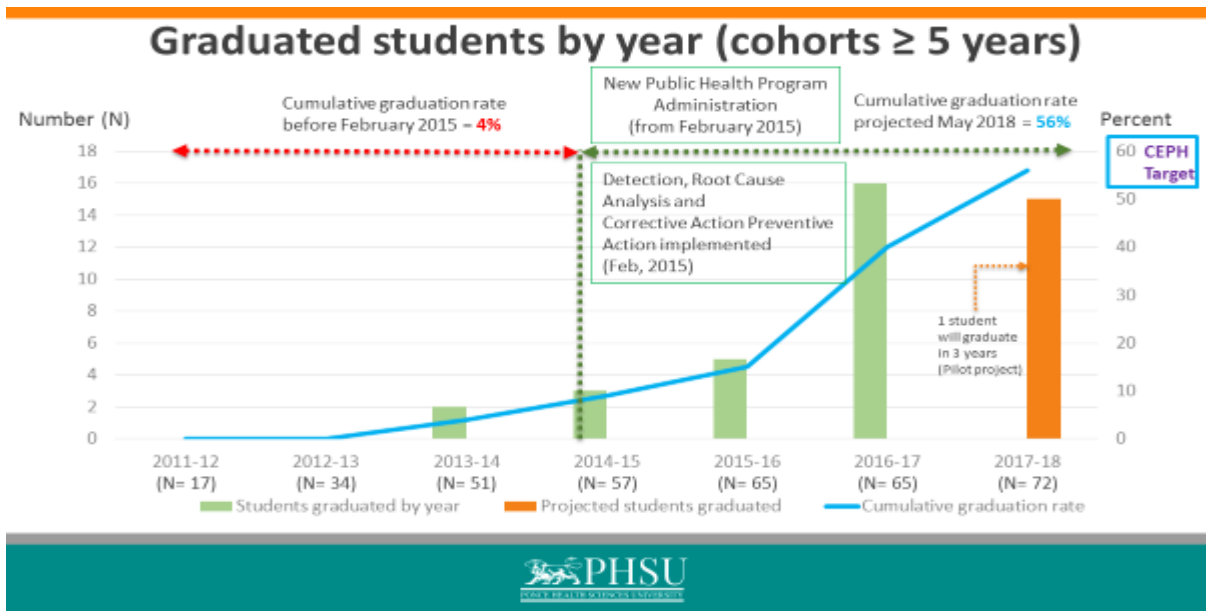
- Adding other types of modalities in the integrative learning experience (before the culminating experience), which we anticipate will allow the students to complete their doctorate in less time.
  - According to the update, doctoral students will begin to identify dissertation themes beginning on their first year. This will be established during a Research Methods Course where the faculty present their research to doctoral students.
- f. Workforce Development
- Doctoral students receive the calendar of conferences offered in workforce development via email. Many of these topics are related to the investigation process. Some examples of the topics covered are: IRB, mathematical models, data quality and others.
- g. Calls for Employment and Post - doctoral Positions
- Every two weeks doctoral students receive opportunities for employment and post - doctoral positions via email. These emails are sent to encourage students to complete their dissertations in reasonable time and to not deviate from their timeframe.
- h. Space Request
- The PHSU gave its approval for the request to increase the PHP location square footage. With this increase in space, the Plans is to increase the size public health laboratories, and to include a dry lab with statistical software for students. Additional space for classroom activities has been identified.

## 2. Cumulative Graduation Rates

The action Plans implemented to improve graduation rates has been effective. The following data provides the evidence:

- **Figure B2-1** Graduated students by year (cohorts  $\geq 5$  years) demonstrates an increase in the number of DrPH graduates by year. Sixteen (16) students have completed their doctoral studies during the year 2017 as compared to previous years.
- Better graduation outcomes are expected at the end of May 2018.
- Fourteen (14) doctoral students will be defending dissertations in the month of May 2018.

Figure B2-1 Graduated students by year (cohorts  $\geq 5$  years)



**Table B2-3: Titles of thesis defenses in May 2018**

Students	Advisor	Year admitted	Dissertation Titles
Robert Rodríguez	Dr. Juan C. Orengo	2014	Ponce Mosquito Guide, Eco-epidemiology and Arboviral Infection Prevalence
Sharon Rodríguez	Dra. Brenda Soto	2008	A Study of Factors Associated with Candida Infections in Hospitals in Southern Puerto Rico from 2009 to 2015
Roberta Lugo	Dra. Jessica Irizarry	2013	Conversion from Epoetin Alfa to Darbepoetin Alfa in Hemodialysis Patients: Effectiveness and Variability in Anemia Treatment
Kendra Caraballo	Dra. Vivian Green	2009	Sleep Insufficiency Profile in the Adult Population of Puerto Rico: 2011 -2012
Mirna Arroyo	Dra. Brenda Soto	2009	Maternal mortality in Puerto Rico during the period from 2002 to 2014
Heidi Acosta	Dr. Juan C. Orengo	2011	Determinants of Intention among Primary Care Physicians in Puerto Rico to Make an Early Diagnosis of Alzheimer's Disease: An Application of the Theory of Planned Behavior (TPB)
Luz Méndez	Dra. Brenda Soto	2009	Medication Therapy Management (MTM) Assessment in a population of people over 65 years in Puerto Rico
			Prevalence and factors Associated with Bulling in Private Schools of a Municipality of the Northwest of Puerto Rico



### **B3. PHP Post-Graduation Outcomes**

#### **B.3.1 - Data on post-graduation outcomes (employment or enrollment in further education) for MPH and DrPH.**

The program uses the Annual Alumni Survey to collect and analyze data on graduate's employment or enrollment in further post-graduate education for each public health degree offered.

##### **a. MPH post-graduation outcomes**

<b>Post-Graduation Outcomes</b>	<b>2014-2015 Number and percentage</b>	<b>2015-2016 Number and percentage</b>	<b>2016-2017 Number and percentage</b>
Employed	22 (73%)	15 (50%)	16 (53%)
Continuing education/training (not employed)	8 (27%)	11 (37%)	11 (37%)
Not seeking employment or not seeking additional education by choice	0	1 (3%)	0
Actively seeking employment or enrollment in further education	0	0	0
Unknown	0	3 (10%)	3 (10%)
<b>Total</b>	<b>30</b>	<b>30</b>	<b>30</b>

##### **b. DrPH post-graduation outcomes**

<b>Post-Graduation Outcomes</b>	<b>2014-2015 Number and percentage</b>	<b>2015-2016 Number and Percentage</b>	<b>2016-2017 Number and percentage</b>
Employed	2 (100%)	5 (100%)	5 (100%)
Continuing education/training (not employed)	0	0	0
Not seeking employment or not seeking additional education by choice	0	0	0
Actively seeking employment or enrollment in further education	0	0	0
Unknown	0	0	0
<b>Total</b>	<b>2</b>	<b>5</b>	<b>5</b>

**B.3.2 - Explain the data presented above, including identification of factors contributing to any rates that do not meet this criterion's expectations and plans to address these factors.**

The MPH achieves the rate of 73% of employment or enrollment in further education during the year 2013-2014; but surpassed the CEPH rates during the years 2015 and 2016 (100%; 87%) for an average rate of 86.7% in the three years. For academic year 2013-2014, 23% of the MPH alumni are conducting doctoral studies (3 in medical education; 1 in biomedical sciences; 1 law in education; 1 in environmental health; 1 epidemiology and 1 in other doctoral degree).

For 2013, 2014, 2015 and 2016, eight out of nine Dr.PH all alumni were employed. The Dr. PH program surpassed the CEPH rates of employment or enrollment in further education. It achieved combined rates of 100% during 2014, 2015, 2016. However, during those academic years we have low graduation rates in the DrPH program. To improve on this low graduation rate, we analyzed the reasons behind this problem and an action Plans was implemented. (Refer to Criterion B2 above).

**B.3.3 - If applicable, assess strengths and weaknesses related to this criterion and for improvement in this area.**

The program collected and analyzed information of its post-graduation outcomes for the MPH and Dr. PH programs. Last year both programs met the criterion related to graduates' employment or further education outcomes. An analysis of strengths and weaknesses follows, including the action Plans for continuous improvement of this criterion:

**Strengths**

- The PHP provides students with the skills needed to enter the workforce in public health or to continue doctoral studies.
- We have a high percentage of alumni working in jobs related to public health or pursuing doctoral studies. We attribute this to the quality of the education that our students receive in PHP at PHSU.
- We developed and implemented a Dr PH and MPH Annual Alumni Survey.

**Weaknesses**

- Efforts will be directed to improve Dr.PH graduation rates within the program's time frame limit.
- There are some unknown data of MPH graduates. Looks like the form currently in use for collecting alumni information is not attractive. Students do not respond to surveys.

**Plans**

- The PHP program will develop alternative forms to gather complete information of graduates. These may include using Survey Monkey via Facebook or email and surveys via phone calls to know the progress of our alumni as professionals.
- The PHP website will be extensively redesigned to correct and update old information and to be informative, interesting and regularly refreshed with new events. The PHP website will include an alumni section. The general objective of the PHP's web page will be to track alumni and their work status. The specific aims of the page are: (a) to get reliable information regarding the professional performance of our alumni; (b) to offer information regarding workforce and seminars offered by the PHP to enrich their professional performance; (c) to know which skills and competencies covered in the Public Health Program have been effective in their professional development; and to know if there are any skills that have not been covered effectively by the program so that we can implement actions that will improve the program's academic level;
- To maintain constant contact with alumni using the following means: yearly alumni gatherings, create an alumni directory, organize the Alumni Association of Public Health.

## **B4. Alumni Perceptions of Curricular Effectiveness**

### **B.4.1 Summary of findings of alumni self-assessment of success in achieving competencies and ability to apply competencies after graduation.**

In June of 2018 we developed an instrument to collect information regarding the perception of the alumni regarding competencies acquired through the programs' curriculum and their ability to apply those competencies in the workplace, for each degree conferred (MPH and DrPH). We collected information for the MPH alumni who completed their degree in the period of 2007 to 2018. We received a total of 46 answers (N=46). For the DrPH we collected information from alumni who completed their degree between 2015 and 2018, and we received a total of 16 answers (N = 16). This survey will take place every year during the month of June, and for each cohort we plan on conducting the survey on their graduation year, and two years later. Most alumni from both programs were highly satisfied or satisfied with their ability to apply the competencies learned in the program in their work place.

#### MPH

- 50% were satisfied in their ability to use data to identify and solve public health problems
- 98% were satisfied in their ability to communicate effectively to promote the health of all members of our communities
- 87% were satisfied in their ability to resolve problems in the community
- 100% were satisfied in their ability to demonstrate the ability to work as part of a team
- 96% were satisfied in their ability to be an effective leader
- 83% were satisfied in their ability to engage within a diverse world and cultures
- 77% were satisfied with the requirements in the work of public health professionals

#### DrPH

- 94% were satisfied in their ability to communicate effectively to promote the health of all members of our communities
- 96% were satisfied in their ability to demonstrate the ability to work as part of a team
- 81% were satisfied in their ability to resolve problems in the community
- 88% were satisfied in their ability to be an effective leader
- 84% were satisfied in their ability to engage within a diverse world and cultures
- 88% were satisfied with the requirements in the work of public health professionals

When we evaluated the results of the alumni survey we realized we should modify some of the survey premises to obtain better information to identify which curriculum they were following and about the perception of our alumni regarding the curriculum. We plan to contact our alumni to invite them to meetings and focal groups where we can establish dialogue and where we can periodically and generally evaluate results of the professional development and needs of our alumni. Our hope is this will help and serve as a reference framework and help in making future decisions regarding the program. (Refer to ERF to other information related to student's perceptions.)

**B.4.2 - Provide full documentation of the methodology and findings from alumni data collection. (ERF)**

The 2018 Dr.PH & MPH Annual Alumni Survey Results and others survey are included in the **ERF**

## **B5. PHP Defining Evaluation Practices**

**B.5.1 Present** an evaluation plans, at a minimum, list the program’s evaluation measures, methods and parties responsible for responsible for review.

The Assessment Committee (before the Evaluation Committee) was charged with the responsibility to review the 2013 plans to develop the new three-year assessment plans to guide all assessment activities during 2014-2017; to collect data, assess the effectiveness of the program in achieving public health goals and make recommendations for ongoing improvement. The plans incorporate public health goals related to the following areas: (A) Research, (B) Academic Excellence, (C) Service, (D) Infrastructure, (E) Diversity/ Disparities. Firstly, the Committee designed a plan to guide the development of the complete final plans. The Committee identified the assessment measures and the data collection methods with input of the faculty. Then, the Committee assigned the responsible person/committee for collecting evidence for each measure. The table that follows presents this guiding plan:

**Table B5-1: Guiding Public Health Assessment plans**

<b>Evaluation measures</b>	<b>Identify data source(s) and describe how raw data are analyzed and presented for decision making</b>	<b>Responsibility for review</b>
<b>Goal A.1: Research portfolio will grow</b>		
% of faculty with some external grant proposal submitted.	PHP Research Committee annual report based on the faculty self-report about funded research activity and project submitted.	Full faculty: annual report
Total of grant(s) acquired by PHP faculty.	PHP Research Committee annual report based on the faculty self-report about funded research activity and project submitted.	Full faculty: annual report
# of total number of manuscripts published in professional journals.	PHP Research Committee annual report based on the faculty CV and faculty self-report about publication in indexed or non-indexed peer review.	Full faculty: annual report
# of environmental, behavioral, prevention or population-based research papers, posters or oral presentations done.	PHP Research Committee annual report based on faculty CV.	Full faculty annual report
<b>Goal A.2: Portfolio will contribute to workforce capacity in population- based research.</b>		
# of health professionals, and external health-related students or trainees trained in research methods.	PHP Workforce Develop Committee produces annual report based in the assistance list for each workforce activity.	PHP Workforce Develop Committee: trimester report.
# of faculty with funded research portfolios that include funding available for PHP students.	PHP Research Committee annual report based on the faculty self-report about funded research activity and student’s research activities. PHP Evaluation Committee annual summary based on the administrative staff work study report.	PHP Research Committee: annual report Administrative staff: trimester report
# of PHP students hired as work/study or full-time researchers	PHP Evaluation Committee annual summary based on the administrative staff work study report.	Administrative staff: trimester report
<b>Goal B.1: Ensure competency base to all academic public health activities.</b>		
% of syllabi that have verbalized competencies.	Curriculum Committee annual report on review of syllabi.	Full faculty: trimester report

% MPH students with a passing grade in comprehensive exam.	MPH Integrative Learning Experience Coordinator generates an annual report based on exam scores.	MPH Integrative Learning Experience Coordinator: annual report
% MPH graduating with achievement of PH competencies.	Culminating Experience Coordinator prepared an annual report based in the Capstone metrics for 2013 to 2017.	Culminating Experience Coordinator
% DrPH students with a passing grade in comprehensive exam.	DrPH Coordinator generates an annual report based on exam scores.	DrPH Coordinator: annual report
% of incoming students who graduate within time limits.	PHP Evaluation Committee generates a cumulative graduation rates annual report.	PHP Associate Dean and PHP Evaluation Committee: annual report
% of students rated contributory to their host agency.	PHP Practical Experience Coordinator produces annual report based on Preceptor to student evaluation of practical activity.	PHP Practical Experience Coordinator: summer
% of students receiving satisfactory, competent & professional rating from their practicum site preceptors	PHP Practical Experience Coordinator produces annual report based on Preceptor to student evaluation of practical activity.	PHP Practical Experience Coordinator: summer
% graduates to secure health related employment or continued graduate education within a year.	PHP Career & Program Promotion Services Coordinator produces an annual report based on the Annual Alumni Survey.	PHP Career & Program Promotion Services Coordinator: summer
% graduates satisfied with the curriculum design	PHP Career & Program Promotion Services Coordinator produces an annual report based on the Annual Alumni Survey	PHP Practical Experience Coordinator: summer
% graduates satisfied because the competencies of the program correspond with the requirements in the work of public health professionals.	PHP Career & Program Promotion Services Coordinator produces an annual report based on the Annual Alumni Survey.	PHP Practical Experience Coordinator: summer
<b>Goal B.2: Curriculum addresses community and public health disparity issues.</b>		
% of course, implementation that include community interactions per year.	Evaluation Committee annual report based on review of syllabi.	Full faculty: trimester report
% of courses that capture diversity, minority or unique aspects of Puerto Rico's Hispanic population.	Evaluation Committee annual report based on review of syllabi.	Full faculty: trimester report
<b>Goal B.3: Curriculum is innovative and dynamic.</b>		
% of courses updated during past year to reflect changing health parameters, tools & technologies.	Evaluation Committee annual report based on review of syllabi.	Full faculty: trimester report
% that uses varied teaching methodologies including innovative technique.	Evaluation Committee annual report based on review of syllabi and report of quantity of courses recorded and on the Moodle platform.	Full faculty: trimester report Educational technologist, trimester report
<b>Goal B.4: Achieve and Maintain Academic Excellence</b>		
Average student admission GPA.	PHP Admission Office produces summary report about the academic profiles of entering classes.	Admission Office: annual report

% of courses with average course evaluation rated 3 or higher overall.	PHP Evaluation Committee generates a trimester report from Final course evaluation. PHP Associate Dean realizes an annual Faculty Evaluation.	Educational technologist: trimester report PHP Associate Dean: annual Faculty Evaluation
% of courses or instructors with scores below 3 who receive feedback & faculty development training.	PHP Evaluation Committee generates a trimester report from Final course evaluation. PHP Evaluation Committee generates a trimester report about the faculty development training.	Educational technologist: trimester report Administrative staff: trimester report about Attendance to faculty development training. PHP Associate Dean: annual Faculty Evaluation
% of courses with previous < 3 review that have improved at next course offering.	PHP Evaluation Committee generates a trimester report from Final course evaluation. PHP Associate Dean realizes an annual Faculty Evaluation.	Educational technologist: trimester report PHP Associate Dean: annual Faculty Evaluation
Average student satisfaction with professional training received at PHSU.	PHP Evaluation Committee generates an annual report about student satisfaction with professional training received at PHSU from Need Assessment Survey, Graduation survey and Exit Interview.	Students Affairs Office, Graduation Survey: annual report Administrative staff, Need Assessment Survey and Exit Interview: annual report
Average student satisfaction with student faculty interaction and advising.	PHP Evaluation Committee generates an annual report about student satisfaction with student faculty interaction and advising from Need Assessment Survey, Graduation survey and Exit Interview.	Students Affairs Office, Graduation Survey: annual report Administrative staff, Need Assessment Survey, Exit Interview and Perception Survey (Qualitative Data): annual report
<b>Goal B.5: Provide students with training in ethics, professionalism &amp; leadership.</b>		
% of courses which includes leadership, ethics or social justice.	Evaluation Committee annual report based on review of syllabi.	Full faculty: trimester report
<b>Goal C.1: Build vibrant collaborative relationships with local and global communities, government and private sector.</b>		
Number of community assessments.	Evaluation Committee annual report based on review of syllabi. Community Relations Committee report based on explores the needs of the community and our service in the community.	Full faculty: trimester report Community Relations Committee; annual report



	PHP Research Committee annual reports based on the faculty self-report about faculty services.	
Service is provided globally as well as locally.	PHP Research Committee annual report based on the faculty self-reports about faculty services. Community Relations Committee report based on explores the needs of the community and our service in the community.	Full faculty: annual report Community Relations Committee; annual report
Number of continuing education (CE or CME) activities offered each year.	PHP Workforce Develop Committee produces annual report based in the assistance list for each workforce activity. PHP Research Committee annual report based on the faculty self-report about continuing education projects and activities offered by the program faculty.	PHP Workforce Develop Committee, annual report PHP Research Committee, annual report
Number of different public health areas covered in the CE events or course.	PHP Workforce Develop Committee produces annual report based in the assistance list for each workforce activity. PHP Research Committee annual report based on the faculty self-report about continuing education projects and activities offered by the program faculty.	PHP Workforce Develop Committee, annual retreat PHP Research Committee, annual retreat
Number of health professionals receiving CE, or additional health capacity training.	PHP Workforce Develop Committee produces annual report based in the assistance list for each workforce activity. PHP Research Committee annual report based on the faculty self-report about continuing education projects and activities offered by the program faculty.	PHP Workforce Develop Committee, annual retreat PHP Research Committee, annual retreat
<b>Goal D.1. Ensure adequate infrastructure for carrying out the Public Health program activities.</b>		
% of faculty able to access needed computer, software, printing or laboratory resources.	PHP Evaluation Committee generates an annual report from Faculty and Staff Survey for Monitoring Infrastructure Goals.	PHP Evaluation Committee: annual Faculty and Staff Survey for Monitoring Infrastructure Goals.
Average student satisfaction with infrastructure support.	PHP Evaluation Committee generates an annual report about student satisfaction with infrastructure support received at PHSU from Need Assessment Survey, Graduation survey and Exit Interview.	PHP Evaluation Committee: annual surveys
% of faculty satisfied with IT infrastructure.	PHP Evaluation Committee generates an annual report from Faculty and Staff Survey for Monitoring Infrastructure Goals.	PHP Evaluation Committee: annual Faculty and Staff Survey for Monitoring Infrastructure Goals.

% of DL activities able to be conducted without interruption.	PHP Evaluation Committee generates an annual report from Faculty and Staff Survey for Monitoring Infrastructure Goals.	PHP Evaluation Committee: annual Faculty and Staff Survey for Monitoring Infrastructure Goals.
<b>Goal D.2: Secure a stable resource base for enhancement and implementation of the public health program.</b>		
% of needed faculty included in budget.	PHP Associate dean prepares an annual budget.	PHP Associate Dean
Program director included in budget decisions, has final authority on certain budget decisions within the current budget.	PHP Associate dean prepares an annual budget.	PHP Associate Dean
<b>Goal E.1: Recruit diverse student body.</b>		
% of newly admitted students who are of non-Hispanic origin.	PHP Admission Committee annual summary based on classes academic profiles. Dr. Rafael Bredy as part of the PHSU Diversity Assessment Committee is the responsible of present an annual report based in the Diversity Climate Assessment Survey.	Admission Office: annual report PHSU Diversity Assessment Committee: annual report
# of racial groups represented in newly admitted students	PHP Admission Committee annual summary based on classes academic profiles. Dr. Rafael Bredy as part of the PHSU Diversity Assessment Committee is the responsible of present an annual report based in the Diversity Climate Assessment Survey.	Admission Office: annual report Diversity Assessment Committee: annual report
% of students from mainland and other countries.	PHP Admission Committee annual summary based on classes academic profiles. Dr. Rafael Bredy as part of the PHSU Diversity Assessment Committee is the responsible of present an annual report based in the Diversity Climate Assessment Survey.	Admission Office: annual report Diversity Assessment Committee: annual report
% of PR students coming from economically-deprived circumstances.	Evaluation Committee annual report based on Financial Aids Statistics (number of students with loans and scholarship).	Financial Aid Office: annual report
% of student body hired for any work-study income opportunities	PHP Evaluation Committee annual summary based on the administrative staff work study report	Administrative staff: trimester report
<b>Goal E.2: Recruit and Maintain diverse faculty body.</b>		
# of racial groups represented within the faculty body	Evaluation Committee annual report based on Human Resource Office.	Human Resource Office: annual report
Female: male ratio within faculty	Evaluation Committee annual evaluation based on Human Resource Office.	Human Resource Office: annual report
% of faculty born outside of USA	Evaluation Committee annual evaluation based on Human Resource Office.	Human Resource Office: annual report
<b>Goal E.3: Strengthen the learning environment elements that values diversity and seek to reduce disparities.</b>		
% of academic curriculum that maintains a learning environment	Evaluation Committee annual report based on review of syllabi.	Full faculty; trimester report

that values diversity		
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In the revision and evaluation of the metrics used for Goal B.1 we have added other metrics that give us information regarding alumni satisfaction.

**Complete Assessment plan**

The final public health program assessment plans incorporate objectives for each goal, indicators, target, data source and the assessment of the objectives for a four-year period. Refer to the table B5-1.2 below:

**Matching of PHP goals with criterion B1 Guiding Statements (MPH and DrPH goals)**

<b>PHP Goals</b>	<b>MPH specific goals</b>	<b>DrPH specific goal</b>	<b>DrPH specific objectives</b>
Goal A.1: Research portfolio will grow.			
Goal A.2: Portfolio will contribute to workforce capacity in population-based research.	<p>To promote through research, the determining factors that affect the health of the population, with the purpose of reducing prevailing mortality rates.</p> <p>To provide academic activities in which the student will develop projects and programs geared at promoting health effectively and preventing disease in the community.</p> <p>To prepare Public Health professionals with the capacity to make fair decisions in different scenarios, while taking into consideration the opinion of the community.</p>	Educate professionals with the knowledge and skills in the epidemiological method as applied to diverse areas of specialization in the identification of health needs and risk factors, and in the evaluation of health programs for the prevention, protection and treatment of illnesses.	<p>To describe and interpret the principal indicators of health and illness to generate relevant information for making decisions in the formulation of health policies.</p> <p>To plans, design, and coordinate research protocols that can be accomplished following ethical principles and safety rules.</p> <p>To integrate the epidemiologic method with qualitative and statistical methods in the designs of investigation.</p> <p>To identify and select appropriate epidemiologic designs that can answer the relevant questions of public health problems.</p>
Goal B.1: Ensure competency base to all academic public health activities.	To offer a broad education to future health, through which they can provide quality service and assume leadership roles in the education and practice of Public Health, both in the private and public sectors of the community.	Educate professionals with the knowledge and skills in the epidemiological method as applied to diverse areas of specialization in the identification of health needs and risk factors, and in the evaluation of health programs for the prevention, protection and treatment of illnesses.	<p>To describe and interpret the principal indicators of health and illness to generate relevant information for making decisions in the formulation of health policies.</p> <p>To identify and select appropriate epidemiologic designs that can answer the relevant questions of public health problems.</p> <p>To integrate the epidemiologic method with qualitative and statistical methods in the designs of investigation.</p>
Goal B.2: Curriculum addresses community and public health disparity	To offer a broad education to future health, through which they can provide	Educate professionals with the knowledge and skills in the epidemiological	To describe and interpret the principal indicators of health and

<p>issues.</p>	<p>quality service and assume leadership roles in the education and practice of Public Health, both in the private and public sectors of the community. To provide academic activities in which the student will develop projects and programs geared at promoting health effectively and preventing disease in the community. To prepare Public Health professionals with the capacity to make fair decisions in different scenarios, while taking into consideration the opinion of the community.</p>	<p>method as applied to diverse areas of specialization in the identification of health needs and risk factors, and in the evaluation of health programs for the prevention, protection and treatment of illnesses.</p>	<p>illness to generate relevant information for making decisions in the formulation of health policies. To provide advice on the decision-making process and on public health policies using the epidemiologic method.</p>
<p>Goal B.3: Curriculum is innovative and dynamic.</p>	<p>To offer a broad education to future health, through which they can provide quality service and assume leadership roles in the education and practice of Public Health, both in the private and public sectors of the community. To provide academic activities in which the student will develop projects and programs geared at promoting health effectively and preventing disease in the community. To prepare Public Health professionals with the capacity to make fair decisions in different scenarios, while taking into consideration the opinion of the community.</p>	<p>Educate professionals with the knowledge and skills in the epidemiological method as applied to diverse areas of specialization in the identification of health needs and risk factors, and in the evaluation of health programs for the prevention, protection and treatment of illnesses.</p>	<p>To describe and interpret the principal indicators of health and illness to generate relevant information for making decisions in the formulation of health policies.</p>
<p>Goal B.4: Achieve and maintain academic excellence.</p>	<p>To offer a broad education to future health, through which they can provide quality service and assume leadership roles in the education and practice of Public Health, both in the private and public sectors</p>	<p>Educate professionals with the knowledge and skills in the epidemiological method as applied to diverse areas of specialization in the identification of health needs and risk factors, and</p>	<p>To describe and interpret the principal indicators of health and illness to generate relevant information for making decisions in the formulation of health policies.</p>

	of the community.	in the evaluation of health programs for the prevention, protection and treatment of illnesses.	
Goal B.5: Provide students with training in ethics, professionalism & leadership.	<p>To promote through research, the determining factors that affect the health of the population, with the purpose of reducing prevailing mortality rates.</p> <p>To prepare Public Health professionals with the capacity to make fair decisions in different scenarios, while taking into consideration the opinion of the community.</p>	Educate professionals with the knowledge and skills in the epidemiological method as applied to diverse areas of specialization in the identification of health needs and risk factors, and in the evaluation of health programs for the prevention, protection and treatment of illnesses.	<p>To describe and interpret the principal indicators of health and illness to generate relevant information for making decisions in the formulation of health policies.</p> <p>To plans, design, and coordinate research protocols that can be accomplished following ethical principles and safety rules.</p> <p>To provide advice on the decision-making process and on public health policies using the epidemiologic method.</p> <p>To integrate the epidemiologic method with qualitative and statistical methods in the designs of investigation.</p> <p>To identify and select appropriate epidemiologic designs that can answer the relevant questions of public health problems.</p>
Goal C1: Built vibrant collaborative relationships with local and global communities, government and private sector.	<p>To offer a broad education to future health, through which they can provide quality service and assume leadership roles in the education and practice of Public Health, both in the private and public sectors of the community.</p> <p>To promote through research, the determining factors that affect the health of the population, with the purpose of reducing prevailing mortality rates.</p> <p>To contribute to the improvement of the population's health by providing high quality health care services, technical assistance and</p>	Educate professionals with the knowledge and skills in the epidemiological method as applied to diverse areas of specialization in the identification of health needs and risk factors, and in the evaluation of health programs for the prevention, protection and treatment of illnesses.	<p>To describe and interpret the principal indicators of health and illness to generate relevant information for making decisions in the formulation of health policies.</p> <p>To plans, design, and coordinate research protocols that can be accomplished following ethical principles and safety rules.</p> <p>To provide advice on the decision-making process and on public health policies using the epidemiologic method.</p> <p>To integrate the epidemiologic method with qualitative and</p>

	<p>consulting services.</p> <p>To provide academic activities in which the student will develop projects and programs geared at promoting health effectively and preventing disease in the community.</p> <p>To prepare Public Health professionals with the capacity to make fair decisions in different scenarios, while taking into consideration the opinion of the community.</p>		<p>statistical methods in the designs of investigation.</p> <p>To identify and select appropriate epidemiologic designs that can answer the relevant questions of public health problems.</p>
Goal D1: Ensure adequate infrastructure for carrying out Public Health program activities.			
Goal D.2: Secure a stable resource base for enhancement and implementation of the public health program.			
Goal E.1: Recruit diverse student body.			
Goal E.2: Recruit and maintain diverse faculty body.			
Goal E.3: Strengthen the learning environment elements that values diversity and seek to reduce disparities.			

The Public Health Program has unified goals that represent the program in its totality. We also have specific goals and objectives for the MPH and DrPH degrees. In the above table we present a comparison between the goals of the PHP as whole and those of the MPH y DrPH. Goals and revised and updated with the establishment of the Institutional Evaluation Committee. Goals A1, D1, D2, E1, E2, and E3 are directed to the faculty research areas infrastructure, Budget, diversity, and disparity, respectively.

**B.5.2 Briefly describe how the chosen evaluation methods and measures track the program’s progress in advancing the field of public health (including instruction, scholarship and service) and promoting student success.**

As described in criterion B1, the program’s evaluation methods and measures are designed to further the mission to provide the highest quality education, research and population-based services. This mission will be accomplished through an innovative, dynamic, responsive public health curriculum while preparing ethically competent professional public health practitioners and researchers who excel in promoting and protecting health in the community and in a diverse, globalized society.

The vision of Public Health Program reflects a commitment and aspiration to be a leader in preparing public health professionals, by excellence in academia and by building and expanding public health knowledge and competency, to improve the health of communities and populations locally and across the world.

Faculty, students, staff, institutional administrators and community are all essential contributors to the PHP assessment process. The Associate Dean of Public Health works together with them the faculty and the program’s committees program Planning, monitoring and assessment efforts. This process is based in the five major areas: research, academic excellence, service, infrastructure and diversity & disparities. The PHP Assessment Committee has four faculty members and one student member, and it is responsible for regular evaluation of all the indicators described in the Strategic plans (see electronic file). Using our mission, goals and objectives as framework the committee developed procedures, identified data sources and developed, as needed, additional data collection procedures or instruments. The program’s evaluation goals and measures are specific and measurable. The evaluation reports out to the relevant PHP committees and the Associate Dean of Public Health Program on their specific areas of interest, so that the committees or PHP Associate Dean can act as needed based on the evaluation results.

**Table B5.2 Alignment between evaluation measures and Education, Research and Service.**

Evaluation measures	Education (highest quality education and leader in preparing public health professionals)	Research	Service (improve health of communities and populations locally and across the world)
<b>Goal A.1: Research portfolio will grow.</b>			
% of faculty with some external grant proposal submitted.		X	
Total of grant(s) acquired by PHP faculty.		X	
# of total number of manuscripts published in professional journals.		X	
# of environmental, behavioral, prevention or population-based research papers, posters or oral presentations done.	X	X	X



<b>Goal A.2: Portfolio will contribute to workforce capacity in population- based research.</b>			
# of health professionals, and external health-related students or trainees trained in research methods.	X		
# of faculty with funded research portfolios that include funding available for PHP students.	X	X	
# of PHP students hired as work/study or full-time researchers	X	X	
<b>Goal B.1: Ensure competency base to all academic public health activities.</b>			
% of syllabi that have verbalized competencies.	X		
% MPH students with a passing grade in comprehensive exam.	X		
% MPH graduating with achievement of PH competencies.	X		
% DrPH students with a passing grade in comprehensive exam.	X		
% of incoming students who graduate within time limits.	X		
% of students rated contributory to their host agency.	X		
% of students receiving satisfactory, competent & professional rating from their practicum site preceptors	X		
% graduates to secure health related employment or continued graduate education within a year.	X		
% graduates satisfied with the curriculum design	X		
% graduates satisfied because the curriculum of the program corresponds with the requirements in the work of public health professionals.	X		

<b>Goal B.2: Curriculum addresses community and public health disparity issues.</b>			
% of course, implementation that include community interactions per year.	X		X
% of courses that capture diversity, minority or unique aspects of Puerto Rico's Hispanic population.	X		
<b>Goal B.3: Curriculum is innovative and dynamic.</b>			
% of courses updated during past year to reflect changing health parameters, tools & technologies.	X		
% that uses varied teaching methodologies including innovative technique.	X		
<b>Goal B.4: Achieve and Maintain Academic Excellence</b>			
Average student admission GPA.	X		
% of courses with average course evaluation rated 3 or higher overall.	X		
% of courses or instructors with scores below 3 who receive feedback & faculty development training.	X		
% of courses with previous < 3 review that have improved at next course offering.	X		
Average student satisfaction with professional training received at PHSU.	X		
Average student satisfaction with student faculty interaction and advising.	X		
Average student satisfaction with class size.	X		
<b>Goal B.5: Provide students with training in ethics, professionalism &amp; leadership.</b>			
% of courses which includes leadership, ethics or social justice.	X		

<b>Goal C.1: Build vibrant collaborative relationships with local and global communities, government and private sector.</b>			
Number of community assessments.	X		X
Service is provided globally as well as locally.			X
Number of continuing education (CE or CME) activities offered each year.	X		
Number of different public health areas covered in the CE events or course.	X		
Number of health professionals receiving CE, or additional health capacity training.	X		
<b>Goal D.1. Ensure adequate infrastructure for carrying out the Public Health program activities.</b>			
% of faculty able to access needed computer, software, printing or laboratory resources.	X	X	
Average student satisfaction with infrastructure support.	X		
% of faculty satisfied with IT infrastructure.	X	X	
% of DL activities able to be conducted without interruption.	X		
<b>Goal D.2: Secure a stable resource base for enhancement and implementation of the public health program.</b>			
% of needed faculty included in budget.	X	X	
Program director included in budget decisions, has final authority on certain budget decisions within the current budget.	X	X	
<b>Goal E.1: Recruit diverse student body.</b>			
% of newly admitted students who are of non-Hispanic origin.	X		
# of racial groups represented in newly admitted students	X		
% of students from mainland and other countries.	X		

% of PR students coming from economically-deprived circumstances.	X		
% of student body hired for any work-study income opportunities.	X		
<b>Goal E.2: Recruit and Maintain diverse faculty body.</b>			
# of racial groups represented within the faculty body	X		
Female: male ratio within faculty	X		
% of faculty born outside of USA	X		
<b>Goal E.3: Strengthen the learning environment elements that values diversity and seek to reduce disparities.</b>			
% of academic curriculum that maintains a learning environment that values diversity	X		X

The PHP collects the evaluation information through many tools (see electronic resource files). The PHP evaluation plans rely on both quantitative and qualitative results to provide a comprehensive and multidimensional response to the evaluation questions and progress towards meeting the goals is measured annually. The information collected from evaluation tools are used to identify gaps and address areas of needed improvement or challenges. Based on the information obtained, policies, strategies, procedures or activities are revised. The revisions may be modifications of current policies and procedures or require development of new ones.

Results of evaluation and planning are regularly used to enhance the quality programs and activities because our evaluation plans are living documents. The faculty body meet one a month to discuss situations and alternatives. Each committee meets according to assigned responsibilities. During meetings faculty and committee report on tasks or activities planned. As appropriate, results of evaluations are discussed during the monthly program meeting or in committee meetings. Each year, at least one-day long meeting serves to plans the upcoming academic, research and service activities. Meetings provide an opportunity for faculty to review and discuss recently collected data. These data are used to inform changes to the programs and the curriculum based on changing student needs and changes in public health evolution. Data are regularly discussed when they can inform planning and decision-making. Problem solving planning can occur at any time during the year.

Faculty evaluations and work plans have been a valuable tool for accountability and to prioritize faculty efforts. Faculty use course evaluations to improve course content and methods. The PHP Associate Dean meets with faculty members whose course evaluations score below 4 of 5 in major areas of the student evaluations. During the summer of 2017, all our faculty members were invited to three development trainings that included the following themes: course structure and organization, learning experience, teaching and learning, and evaluation and feedback. These short trainings are an effort to increase our faculty’s academic excellence and to provide the highest quality education.

There are three main periods of planning within the PHP:

- **Planning year course navigation.** Track Coordinators make initial plan’s and then in their roles as members of the Curriculum Committee they review schedules, resolve overlaps and set the course navigation for the year for all tracks. Problems in content coverage are brought to the PHP Deans’ attention. This occurs in June/early July and rechecked before each subsequent trimester.
- **Faculty annual work-plan’s.** At the end of academic year, both the faculty members and the Program Dean review the past year performance, successes and challenges, and Planss for the upcoming year. Each faculty member review

and revise the annual work plans to reaffirm or change goals, targets or areas of personal and professional development. As individuals are reflecting and revising their individual plan's, collective plans for the program for the upcoming year are introduced, discussed and decided on by the faculty during summer faculty meetings. Programmatic plan's may be initiated by an individual, the Program Dean or an idea taken from a problem identified during evaluation.

- **Strategic planning.** The PHP regularly engages in a long-term strategic planning, for itself and during Institution-wide strategic planning activities. Major strategic work has been done on the areas of research and Dr.PH graduation rates.

**B.5.3 Provide evidence of implementation of the plans described in Template B5-1. Evidence may include reports or data summaries prepared for review, minutes of meeting of meeting at which results were discussed, etc. Evidence must document examination of progress and impact on both public health as a field and students' success.**

The table B5-2 presents the implementation of the assessment plans. Please see the *electronic resource file (ERF)*.

**B.5.4 Assess of the extent to which this criterion is met and an analysis of the program's strengths, weaknesses and plan's relating to this criterion.**

The PHSU Public Health Program meets Criterion B5. The program collects and analyzes graduation rate data for each degree and evidence has been provided of the progress related to the required thresholds of the CEPH. Factors affecting the graduation rate in the Dr.PH program have been identified and analyzed and a plans for improving graduation rate has been provided. The program tracks post- graduation outcomes and has evidence that the MPH and DrPH programs surpassed the expected rates of employment and further education outcomes during 2015 and 2016. Most alumni are employed or continued graduate education in diverse fields. Before leaving the program, students self-assess their readiness to continue graduate studies or practice the profession by completing the graduation questionnaire administered by the institution. planning is under way to develop a questionnaire that can assess specific competencies and skills of both active students and alumni. The Assessment Committee has designed a three-year evaluation plans with faculty input to assess the effectiveness of the program in achieving its curricular objectives and document the accomplishments of program's outcomes.

The following strengths and weaknesses have been identified during the analysis of Criterion B5 and some action steps are recommending for continuous improvement.

**Strengths**

- The PHP has incorporated multiple methods for the assessment of program goals and objectives.
- Some indicators and targets are appropriate for measuring PHP's progress towards meeting its desired goals.
- The program has evolved from a problem-solving evaluation methodology to a planned evaluation strategy with a developed system for collecting, analyzing, interpreting and acting upon available data.
- A regular PHP assessment system and the timeline for measuring outcomes are in place that can provide information for planning and problem solving in a prompt manner.
- An external consulting committee ("Comité Externo de Consultoría") was created, in which there is representation of the academic, service and research areas, both national and international. The goal is to receive external recommendations so that the Public Health Program is more effective in meeting its goals and objectives.

**Weaknesses**

- Some processes are new, and the program needs to analyze them to ensure the usefulness and completeness of the data gathering.

**Plans**

- The PHP evaluation committee plan's to regularly present trimester and annual assessment information to the faculty and other constituencies to inform them regarding progress and problems identified.
- To create new tools to assess PHP processes.
- To regularly review the curriculum to ensure that the program is meeting the new CEPH competencies and the needs of the students, and to include new sources of information.

## **B6. PHP Use of Evaluation Data**

**B.6.1 Provide two or four examples specific examples of programmatic changes undertaken in the last three years based on evaluation results. For example, describe the specific evaluation finding and the groups or individuals responsible for determining the planned change, as well as identifying the change itself.**

There are significant changes that have been implemented to improve the PHP:

- **Development of the Research plans**

The PHP Research Committee and the Seed Money provided by the PHSU were the baseline to develop faculty research and to help doctoral students by incorporating them to research through the work study program. The incorporation of students in faculty research and in practicum allows the students to develop possible dissertation topics. PHSU has made twenty-five thousand dollars (per year) of seed money available for the program to promote new research. Seed money may be used in two primary ways: for work-study students and for small expenses in unfunded research projects. Seed money can be approved for funding pilot projects that build relationships, methodology or data that will allow the faculty member to more successfully pursue external grants. The PHP has hired current and recent PHP student as work study students who assist in the background literature reviews or assistance with grant implementation activities. The members of the Research Committee are responsible for developing the research plans of PHP.

- **Action plans to improve Dr.PH Graduation rates**

The Dr.PH coordinator met with thesis directors to discuss the status of each student, developed an individualized work plans for each dissertation student, and established a tentative graduation rate for each student. Other areas of academic coordination were the development of a Need Assessment questionnaire to be administered annually. This will help us to understand the needs and recommendations of doctoral students, allowing us to help them during the dissertation period. In response to the questionnaire the PHP established seminars and conferences with practical topics and related to the investigation process. To comply with the new 2016 criteria, an evaluation and updating of the Dr.PH curriculum took place. For example, the Curriculum Committee has added courses related to administration of health services, health policy, leadership, teaching and bioethics, among others. Other actions taken include the sending of calls for employment and post-doctoral positions to doctoral student via email. These emails are sent to encourage students to complete their dissertations in the timeframe specified. The doctoral program director, together with the DrPH committee are responsible for the graduation rate improvement committee.

- **Updating and continuing education for the faculty in topics related to faculty improvement and new educational techniques focused on teaching.**

The Associate Dean of the Public Health Program, together with the Dean of Curriculum of PHSU will develop a professional development plans for the faculty, which will take effect on October 2018. The plans has four principal areas: professional continuing education, technology, educational skills, and interpersonal skills. Topics included will be how to prepare a course and syllabus using competencies. Another important aspect which will be included in these workshops will be the preparation of the comprehensive exam emphasizing critical thinking, to fulfill the new criteria related to ILE. The person responsible of the planning and updating the faculty is the Curriculum Committee Chair, together with the members of the committee

- **Creation of the career and alumni services position.**

After examining the MPH and DrPH student evaluation results we found that they needed a person in charge of orientation in terms of jobs, internships, and fellowships. The person hired holds a master's degree in education and is completing a doctoral degree in curriculum. Another of her responsibilities is to offer continuing education and job search services to alumni. The person responsible for these services is the PHP career and alumni services coordinator



**B.6.2 - If applicable assess strengths and weakness relate to this criterion and plans for improvement in this area.**

The criterion B6 is met. The PHP uses the results of assessment to continuously improve the public health curriculum and the student learning experience. As noted, most public health students are highly satisfied with the quality of the PHP. The following strengths and weaknesses have been identified:

**Strengths**

- The number of projects funded by Seed Money has increased to seven during 2018.
- The participation of students in faculty research has increased during 2018.
- The cumulative Dr.PH graduation rate projected for May 2018 is 56%.
- In May 2017, 6 oral presentations and 1 poster presenting results from research accomplished with funding from Seed Money were presented in the 13<sup>th</sup> Annual Scientific Conference.
- The laboratory facilities that are the exclusive use of PHP consist of 741.5 sq. ft.; it is housed in the same building reserved for the program's offices. There is a planned expansion of the PH laboratories that will include a dry lab with statistical software for students.

**Weakness**

- We need to increase work study funding; only six students were awarded work study funds in 2016-2017.

**Plans**

- To maintain a continuous monitoring of our doctoral students so they graduate in the timeframe allotted.
- To continue to strengthen our laboratory with up to date equipment.
- In the long term, we will need a laboratory technician to facilitate our research.
- We need to increase the number of work-study positions available for both master's and doctoral students.

## **C1. PHP Fiscal Resources**

<b><u>C.1.1</u> Describe the program's budget processes, including all sources of funding. This description addresses the following, as applicable:</b>
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PHP Dean of PHSU prepares operational expenses budget request through an on-line system, such request will include departments operational expenses for the fiscal year that runs from July to June. In such request the PHP Dean request expenses to be incurred including salaries and operational expenses. Also, capital expenditures are requested during the budget process, it is equipment and software whose acquisition cost exceeds \$2,000 useful life exceeding three years.

The PH Dean have periodic meetings with faculty, in those meetings the Dean and the faculty could coordinate activities to be held as well as the resources needed.

When preparing the budget, the Dean considers the discussions with faculty, discussion with students, their own plans and PHSU president program development Plans.

Revenues to be included in budget are determined by Budget Department staff using the estimated enrollment submitted by the PHP Dean.

Upon PHP Dean Submission, the Budget is subject to review of the Chief Financial Officer (CFO), and the President & CEO, after such review they submit the budget to the approval to the Board of Directors. Before the beginning of the fiscal year the approved budget is available to the Dean of PH, through an automated system, this system allows transfers funds between accounts, monitor spending and to have updated balances in real time through the year.

**C1-1a. Briefly describe how the program pays for faculty salaries**

Faculty salaries are determined by the PHP Dean, taking into consideration the rank of the faculty member and the institutional faculty compensation scale in effect. PHP faculty and staff base salaries are fully guaranteed as included to the budget each year. The salary of some faculty members is paid in part by their research activities. Research Grant salaries are guaranteed for the term of the grant, but when the grant ends so do the compensation and related duties.

**C1-1b. Briefly describe how the program requests and/or contains additional faculty or staff (additional = not replacements for individuals who left). If multiple models are possible, indicate this and provides examples.**

Each year the Associate Dean determines the FTE of faculty members needed, based on the student enrollment projections. Salary increases for faculty members that will have a change in their rank are included in the budget request. The number of faculty members necessary for the PHP is established in the budget request. The ratio used to determine the necessary number of FTE is one professor for every ten students. If a faculty member leaves their job, their position remains open, and the Associate Dean decides when to fill the position.

The definition of operational expenses are those expenses directly associated with the program for the fiscal year; they do not include institutional overhead and funding from other sources that are available to the PHP.

**C1-1c Describe how the program funds the following:**

- a) Operational cost (program define “operational” in their own contexts; definition must be included in response)

Operational expenses are those expenses directly associated with the program for the fiscal year, for example faculty support for conference participation and other expenses related to the participation in those activities, teaching supplies, laboratory supplies, miscellaneous equipment, funding for official activities of the program (open house, meetings). They do not include expenses of Departments that provide support to the PHP, such as administrative, student services and academic divisions

Some funds available to PH faculty and student’s activities are not included in PH Program code, for example Faculty Development and Recording Studio.

There are other units that provides support to PHP, which expenses are recorded in their own program codes, those are the administrative units: Accounting, Human Resources, Budget, Finance, Purchasing, IT, Compliance and Plants services; Academic offices: VP of Academic Office, Health Sciences Dean Office and Library; Student Services: VP of Student Services Office, Registrar, Admissions, Financial Aid, Recruitment and Marketing.

- b) Student support, including scholarship, support for student conference travel, support for student activities, etc.

The Public Health Program should plan their activities for each fiscal year and should include the request for related expenses in the budget. Such activities are those to be held exclusively for PHP faculty and students.

Annually the Dean of PHP includes a request for seed money in the Budget, those funds are used to support research activities with students.

The institution is seeking for scholarships opportunities to be awarded to PHP students. Institutional Scholarships fall within the budget of the PHSU President.

- c) Faculty development expenses, including travel support. If this varies by individual or appointment type, indicate this and provide examples.

PHP budget includes funding for travel that is used for faculty travel to meetings, also the Provost/VP of academic affairs budget has funding for faculty development activities that are coordinated for all programs.

Student support activities are under the budget of the VP of Student Services that serves students of all programs. Institutional Scholarships fall within the budget of the PHSU President.

**C1-1d - In general terms, describe how the program request and/or obtains additional or funds for operational cost, student support and faculty development expenses.**

The spending for a year should be equal to the approved budget. If additional funding is needed, the Dean should request a supplemental budget and justify the additional funding, which is subject to the approval of the CFO.

The PHP can develop income generating activities and use the funds at their discretion.

**C1- 1e - Explain how tuition and fees paid by students are returned to the program. If the program receives a share rather than the full amount, explain, in general terms, how the share returned is determine. If program's funding is allocated in a way that does not bear a relationship to tuition and fees generated, indicate this and explain.**

Revenues from tuition and fees are fully allocated to the PHP. Net income goes to institutional support. A budget is approved based on enrollment projections, the expectative is that the PHP revenues pays for PHP expenses and for an allocation of supporting units. If the enrollment projection is not achieved the budget is subject to a reduction proportionally to the enrollment shortage. Net income or loss goes to institutional support.

**C1-1f - Explain how indirect cost associated with grants and contracts area returned to the program and/or individual faculty members. If the program and its faculty do not receive funding through this mechanism, explain**

Public Health faculty and students are involved in research activities. All research operations are carried out under the Ponce Research Institute (PRI); direct and indirect revenues and the corresponding expenditures are recognized by PRI under the grant program code, including the compensations for all faculty that work under the PRI for the grant. All PHP faculty research related expenses are paid by the grant, including travel to meetings and research presentations.

Current Indirect Cost of PRI approved until June 30, 2019 with federal government is 56.8% of Modified total direct cost, consists of all direct salaries and wages applicable fringe benefits, material and supplies, service and travel. Some exclusions also apply. Some federal agencies have pre-established indirect cost rates that may vary when a request for proposal is released.



**C1-2 - Clearly formulated program budget statement in the format of Temple C1-1, showing sources of all available funds and expenditures by major categories, for the last five years.**

**Public Health Program Budget Statement**

Following is the Public Health funding available to Public Health program from 2013 to 2018

**PHSU- Public Health Program**

Available Funds and Expenses by Major Category, 2013 to 2018

	year ending June 30,					Budget 2018
	2013	2014	actual 2015	2016	2017	
<b>Sources of Funds</b>						
Tuition & Fees	\$ 760,709	\$ 1,110,739	\$ 1,075,703	\$ 1,227,539	\$ 1,353,122	\$ 1,475,783
University Funds		25,000	25,000	40,000	39,320	25,000
Grants/Contracts	261,285	257,540	242,146	476,775	786,901	1,299,999
Other	43,006	-				
<b>Total</b>	<b>\$ 1,065,000</b>	<b>\$ 1,393,279</b>	<b>\$ 1,342,849</b>	<b>\$ 1,744,314</b>	<b>\$ 2,179,343</b>	<b>\$ 2,800,782</b>
<b>Expenditures</b>						
Faculty Salaries & Benefits	733,403	631,130	863,781	728,673	781,772	979,300
Staff Salaries & Benefits	42,000	36,066	33,019	38,161	39,550	65,334
Operations	165,040	227,722	213,241	323,681	506,413	892,116
Travel	25,000	14,677	3,000	2,872	10,175	9,000
Student Support	14,000	28,000	25,000	25,000	25,000	60,464
University Tax	36,028	443,716	395,308	626,715	546,715	704,260
Other	13,500	4,081	5,000	5,175	6,258	32,450
<b>Total</b>	<b>\$ 1,028,971</b>	<b>\$ 1,385,393</b>	<b>\$ 1,538,348</b>	<b>\$ 1,750,277</b>	<b>\$ 1,915,883</b>	<b>\$ 2,742,924</b>
change		356,422	152,956	211,929	165,606	827,041

The public health budget has increased significantly during the last five years. Faculty salaries and fringe benefits are the largest expenditure categories correlating with the program increase in the number of public health faculty members. The expenditures categories components are as follows:

**Faculty Salaries & Benefits:** Includes salaries paid from the PHP and those paid from the grants, also corresponding fringe benefits are included.

**Staff Salaries & Benefits:** Include salaries and fringe benefits of administrative assistants and the Career and Promotion Coordinator

**Operations:** Are included office supplies, teaching supplies, laboratory supplies, miscellaneous equipment, funding for official activities, faculty support for conference participation, dues and seminars etc.

**Travel:** Is a funding to pay for travel of faculty for attendance in meetings and seminars.

**Student Support:** Includes seed money for research activities of students and funds for IPADs that the program brings to entering students and used as part of curricular activities.

University tax is an allocation of expenses of supporting units of PHSU, Administrative, Academic and Student Services units. To determine the allocation, a percent of PHP revenues over total PHSU revenues is apply to the expenses of the referred divisions.

Other include accreditation expenses and funds for unexpected needs.

**C1-3 - If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.**

The PHP complies with Criterion C1. The institution has allocated enough fiscal resources to support the public health instructional programs and its teaching and learning activities. The resources are adequate to fulfill the educational goals of the PHP. Some strengths including weaknesses and Plans for incorporating additional item lines in the PHP budget are presented below:

**Strengths**

- The PHP has a strong and independent role in managing its own budget.
- The PHP can discuss, design, and submit a budget to the administration based on the program's priorities.
- The Public Health Program can negotiate with the administration possible modifications to the budget when it is justified.

**Weaknesses**

- There is a limited fund amount assigned to the Seed Money, when compared with the faculty number during the 2017-2018 budget.
- There is no item line in the 2017-2018 budget form assigned to the development of facilities or equipment in the laboratories of PHP.
- There is a limited fund amount assigned to the attendance to seminars, scientific conferences, etc. when compared with the faculty number.
- There is no item line in the budget assigned to work-study. One of the requirements to be able to request Seed Money from the Program is to have an item line for work-study in the approved research budget.

**Plans**

- The 2018 – 2019 budget will have a 10% increase in the seed money line of the program. This will accompany a four-year Plans, which contemplates a 10% annual increase.
- The 2018 -2019 budgets will also have funds destined so that 15% of students have access to work-study.
- The 2018-19 budget also provides for funding for the faculty who have had abstracts accepted to be presented in national or international congresses, so they can travel to these.

## **C2. PHP Faculty Resources**

**In addition to meeting the minimum quantitative standards above, the size of the program's complement is appropriate for the size of the student body and supports and encourages effective, regular and substantive student – faculty interactions.**

**The program documents the adequacy of the faculty complement through multiple quantitative and qualitative measures, including the following: advising ratios; availability of faculty to supervise MPH integrative learning experiences and doctoral students' final projects; and data on student perceptions of class size and faculty availability.**

**C2-1 - A** table demonstrating the adequacy of the school or program’s instructional faculty resources in the format of Template C2 – 1.

**Template C2-1:  
Instructional Faculty**

CONCENTRATION	FIRST DEGREE LEVEL			SECOND DEGREE LEVEL	THIRD DEGREE LEVEL	ADDITIONAL FACULTY <sup>+</sup>
	PIF 1*	PIF 2*	FACULTY 3 <sup>^</sup>	PIF 4*	PIF 5*	
General	Vivian Green 1.0	Brenda Soto 1.0	Frank Fraticelli 1.0	N/A	N/A	PIF: 3 Non-PIF: 9
MPH						
Epidemiology	Luisa Morales 1.0	Diego Zavala 1.0	Jessica Irizarry 1.0	Juan Carlos Orengo 1.0	N/A	PIF: 4 Non-PIF: 5
MPH DrPH						
Environmental Health	Mayra Roubert 1.0	Yashira Sanchez 1.0	Adalberto Bosque 1.0	N/A	N/A	PIF: 0 Non-PIF: 4
MPH						

**TOTALS:**

Named PIF	10
Total PIF	17
Non-PIF	18

The PHP has done important and significant hiring during 2015. Before 2015, six epidemiologists from the PHP, including two senior epidemiologists had resigned. Starting in February 2015, and under the new PHP administration, eight new faculty, including five of those who had resigned were hired. Six of these were on site and two were in Washington DC and available remotely using Skype. Six other faculty members were also hired to support doctoral dissertations. For 2016 two part-time faculty for the General MPH were hired. For 2017 one faculty was hired for the Epidemiology MPH, and two more faculty were hired to fill positions left open by faculty that had left: one for the general MPH and one for the environmental MPH.

**C2-2 - Explain the method for calculating FTE for in the templates and evidence of the calculation method's implementation. For schools, only, all primary instructional faculty, by definition, are allocate 1.0 FTE. Programs must present calculation methods for primary instructional and non- primary instructional faculty.**

PHSU defines a full time (FT) faculty as one that contributes a total of 27 to 40 hour a week to the institution. FTE were calculated taking into consideration the PHSU definition of full-time faculty.

**C2-3 - If applicable, provide a narrative explanation that supplements reviewers understanding of data in the templates**

All PHSU PHP faculty meet the PHSU definition of 27 to 40 hrs. per week. Compliance with the full-time status at PHSU is monitored through the clear work Plans objectives and time commitments and the one-year contract status, which allows the PHP Associate Dean to let go of any of these faculty who are not contributing at the required level. Dr. Diego Zavala is one of our two senior epidemiologists. He has been a vibrant and active team member of the epidemiology concentration, teaching courses, setting up practicum sites and overseeing doctoral students. During the 2013-14 academic year Dr. Zavala went from being a 40 hr. FT faculty to be a 27 hr. FT faculty. This change has been so successful, that we were comfortable hiring three others with the same conditions and oversight. Dr. Serrano, Dr. Irizarry and Dr. Marzan are the other three 27-hr. faculty members assigned to the epidemiology concentration.

**C2-4 - Data on the following for the most recent year in the format of template C2-2. See template C2-2 for additional definitions and parameters.**

All faculty contribute to the teaching, research, service and mentoring of PHP students. The faculty share administrative and teaching workload. The PHP faculty has been and is able to meet its academic, research and services responsibilities. Regarding teaching, the faculty has completed a thorough curriculum revision and expansion while continuing to provide excellent courses. The success of the academic program is measured by the competency coverage and student course evaluations (see section D7 & D8). In addition, the PHP faculty is performing very well on service and workforce capacity building (see sections F2 & F4). Research was the less successful area but is beginning to show growth (see E2)



**C2-4a - Advising ratios (faculty and, if applicable, staff) by degree level (bachelor's, master's doctoral), as well as the maximum and minimum. If both faculty and staff advise, present and calculate both ratios.**

Temple C2-2 General Advising & Career Counseling

General advising & career counseling			
Degree level	Average	Min	Max
Bachelor's	N/A	N/A	N/A
Master's	2.5	1	4
Doctoral	2.5	1	4

PHP students receive general and professional counseling in several ways.

- The process of general and academic counseling begins at admissions. During the process of admission, the Admissions Committee evaluates and analyzes the academic records of the new candidates. The admissions requirements include having an academic average equal or greater than 2.75 on a 4.0 scale. The program decided to identify those candidates with less than a 3.0 average as being at academic risk. These students are referred to academic counseling at PHSU, and to the first-year coordinator at PHP, to follow up on their progress more closely.
- Students acquire required competencies during their first year of the MPH, and this is a crucial time where they need faculty of all areas in public health available to them. Students in general, epidemiology, and environmental health also need to develop skills in other basic competencies in public health, so assistance by experienced faculty in other tracks is also necessary.
- Each one of the different masters and doctoral tracks within PHP has a coordinator assigned to it. His or her functions include offering orientation about topics, job possibilities, or any questions regarding the student's chosen track. Sometimes the students are referred to the counselor for referrals on job postings internships, and fellowships. Coordinators meet at least once a trimester with every one of the students in their track, for orientation and to identify any problems. The student may meet with their coordinator at any time and as many times as needed (see Coordinator manual).
- At the end of the third trimester, the first-year master's students are assigned a faculty advisor. For doctoral students, a thesis director is assigned once they pass their comprehensive exam. The thesis directors are responsible for guiding the students through the process of doctoral research, and to follow up on their academic progress, together with the doctoral program coordinator.
- The PHP has a Career Counselor as part of its staff. Ms. Ponce offers counseling on available positions, internships, fellowships, among others, to master's and doctoral students, as well as program alumni. The Career Counselor position is a new one created by PHP. The other responsibilities of this position include to organize professional development seminars (together with the Counseling program of PHSU) and job fairs, and to identify future employers, fellowship, and internships in and out of Puerto Rico.

**C2-4b - If applicable, average number of baccalaureate students supervised in a cumulative or experiential activity.**

Not Applicable.

**C2-4c - Average number of MPH students supervised in an integrated learning experience (as defined in Criterion D7), as well as the maximum and minimum.**

**Temple C2-3 Average number of MPH students supervised**

Advising in MPH integrative experience		
Average	Min	Max
2.5	1	4
Supervision/Advising of bachelor's cumulative or experiential activity		
Average	Min	Max
N/A	N/A	N/A

The faculty advisors assigned to the master's students follow up the students until they graduate. The faculty advisors are responsible for guiding the students during the processes of Integrative Experience Learning, and Applied Practical Experience, as well as following their academic progress. The main responsibility of the thesis director (for doctoral students) is to guide the students through the process of doctoral research, as well as their academic progress.

**C2-4d Average number of Dr.PH students advised, as well as the maximum and minimum**

**Temple C2-4 Average number of Dr.PH students advised**

Mentoring/primary advising on thesis, dissertation or DrPH integrative project			
Degree	Average	Min	Max
Dr.PH	2.5	1	4
PhD	N/A	N/A	N/A
Master's other than MPH	N/A	N/A	N/A

- Dr. Roubert is one of the faculty members on the environmental health track. She herself has a Dr.PH and is the epidemiology coordinator for the Dr.PH. She follows up the Dr.PH students, as well as coordinate the Dr.PH in general.
- The Dr.PH coordinator works to assign the Dr.PH dissertation directors to each student once they pass the comprehensive exam. The dissertation director chosen is based on their research area and how they relate to the student's interest. The workload required for Dr.PH mentoring is at its most intense at the beginning and end of the dissertation work. The thesis director follows up with the student together with the coordinator of the doctoral program. These students are at different levels in terms of their progress towards their degree. Students in the first and second years are completing required course work and require mainly academic mentoring.
- A work study program focused on doctoral students has been established using the Seed Money program of the PHP. This work study program is meant to help with research lines of doctoral dissertations.

**C2-4e - Average number of PhD students advised, as well as the maximum and minimum**

Not Applicable.

**C2-4f - Average number of academic public health master's students advised, as well as the maximum and minimum**

Not Applicable

**C2-C5 - Quantitative data on student perceptions of the following for most recent year:**

In the middle of February of 2015, PHP entered a transition process between administrations. Under the new administration PHP developed a work Plans to explore and identify needs among the students and faculty. The Needs Assessment Survey and the Graduation Questionnaire were developed to fulfill this objective. This questionnaire was administered to masters and doctoral students. The results revealed several questions related to:

- Class size
- Quality of teaching
- Availability of faculty
- Mentoring

This questionnaire is in the process of revision to include the new criteria.

**C2-5a - Class size and its relation to quality of learning**

**Source:** Needs Assessment Survey

**MPH 2016-17 (MPH2018)**

Question 18. Are you satisfied with the class size? Is appropriate to my learning?

**Average rank**

Table C2-5

<b>MPH Responses</b>	<b>Very dissatisfied</b> <b>1</b>	<b>Dissatisfied</b> <b>2</b>	<b>Neither Satisfied/dissatisfied</b> <b>3</b>	<b>Satisfied</b> <b>4</b>	<b>Very satisfied</b> <b>5</b>	<b>Total</b>
<b>7 students</b>				█		4.0

In question 18 we explored the degree of satisfaction of the master’s students related to the size of the class. In a scale of 1 to 5, where 1 is very unsatisfied, and 5 is very satisfied, seven students in the MPH classes of 2017 and 2018 indicated to be satisfied with class size. This is represented with a value of 4 (satisfied)

**Dr.PH 2016-17**

Question 13. Are you satisfied with the class size? Is appropriate to my learning?

**Average rank**

Table C2-6

<b>Dr.PH</b>	<b>Very dissatisfied</b> <b>1</b>	<b>Dissatisfied</b> <b>2</b>	<b>Neither Satisfied/dissatisfied</b> <b>3</b>	<b>Satisfied</b> <b>4</b>	<b>Very satisfied</b> <b>5</b>	<b>Total</b>
2020 (9 responses)				█		4.6
2021(11 responses)				█		4.5

In question 13 the degree of satisfaction of the students in the 2020 and 2021 classes with the class size in the doctoral program is explored. Using a scale of 1 to 5, where 1 is very unsatisfied, and 5 is very satisfied, nine students of the doctoral program corresponding to the class of 2020 indicated they were very satisfied with the size of the classes. This is represented by the value of 4.6. Students in the class of 2021 indicated they were satisfied with the size of the classes. This is represented by the value of 4.5.



**C2- 5b - Availability of faculty**

**Source:** Needs Assessment Survey

**MPH 2016-17 (MPH2018)**

Question 19. Are you satisfied with the availability of faculty?

Average rank

**Table C2-7**

<b>MPH Responses</b>	<b>Very dissatisfied</b> <b>1</b>	<b>Dissatisfied</b> <b>2</b>	<b>Neither Satisfied/dissatisfied</b> <b>3</b>	<b>Satisfied</b> <b>4</b>	<b>Very satisfied</b> <b>5</b>
<b>7 students</b>				7	

Question 19 explores the degree of satisfaction of the master’s students with the availability of faculty. Using a scale of 1 to 5, where 1 is very unsatisfied, and 5 is very satisfied, seven students of MPH class of 2017 and 2018 indicated being satisfied with the availability of their professors. In the scale used that was represented by a value of 4. In the graduation questionnaire, the variables examined were communication between faculty and students, mentoring, and the backing of the faculty to achieve their academic goals.

Source: Graduation Survey

Communication, personnel, service, and experiences

**Table C2-8**

<b>MPH 2013</b>					
<b>Communication, personnel, and facilities</b>	<b>Strongly agree A</b>	<b>Agree B</b>	<b>Disagree C</b>	<b>Strongly disagree D</b>	<b>Not applicable E</b>
19. Communication between faculty and students.	52%	27%	17%	4%	0%
<b>Services to students</b>					
44. Mentoring from faculty	69%	13%	5%	13%	0%
<b>Experiences</b>					
82. I received good backup from the faculty to complete my studies.	63%	26%	11%	0%	0%
<b>MPH 2014</b>					
<b>Communication, personnel, and facilities</b>	<b>Strongly agree A</b>	<b>Agree B</b>	<b>Disagree C</b>	<b>Strongly disagree D</b>	<b>Not applicable E</b>
19. Communication between faculty and students.	30%	40%	25%	5%	0%
<b>Services to students</b>					
44. Mentoring from faculty	65%	15%	20%	0%	0%
<b>Experiences</b>					
82. I received good backup from the faculty to complete my studies.	50%	45%	5%	0%	0%
<b>MPH 2015</b>					
<b>Communication, personnel, and facilities</b>	<b>Strongly agree A</b>	<b>Agree B</b>	<b>Disagree C</b>	<b>Strongly disagree D</b>	<b>Not applicable E</b>
19. Communication between faculty and students.	27%	37%	23%	13%	0%
<b>Services to students</b>					
44. Mentoring from faculty	57%	33%	10%	0%	0%
<b>Experiences</b>					
82. I received good backup from the faculty to complete my studies.	54%	40%	3%	0%	3%

In the graduation questionnaire, question 19 in the section of communication, personnel, and facilities, the degree of satisfaction of the master’s students of classes of the years 2013, 2014, and 2015. The scale used is from A to E, where A represents Strongly Agree, and letter E represents Not Applicable.

Seventy-nine percent of the MPH class of 2013 indicated that they strongly agree or agree with the statement that there is communication between faculty and students. For MPH class of 2014, 70% indicated that they strongly agree and agree that there is communication between faculty and students. The percentage for the class of 2015 for the same question is 64%.

Question 44 of the services section explores the degree of satisfaction of the MPH students, classes of 2013, 2014, and 2015. The scale used is from A to E, where A represents Strongly Agree, and letter E represents Not Applicable.

Eighty-two percent of the 2013 class indicated that they are in strong agreement or agreement with the level of mentorship they received from faculty to complete their studies. The number for the class of 2014 was 80%, and for the class of 2015 it was 90%.

Question 82 in the section of experiences they participated in, the degree of satisfaction of students in the master's classes of 2013, 2014 y 2015 is explored. The scale used is from A to E, where A represents Strongly Agree, and letter E represents Not Applicable.

Eighty-nine percent of the MPH class of 2013 indicated that they are in strong agreement or agreement with the level of backup they received from faculty to complete their studies. The number for the class of 2014 is 95%, and for the class of 2015 is was 94%.

**Dr.PH 2016-17- Dr.PH 2020 and 2021**

**Source:** Needs Assessment Survey

Question 14. Are you satisfied with the availability of faculty?

Average rank

**Table C2-9**

DrPH	Very dissatisfied 1	Dissatisfied 2	Neither Satisfied/dissatisfied 3	Satisfied 4	Very satisfied 5	Average rank
2020 (9 responses)			□			3.2
2021 (11 responses)			□			3.5

Question number 14 explored the degree of satisfaction of the doctoral students in the class of 2020 and 2021 with relation to the availability of faculty. The scale used was 1 to 5, where 1 is very dissatisfied and 5 is very satisfied. Nine students of the doctoral program class of 2020 indicated they were neither satisfied nor dissatisfied with the availability of the faculty. In the scale used the value represented was 3.2. The eleven students in the class of 2021 expressed a similar level of satisfaction, with a represented value of 3.5.

**Source:** Graduation Survey

**Table C2-10**

<b>Dr.PH 2014</b>					
Communication, personnel, and facilities	Strongly agree A	Agree B	Disagree C	Strongly disagree D	Not applicable E
9. Communication between faculty and students.	50%	50%	0%	0%	0%
<b>Student services</b>					
44. Mentoring from faculty	50%	50%	0%	0%	0%
<b>Experiences</b>					
82. I received good backup from the faculty to complete my studies.	50%	50%	0%	0%	0%

In the graduation questionnaire, question 19 in the communication, personnel, facilities section, the level of satisfaction of students in the doctoral program, class of 2014, was explored. The scale used is from A to E, where A represents Strongly Agree, and letter E represents Not Applicable.

One hundred percent of the Dr.PH class of 2014 indicated that they strongly agree and agree with being satisfied with the communication level between faculty and students.

Question 44 in the section services to the student, the question explored was their level of satisfaction with the mentoring received from the faculty. The same scale (A to E) was used.

Results indicate 100% of the Dr.PH class of 2014 strongly agree or agree with being satisfied with the level of mentoring received from faculty.

Question 82 in the section of experiences they participated in, the degree of satisfaction of students in the Dr.PH class of 2014 is explored, in relation with the level of support received from the faculty to complete their studies. The scale used is from A to E, where A represents Strongly Agree, and letter E represents Not Applicable. One hundred percent of the Dr.PH class of 2014 indicated they strongly agree or agree with the statement.

## **C2-6 - Qualitative data or student perceptions of class size and availability of faculty.**

**Source:** Level of perception of active students to the Public Health Program 2017-2018 academic year

### **Introduction**

To comply with the new CEPH 2016 criteria, the PHP of the Ponce Health Sciences University developed a questionnaire to obtain qualitative data with the purpose of evaluating the perception among active students in the different masters and doctoral programs (for academic year 2017-2018) specifically related to class size and faculty availability.

### **Methods**

#### **Participants**

Students registered in the first year of the Master of Public Health Program (PHP) for academic year 2017-2018, and students registered in first, second and third year in the Epidemiology Doctoral program, also for academic year 2017-18 (n=77). This questionnaire was completed by 66 (representing an answering rate of 85.7% (n=66)).

#### **Procedure**

A questionnaire was developed using the Google drive electronic platform with a total of 18 items divided in 2 parts. The first part consisted of four items designed to obtain student's sociodemographic information. The second part consisted of fourteen items that evaluated perceptions and satisfaction of the students regarding the quality of classrooms, socialization environment between students and professors, accessibility of the professors, and the number of students registered related to their impact in the learning process. This questionnaire was designed using the Likert scale (completely agree, agree, neither agree nor disagree, disagree, and completely disagree).

## Results

**Table 1: Results of the Perception questionnaire given to active PHP students for the 2017-2018 academic year**

Premises	MPH n=31 (46.9)		DRPH n=35 (53.0)		MPH+DRPH Total n=66	
	n	%	n	%	n	%
<b>Sociodemographic</b>						
<b>Gender</b>						
Female	16	51.6	26	74.3	42	63.6
Male	15	48.4	9	25.7	24	36.4
Other	0	0.0	0	0.0	0	0.0
<b>Age Groups</b>						
21-30	30	96.8	22	62.9	52	78.8
31-40			11	31.4	11	16.7
41-50	1	3.2	2	5.7	3	4.5
<b>Perception</b>						
1. Classroom size are adequate for the number of students in the courses.	27	87.1	22	62.9	49	74.2
2. Classroom sizes are appropriate for class discussion.	26	83.9	28	80.0	54	82.0
3. The number of students in the classroom determines my learning.	9	29.0	14	40.0	23	34.8
4. I'm satisfied with the number of students registered in my classes.	22	70.9	27	77.1	49	74.2
5. The number of students in my group is adequate for discussion and to ask questions	21	67.7	29	82.9	50	75.8
6. I learn better when I have courses with few students.	15	48.4	23	65.7	38	57.6
7. The classroom environment provides an effective atmosphere for socialization before, during, and after classes	24	77.4	24	68.6	48	72.7
8. The environment in the classrooms provides an atmosphere for effective socialization with my professors before, during, and after classes.	24	77.4	27	77.1	51	77.3
9. My professors answer all the questions that arise in the classroom.	24	77.4	31	88.6	55	83.3
10. The professors 'office hours are adequate for me.	20	64.5	11	31.4	31	47.0
11. My questions are answered when I visit my professor during office hours.	31	100	29	82.9	60	90.9
12. My professors are available for answering questions using available technologies (phone, email, video conferencing/Skype).	27	87.1	27	77.1	54	81.8
13. I feel that my professors achieve some bonding with all of us.	25	80.6	19	54.3	43	65.2
14. I am proud of being a Public Health student at PHSU.	28	90.3	31	88.6	59	89.4

### **Outstanding findings:**

Based on the survey administered to the MPH and DrPH students for academic year 2017-2018, and related to the perception and satisfaction related to class size and faculty availability, the finding was:

- 82% agreed in that class size is adequate to promote the discussion in the courses.
- 35% agreed that the number of students in a classroom determines their learning process. The results of this premise were more significant for the doctoral program students (40%) than for the MPH students (29%).
- 76% of the students agreed with the statement that the number of students in the group is adequate for the process of discussing questions.
- 58% of the students agreed with the learning process is better in courses with few students, with 66% of DrPH students agreeing versus 48% of MPH students.
- The students taking the survey agree that the atmosphere in the classroom provides for effective socialization between students (73%) and between professors and students (77%).
- 83% of students agreed that professors answer any questions they have during their classes.
- 47% of students agreed that faculty office hours are adequate, with 65% for MPH students and 31% for DrPH students.
- 91% of students agreed that faculty is available to answer questions during their office hours.
- 82% of students agreed that their professors are available to answer their questions using available technologies.

These findings provide PHSU with the focus needed to maintain strong areas and to develop new strategies for the improvement of areas students perceive need to be worked on.

**C2-7 - If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area**

**Strengths**

- Students are satisfied with the size of students per class as shown in previous tables.
- After the process of transition during the change of administration, (February 15, 2015) the program has undergone some adjustments for the benefit of both professors and students.
- Once the new administration took office, we have hired 10 faculty members, to lighten the load of the professors already in the program.
- The new faculty was hired on a full-time basis, which allows them to be available in the office to help the students whenever they are needed. This is especially important for doctoral students.
- One of the issues presented by students was that PHP didn't offer extracurricular activities. This perception may arise from:
  - PHP does offer extracurricular activities, but attendance by the students was poor. As a corrective measure, PHP created the *Attendance seminar, workshop and Public Health Activities Policy*. As part of the evaluation requirements for these courses, students must attend a selected number of seminars and workshops by their faculty. Also, a seminar committee was designated, composed of faculty and students, and in charge of scheduling and selection of topics for masters and doctoral students.
- Research at PHP has been strengthened by:
  - Defining lines of research
  - Development of the Public Health lab
  - Strengthening of the teaching lab
  - Creation of the new Research and Seed Money Committee
  - Hiring of students for work study related to research lines.

**Weaknesses**

- The Program was in an administrative transition period during February of 2015. This period affected both faculty and students. Before the transition some faculty resigned their positions, and some students were affected as they lost their thesis directors and epidemiologists of PHP. At present the Program has the recommended number ad ratio of faculty to serve the students in the program.
- One of the weaknesses identified is the lack of an instrument to measure qualitative questions, and perceptions of the students related to class size, facilities, amount and availability of the faculty, and the effect of these variables in the teaching- learning process. The Assessment Committee of the Program is in the process of developing such an instrument.

**Plans**

- To revise the Needs Assessment document, to include qualitative questions so we can collect information such as how the number of students per group affects the teaching -learning process.
- To maintain consistency in the Needs Assessment Survey questionnaire during the next few years of evaluation.
- To administer the Needs Assessment Survey once per year for each student class, and to find a way to get more participation in this survey from the students.
- To develop an instrument where students' perceptions can be measured.



### **C3. Staff and Other Personal Resources**

**The program has staff and other personnel adequate to fulfill its stated mission and goals. The stability of resources is a factor in evaluating resources adequacy.**

**“Staff” is defined as individuals who do not have faculty appointments and for whom staff work is their primary function. “Other personnel” includes students who perform work that supports the program’s instructional and administrative needs.**

**C3-1** - A table defining the number of the program’s staff support for the year in which the site visit will take place by role or function in the format of Temple C3-1. Designate any staff resources that are with other unit outside the unit of accreditation

**Template C3-1. Staff support**

<b>Role/Function</b>	<b>FTE</b>
Administrative staff	1
Administrative staff	1
Career & Program Promotion Services Coordinator	1

The administrative staff consists of two full-time administrative assistants: Mrs. Ada González and Mr. Juan Eloy González (no relation). Administrative tasks related to the master’s program and doctoral program were divided among them for better efficiency. Mrs. Gonzalez oversees everything related to administrative functions of the doctoral program, while Mr. Gonzalez handles everything having to do with the master’s programs.

In July of 2017 PHSU approved the creation of Career & Program Promotion Services Coordinator at PHP. The responsibilities of this position are:

- To provide orientation to current students and alumni regarding job openings, and how to prepare for job interviews; to contact potential employers and present our current students to them.
- To facilitate the creation of job fairs
- To provide orientation regarding internships and fellowships related to public health
- To develop the student and alumni section of the Institutional web page
- To develop continuing education opportunities for alumni
- To develop the Public Health Alumni Association

The person in charge is Mrs. Ivette Ponce, who has a master’s in Special Education and is currently in the process of completing a doctorate degree in curriculum design. Mrs. Ponce previously worked in the office of the Dean of the Student Affairs.

**C3 -2 - Provide a narrative description, which may be supported by data if applicable, of the contributions of other personal.**

**Not Applicable.**

**C3- 3 - Provide narrative and/or data that support the assertion that the school or program's staff and other personal support is sufficient or not sufficient.**

As mentioned above, PHP has as part of the staff, two administrative assistants. Mrs. Ada Gonzalez has a bachelor's degree in secretarial sciences, while Mr. Juan Gonzalez has a bachelor's degree in office systems. At present, Mr. Gonzalez is working on a master's degree in human resources. Also, as mentioned previously, the division of labor provides for Mrs. Gonzalez to oversee doctoral degree administration, and Mr. Gonzalez does the same for the master's degree. They both are knowledgeable regarding all tasks and responsibilities of the Program. Both administrative assistants provide support to faculty and students.

The new position of Career & Program Promotion Services Coordinator was created to fulfill the needs the Program identified: services in orientation and job placement, internships, fellowships, and continuing education for both students and alumni, as well as the creation of a PHP alumni association. As mentioned previously, part of the functions associated with this position is to identify potential employers, and to prepare students for job interviews.

PHP is evaluating the creation of a Public Health Assessment Coordinator position. The responsibilities for this position would include:

- Responsible for the fulfillment of the Assessment Plans for PHP
- Updating and development of assessment instruments
- Analysis and presentation of findings
- Development of an action Plans

**C3-4 - If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.**

**Strengths**

- Our two administrative assistants are university graduates, and one of them is pursuing graduate studies.
- Both assistants have knowledge of the inner workings of PHP, its faculty and students.
- The individual responsibilities of both assistants are clearly delineated
- PHP has a staff member whose position is specifically to help students and alumni identify potential employers, get help with preparation for interviews, internships, fellowships, and to offer continuing education related to public health.

**Weakness**

- Although the PHP has created an assessment committee, a specific staff person is needed to coordinate PHP assessment activities. Currently, this new committee is composed of two teaching faculty members.

**Plans**

- The PHP Plans to identify funds to contract a part time coordinator to support the assessment committee as well as the liaison between the program and the Institutional Assessment Committee centralized in the office of Academic Affairs.

#### **C4. Physical Resources**

**The program has physical resources adequate to fulfill its stated mission and goals and support instructional programs. Physical resources include faculty and staff office space, classroom space, student shared space and laboratories, as applicable.**

**C4-1 - Briefly describe with data as applicable, the following:**

- **Faculty office space**
- **Staff office space**
- **Classrooms**
- **Shared student space**
- **Laboratories, if applicable to public health degree program offering**

The Public Health Program and the labs are located in Building O, and it shares this building with the Nursing Program and the Department of Purchasing and Receiving. The physical space occupied by the program is 4,333.33 sq. ft., which is distributed in the following manner: Fourteen closed offices, two (large and small) conference rooms, one student study area, three office areas for staff, and the reception/lobby. (See Resource file for floor chart).

The PHP laboratory facilities that are for the exclusive use of PHP consist of a teaching lab (741.5 sq. ft.) one dry lab, environmental health lab, molecular lab and vector Bourne Disease lab (75 sq. ft) that area located in the same building as that of the program's offices.

In building O there are also four classrooms; two large, one medium-sized, and one small. All of the PHP are offered in these four rooms, except for those that need to use the computer labs. These are offered in Academic Building B.

Other laboratory facilities accessible to the Public Health Program include laboratories located in the research building and in the Clinical Research Center (Centro Ambulatorio de Investigaciones Médicas-CAIMED), which consists of 22,500 sq. ft. PSMHS has a leasing agreement with the Economic Development Corporation of Puerto Rico (PRIDCO), which has subsequently led to the development of this ambulatory clinical research center (to further enhance clinical research and teaching) and a clinical reference laboratory. With this new emphasis and the more readily available funding for clinical translational research, the existence of this clinical laboratory represents an as-yet untapped resource. On the first floor of the academic building, there is a multi-purpose teaching laboratory that houses facilities for microbiology, and histology as well as for many activities.

The physical plant of Ponce Health Sciences University consists of 11 buildings, in which can be found a school library, a student lounge, a clinical and reference laboratory, wellness center, School of Behavioral and Brain Science, animal research (biomedical) facilities, academic and research facilities (dedicated both to the clinical and the basic sciences), the audiovisual, communication, and IT departments (support staff), and the administration

A list of PHSU facilities regularly used by the PHP follows:

**Building B- The Academic Building (15,900 sq.ft.)**

This is a two-story building with two large classrooms and four smaller classrooms, all equipped with audiovisual systems. Audiovisual services, a computer lab, and the school's computer operations center (IT facilities) are also located in this building. Two of the large classrooms are set up for distance learning. These 6 rooms and the computer lab are available for use by the PHP.

**Building F - Research Building (28,500 sq. ft.)**

The research building is a two-story building that houses all basic laboratory and research activities of the institution as well as offices for the basic sciences departments. Building F contains the Core. The Core is a support unit for researchers, providing both equipment and technical support. The PHP uses the Core facilities to support all research areas.

**Building A - Administration Building (8,000 sq. ft.)**

A single-story building that is located conveniently between the PHP's offices and the classrooms in the PHP building; this is where the offices all administrative support personnel are located. Administrative support, including human resources, finance, budget, and the Dean for Health Sciences (who oversees the PHP) are all housed in the administrative building. The following offices also are in the administration building: The Chief Finance Officer,

Directors of Finance and Budget, the Vice President of Academic Affairs, the Assistant Deans of Education and Curriculum, Compliance Officer, Human Resources, General Services, Conference Room and Reception.

**Building H - School of Medicine, Student Support Services and Standardized Patients (26,644sq.ft.)**

This building has four large classrooms which can be used by the PHP in case it's needed. The Vice President of Student Affairs, student service units, the student lounge and the recording room are housed in a building next to the administration building and within walking distance of the academic and PHP building where students take classes. The Standardized Patients Clinic is in this area. This clinic has the most modern facilities for this academic program.

Other supporting facilities for the PHP include:

- **Building D - Administration Building Annex I (3,200 sq. ft.):**

In the Annex, the Offices of the President and CEO, and the Chief Strategy Officer, Conference Rooms, Ponce Research Institute and the VP of Research Offices, IRB and the Continuing Medical Education Staff are located. The PHP can use the two conference rooms in this building.

- **Building C - Library (10,323 sq. ft)**

The Library was remodeled, and the expansion added 2,323sq.ft. to the operation.

- **Building M - Wellness Center (22,500 sq. ft.):**

All ambulatory medical and mental health services are in this one-story building. All students in PHSU included our PHP Students rotate in some of the clinical services offered. The building was repaired and an area of 1,500sq.ft. has been added. This building has a capacity to expand horizontally or vertically. The trailer is used for the Psychiatry Residency Program. PHP conducts outreach education activities regularly in this clinical setting.

- **Building L- PSYCHONEUROMETRICS (11,050 sq. ft.):**

This building is leased from Puerto Rico Industrial Development Company (Compañía de Fomento Industrial). This area, headquarters the Psychology Programs Faculty, students and patients, offers PHP students opportunities to study and learn about mental health issues.

- **Building E - Anatomy (5,800 sq. ft)**

The Gross Anatomy Building is composed of the Gross Anatomy Laboratory, a Morgue and freezer, and the Departmental office.

- **Building J - CAIMED (Ambulatory Center for Medical Investigation) 23,300 sq. ft**

Also leased from Puerto Rico Industrial Development Company. In this building, Neurosciences, Clinical Protocols, a Clinical and Reference Laboratory, and Animal facilities are located. A PVC building is available for storage.

The PH program has agreements with different community organizations, including teaching hospitals, clinics, schools, and local and state agencies that collaborate for purposes of instruction, research, and service; they also serve as sites for our students' practicums (*see Resource File*).

PHSU receives "in-kind" resources as a part of some of our inter-institutional or community projects when the goals and objectives of these projects are consistent with those of the institution. Examples of projects where the Public Health faculty received "in-kind" contributions are "Casa Pueblo" in the municipality of Adjuntas and "DISUR" (Project for the Socioeconomic Development of Southern PR). The Bridge – Community Engagement Moffit U54 in La Playa (Project to Determine the Prevalence of Gastrointestinal Diseases and return of reusable water).



**C4-2 - Provide narrative and/or data that support the assertion that the physical space is sufficient or not sufficient**

The physical space for the PHP is sufficient to achieve its educational goals and objectives and to perform all program's academic and administrative responsibilities and functions. Starting in 2015 the program has experienced growth in terms of space. Within building O, where PHP is located, there are four classrooms. Two are large, one with a seating capacity of 175 and other with seating capacity of 140 students, one medium room with capacity for 40 students, and a small classroom with capacity for 25 students. These classrooms are used by the faculty and students of the Public Health Program.

The Program has also grown in terms of space devoted for research. There are four labs within building O:

Environmental Laboratory

This Lab will be used to provide hands-on experience to the students and also as a place for faculty to work on their research.

The Environmental laboratory is both an environmental teaching and environmental research lab. The environmental laboratory has the equipment to perform research in the four basics areas: microbiology, wet chemistry, sound analysis and air analysis (is equipped with some basic components such as incubators, refrigerator and laboratory glassware).

Molecular Epidemiology Laboratory

The new space of the Molecular Epidemiology Laboratory has around 570 sq. ft. This is used for research, teaching (courses such as laboratory rotations) and will be available for doctoral dissertations with a main focus on molecular epidemiology.

Vector Borne Laboratory

Researchers and students study vectors, in this case mosquitoes, classification and identification following the molecular techniques to identify arbovirus infection among them, mutations and phylogenetic. All this will be the basis for different models of disease spread that we will be creating additional to the intervention compound. Currently there is an ongoing project funded by RCMI, as well as an ongoing joint project with the Pan-American Health Organization (PAHO). The Vector Borne Laboratory is a center of teaching and research serving to all students of the PHSU, a new course named "Public Health and Medical Entomology" has been developed. In this laboratory a colony of *Aedes aegypti* will be bred, with the following objectives: a) to offer our services for "insecticide-resistance" studies; b) to study animal models for arbovirus transmission; c) to study arbovirus vectors; d) to study the biology of vectors that transmit diseases; e) to study mutations; f) to study the epigenetics of vectors. Doctoral thesis will be developed in these areas.

Public Health Dry Lab

Inside the building we have designated a space for computer use and database access. We call this the "dry lab", and it is for use by doctoral students and research assistants. There are currently four projects funded by the seed money program of the PHP, one project funded by RCMI and two by Merck Co. All computers in the "dry lab" have statistical packages installed.

In building O where the classrooms are located we will be installing vending machines, a water fountain, and a microwave.

As part of the strategic Plans, and already presented to the Board of Directors, PHSU is contemplating developing new academic offerings, and initiating the process of a status transition from a Public Health Program to a Public Health School. The Institution is fully aware of the Plans the Program has for growth; and it has included new facilities for PHP in its construction plans. All programs offered by PHP would be within this new facility. We have had several meetings with the architectural firm commissioned for the construction of PHSU's new facilities, and the current and future needs of each program have been discussed.

**C4-3 - If applicable, assess strengths and weaknesses relate to this criterion and plans for improvement in this area.**

**Strengths**

- The Program has faculty office space, staff space sufficient to fulfill its administrative goals.
- The Program has laboratory space sufficient to grow and to fulfill its research goals.
- The Program has classrooms space sufficient to grow and to fulfill its academic goals.
- The Program has a space for students use. In this space there are study tables, internet access, reference books, microwave and a fridge.
- The physical resources are clearly delineated and allocated accordingly to priorities and needs.

**Weaknesses**

- At present, public health faculty must use the large conference room for meeting individually with students; small conference rooms are needed.
- There is a need for more student study space and faculty research space.
- Current physical facilities are sufficient to sustain existing public health programs, but as the University reaches its maximum capacity, more space is needed to maintain the programs' effectiveness.

**Plans**

- Once the Program begins offering more academic options, the Institution will have to identify available space for students and new faculty.
- To reorganize and redistribute the spaces where the Program is located so we can create more office space for faculty.
- The PHP has submitted a master Plans to the institution for the development of the PHP new physical facility.

### **C5. Information and Technology Resources**

The program has information and technology resources adequate to fulfill its stated mission and goals and to support instructional programs. Information and technology resources include library resources, student access to hardware and software (including access to specific software or other technology required for instructional programs), faculty access to hardware and software (including access to specific software required for instructional programs offered) and technical assistance for students and faculty.

**C5- 1- Briefly describe, with data if applicable, the following:**

- Library resources and support available for students and faculty:

The Library is designed to offer update information and assist with high quality services to all students and teaching faculty, researches, health professionals, and staff of the PHSU. The Library mission is to serve the needs of the PHSU community, providing information literacy instruction, and innovative resources that meet the challenges of educational and technological changes.

The regular schedule is: Monday – Friday: 7:00 a.m. - 11:30 p.m.; Saturday: 12:00 m - 8:30 p.m.; Sunday 3:00 p.m. - 11:30 p.m. Special schedules are observed during holidays, academic recesses and weekends. It offers spacious (10,128 square feet) comfortable facilities and a suitable environment that includes excellent lighting, equipment, arrangement of books, journals and audiovisual materials in open stacks (shelving space saver). It is an attractive place for study, research, and teaching. Upon entering the library users will go up for the Learning Resource Center (LRC), a 24-hour study hall. In general, it has 72 individual seats, and 8 small group study rooms. One room with 14 cubicles (two are for people with disabilities) is for individual study and offers for more privacy and concentration.

The library has 60 computers exclusively for use by patrons and Wi-Fi access throughout the library. On the first floor there are the books, journals, local newspapers, recreational reading, administrative offices, technical services, and staff lounge. Reference, Circulation, Reserve, and another 24-hour study room with 7 computers and 24 carrels (one for people with disabilities) with one photocopy/printer machine are also located in this area. There are five cubicles especially designed for persons with disabilities throughout the Library.

The library has 207 ergonomic chairs. Seating for patrons is to be found throughout the library on the first and second floor. Elevator and ADA accessible carrels are available. The Library's personnel make every effort to provide library services to persons with disabilities.

All databases run on remote access, except Up To Date. Students and faculty must register with Athens, an access management system which provides access to online resources. Electronic books and electronic journals, with full text are also available for students and faculty through the Public Access Catalog (PAC). A greater number of books and journals can be accessed by borrowing from other libraries using interlibrary loans. The library workstations provide full access to wireless Internet.

Books (24,973 vols.) are shelved by National Library of Medicine (NLM) or Library of Congress (LC) classification numbers and can be located through ours three workstation Online Public Access Catalog (OPAC) [www.psm.edu](http://www.psm.edu). Guides to the classification schedules are located throughout the library. The librarians or assistants on duty at the reference desk of the first and second floors are available to assist patrons with their needs for information. Print journals are organized in open stacks in alphabetical sequence. There are 12,476 volumes in 337 titles, 115 titles with active subscription and 7 titles are in print only.

Non-print materials available include the necessary equipment to view films, slides, DVD, videos, and computer software. These are used to foster in our students lifelong, self-directed, independent study skills and attitudes. The study rooms are available for group discussions, self-study, classes, meetings, etc. The Library has institutional licenses agreements with the several full text sources, electronic books and streaming videos as follows:

- Access Medicine
- Access OB-Gyn
- Access Pediatrics
- Barbara Bate's Streaming Videos
- CINAHL Complete
- Clinical Pharmacology
- ClinicalKey
- Cochrane Central Register of Controlled Trials
- Cochrane Database of Systematic Reviews

- Cochrane Methodology Register
- Global Health
- Global Health Archives
- Health Source: Nursing/Academic Edition
- JAMA + 10
- MEDLINE Complete
- Nature Complete
- Ovid SP
- Ovid MD
- PsycARTICLES
- PsycBooks
- PsycEXTRA
- Psychiatry Online
- Psychology and Behavioral Sciences Collection
- PsycINFO
- PsycTESTS
- Sage Premier
- Stahl's Pharmacology
- UpToDate

Public health students can find the American Journal of Public Health, the Bulletin of the WHO, the Journal of Public Health Management, and others.

Criteria for journal selection include the curricula of the different programs, the needs for students to acquire the skills and intellectual abilities necessary to successfully function independently, the needs of departmental and program directors, and of faculty members.

The library provides a wide range of distance and on-site seamless information services. Library personnel strive to transform their services in response to the changing environment and the growing needs of the patrons and keeps abreast of the latest information on new publications available through mail, internet, vendors, etc. The Library's Web Page has a link ([http://www.psm.edu/?page\\_id=171](http://www.psm.edu/?page_id=171)) where patrons can make recommendations and suggest new additions to the collection and another one to request for interlibrary loans ([http://www.psm.edu/?page\\_id=174](http://www.psm.edu/?page_id=174)). Departments and programs yearly recommend a list of new titles, software, journals, etc.

The PHSU Library belongs to the Southeastern Region of the National Network of Libraries of Medicine (NNLM). FreeShare, a Reciprocal Interlibrary Loan (ILL) agreements, exist with other Medical Libraries in USA and PR. The library delivers or transfers full text documents directly to primary users, external individuals, hospitals or organizations in need, including those without libraries. For the fiscal year 2015-2016 our Library received 9,322 requests (53 International -outside US).

Three professional librarians, four library assistants, and one secretary, have responsibilities and expertise in the areas of information retrieval and are highly qualified to help facilitate the teaching and learning process. They assist patrons in finding information in the library's academic resources, using the databases, e-books and other electronic resources, and in guiding the most efficient and effective use of our instructional materials.

The time allotted for orientation seminars and workshops with new students has increased. The activities include basic literature searching strategies and workshops on how to use the specific database according with their academic program.

Computerized instruction programs are also available to the faculty and other patrons to improve their skills in literature searching. Individual appointments can be made for special needs.

The information searching process is a major step in the problem-based learning and evidence-based curriculum, therefore the library establishes and active educational role. Our library staff is prepared to help facilitate the teaching process, especially in assisting students to improve their information skills.

The IT department provides technical services to computer equipment and maintenance to on-line systems. The students can access computers connected to the network in the library building. Access from remote locations is possible through online Public Access Catalog and a visitor's count will soon tell us the extent of use of our OPAC (352,512 since 2003).

For remote access the Library uses Open ATHENS. Each library's user has their own specific ID to log in with and can access our electronic resources from anywhere. Open ATHENS manages users' identity and access to both internal and external resources and enables secure, easy access to electronic resources through a single username and password (single sign on). Students and faculty have access to hardware and software, including access to specific software or other technology required for instructional programs.

To maintain its value to the research, academic and clinical needs of our users, the library's eBooks, print books, journals, databases and other electronic resources, and AV equipment are under constant evaluation.

### **Infrastructure, Internet & Network Services**

PHSU Network is connected to the Internet using a 500 Mbps line. PHSU has over 700 network connections throughout the campus, connection speed is 100/1GB using category 6 or 5E structured wiring, capable of supporting the networking requirements of faculty, students and administration. Wireless service is available throughout the campus.

Backbone communication is in Gigabit Ethernet using Giga-ether channels (2 – 4 Gbps). All servers are connected to the network with full duplex-switched Gigabit connection, to ensure minimum latency. An inter-building fiber optic infrastructure capable of supporting current and future networking technologies was installed that connects 10 buildings. The Data Center is connected to the building power generator in case of power failure.

PHSU has 75 servers, 10 physical servers and 55 on a virtual infrastructure using VMware; providing the following services: File and Print, Applications and Database, Web Services, Email, Remote Access, Security, Users Authentication. We provide support to 1250 independent users, and manage and support over 20 applications or Databases, and about 425 computers.

### **Software:**

Desktop applications used on the institutions are mostly Microsoft office suite. Email system used is in the cloud using the platform of Office 365. Other applications include antivirus and other software needed for the operations. Staff and students have the benefit of using the applications of Office 365 on their personal devices. The institution has license agreements for the use of the following software applications: (See Resources File)

- SPSS (campus license)
- Stata
- Endnote
- Jenzabar EX. For the management of student's records, advising, e-learning, and accounting suite. The institution is using Jenzabar EX, as a software as a service.
- Moodle e-learning platform also is in used. Docebo platform as a repository of video of classes.
- Videoconference and web meeting software such Skype for Business, GoToMeeting.

### **Learning Resource Center**

On the second floor of the main academic building (Building B), there is a computer center for the use of students and faculty: The Learning Resource Center (LRC). The center offers access to electronic databases, the internet, link services and office productivity applications such as Word processing, Excel, Power Point, etc. Faculty members who want to teach students how to work with SPSS and/or who want to work with students on data analysis may use the center. Specialized software such as SPSS, Stata, EndNote and laser printers are also available. Security measures have been installed to provide more reliable, secure and available Internet connection; they include Internet access

control and AntiSpam systems. Physical segmentation and Virtual Local Area Networks (VLAN's) have also been implemented to safeguard data.

The management of the Learning Resource Center (LRC) is centralized on the Library. Users may only utilize applications that are installed in the library network. The LCR supports teaching, evaluation and testing and other computer-related activities. Library and IT specialized staff provide support and assistance to users. The use of the center must be authorized.

## **Educational Technology**

The University has an Educational Technology Division (ETD), under the Assistant Dean for Curriculum and Faculty Development. It provides support to students, faculty members and staff on the use of the Moodle educational platform for learning activities, the Docebo platform for recording videos to be used in the flipped classroom modality, offline exam platform (Exam Soft) for the preparation, administration, scoring and analysis of internal examinations, and Microsoft applications.

The ETD also assists students and faculty in the development and use of other technologies to support educational and evaluation activities and it serves as a liaison between academia and the information technology unit. The division uses Moodle as its online learning management system where students can evaluate teaching faculty and courses and faculty can upload power presentations, handouts, and learning materials. The E-value software for the evaluation of third year medicine courses is also managed through Moodle. ETD educational technology specialists have developed a series of workshops for educating faculty, students and staff on the use of new technologies in education. Specialists are equipped with laptop computers, iPad Air 2 and Mac Book Pro. Recently, the division has recruited an academic media specialist to develop a recording studio in order to record faculty lectures to be used in the flipped classroom modality. The studio has acquired production monitors, cameras, tele-prompters, TVs and computers.

- **Exam Soft**

PHSU has acquired an offline exam platform, Exam Soft, for the preparation, administration, scoring and analysis of the internal examinations in every course. It will allow mapping each question with the course/lecture objectives and content, as well with the competencies and educational objectives. It will also enable the implementation of student assessment tracking system for continuing monitoring of student performance and early identification of students at risk and to determine the validity and reliability of questions in the test, to ensure their effectiveness in the evaluation of student learning. The Educational Technology Division, with three specialists, will manage Exam Soft and the training on its use by students, faculty and administrators.

- **Audio Response System**

The PHP faculty is using the Audio Response System (ARS) to create interactivity with the students. The faculty prepares a normal power point presentation and adds interactive slides to it interactive slides such as multiple-choice questions that students need to provide responses. The hand-held remote control (clicker) is used by students to convey their responses to faculty questions. Student answers are immediately shown. The clicker helps to create an interactive classroom environment. It is also used to confirm student understanding, improve attentiveness, increase knowledge retention, and gather data for reporting and analysis. This innovation is being implemented across all programs. The Assistant Dean for Curriculum is providing training on the use of ARS to support teaching and learning activities.

- **Jenzabar EX**

Jenzabar® EX is a comprehensive, fully-scalable administrative platform designed specifically for use in higher education. Members of an institution's ecosystem are connected with a centralized database that can be implemented out-of-the-box and rapidly deployed. Jenzabar EX provides interoperable workflows that adapt as institution policies change and technology evolves. A proven solution built on the industry-leading Microsoft® SQL Server® platform, Jenzabar EX is a complete solution to help the institution to:

1. **Manage of Student Information**  
Enhances constituent satisfaction through all stages of the student lifecycle: Admissions, Financial Aid, Registration, Student Life, Student Records, and Student Advising.
2. **Streamline Business Operations**  
Empowers administrative staff and cut costs by reducing time spent on routine tasks: General Ledger, Accounts Receivable, Accounts Payable, Purchasing, and Budget.
3. **Exchange Ideas and Information for Better Communication**  
Jenzabar EX connects administrators, faculty, students, and partners with the right information in real time, enabling better communication across the entire community. Jenzabar gives students more personal control. Online information portals help students manage their curriculum, academic progress, room choices, health records, and more. It helps Human Resources become more resourceful to manage payroll, benefits, and performance information more easily; track open positions and applications more effectively; and ensure regulatory compliance. The online information portals help students manage their curriculum, academic progress, health records, and more. Experts from Jenzabar EX are training PHSU personnel.

### **Audiovisuals**

PHSU has an audiovisual unit to ensure that the proper audiovisual material, equipment and services be available to support faculty teaching, student learning and administrative activities. The unit has laptops, slide projectors, overhead projectors, videotapes and DVD players, video projectors, electronic boards, sound equipment, and teleconference equipment for the use of students, faculty, and administration. The unit also provides services in the development of audiovisual materials such as photographs, illustrations, images, etc. The unit is staffed with two audiovisual technicians who provide training on the use of audiovisual equipment as needed and also provide support to the Educational Technology Division.



**C5-2 - Provide narrative and/or data that support the assertion that information and technology resources are sufficient or not sufficient**

The PHP has enough technological and educational resources to support teaching and learning. All faculty of the Program have the following software available in in their offices: SPSS, Berckley Madonna, STELLA, Minitad, EndNote. Each faculty and staff member have a desktop computer in their assigned office space. Printers are shared via network. The PHP dry lab is also used by faculty, doctoral students, and research assistants. Software available in the dry lab includes: SPSS, STATA, SAS, STELLA, PASS, Epi Info, R, Epidat, Minitad, MAPTAB, Berckley Madonna, EndNote, ARC - INFO.

The Library provides enough information resources to support teaching and learning activities to public health faculty and students. The Institution has established a learning resource center that PHP faculty and students may use. This center allows for both online demonstration, and hands-on workshops. It is equipped with 40 computers and ergonomic chairs, one interactive podium, symposium interactive pen (SMART TECH), DVD/VCR combos, and other hardware, where students, faculty and staff can access Internet and make use of the different databases and online resources available for instruction and self-study.

**C5-3 - If applicable, assess strengths and weaknesses relate to this criterion and plans for improvement in this area**

**Strengths**

- All faculty have up-to-date versions of software related to new trends and requirements for public health.
- Students and faculty are exposed to new software related to public health.
- The institution is a leader in new tendencies in educational technologies and resources.
- The office of faculty development has a work Plans focused on the development of new faculty knowledgeable in new educational techniques and resources. All full –time and part-time faculty must stay updated.

**Weaknesses**

- Not all PHP faculty has the skills to work with the new software in use in the Program.
- Not all PHP faculty has the skills to work with ARC-INFO.
- The faculty is slowly adapting to the new changes in educational technology at PHSU.

**Plans**

- To develop workshops to get faculty up to date in the use of new programs related to public health.
- We should develop an advanced training in ARC -INFO in order to maximize its use.
- To incorporate new educational resources and techniques in the coursework of the program.

## **D1. MPH & Dr.PH Foundational Public Health Knowledge**

### **D1.1- Describe how the program ensures that all the MPH and Dr.PH students are grounded in foundational public health knowledge.**

The PHSU-PHP ensures that all MPH graduates are grounded in foundational public health knowledge by requiring all new MPH students to enroll in the core course MPH 5101, Fundamentals of Public Health. The student's achievement is measured by the following learning objectives provided by 2016 CEPH criteria:

1. Explain public health history, philosophy and values
2. Identify the core functions of public health and the 10 Essential Services
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program
5. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.
6. Explain the critical importance of evidence in advancing public health knowledge
7. Explain effects of environmental factors on a population's health
8. Explain biological and genetic factors that affect a population's health
9. Explain behavioral and psychological factors that affect a population's health
10. Explain the social, political and economic determinants of health and how they contribute to population health and health inequities
11. Explain how globalization affects global burdens of disease
12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (e.g., One Health)

The course was modified to ensure all students who started their MPH degree in the academic year 2017-2018 followed the above learning objectives. Dr.PH students admitted from CEPH- accredited MPH degrees are considered in compliance with this requirement. However, if a Dr.PH student is admitted from a non CEPH- accredited MPH degrees program or school, the student will be required to enroll in the MPH 5101 course. The information related to Dr.PH students to check if they obtained their MPH degrees from a CEPH- accredited MPH degrees program or school is provided by the PHSU Admissions Office.

**D.1 -2 - Document the methods described above. This documentation must include all referenced syllabi, samples of tests or other assessments and web links or handbook excerpts that describe admissions pre-requisite, as applicable.**

Syllabus of the core course MPH 5101, Fundamentals of Public Health, including the twelve learning objectives and their corresponding activities to ensure all students are grounded in foundational public health knowledge is provided in the resource file. Dr.PH curriculum Planners with all pre-requisites courses is also provided in the resource file.

**D.1-3 - Strengths and weaknesses related to this criterion and plan for improvement in this area**

**Strengths**

Modifying the MPH 5101 course, Fundamentals of Public Health, has been the most effective and systematic way to ensure all our students comply with this criterion. The faculty member assigned to offer the course is being advised about the importance of complying with this requirement. These learning objectives, although covered in MPH 5101, are also covered at other core courses every student take during their first year. The table below includes the additional courses that strengthen and support the criterion.

<i>Template D1-1: Foundational Public Health Learning Objectives Covered in PHSU MPH Degrees</i>	
<b>Content</b>	<b>Course number(s) or other educational requirements</b>
1. Explain public health history, philosophy and values	MPH 5101: Fundamentals of Public Health MPH 5200: Psychological Aspects of Public Health
2. Identify the core functions of public health and the 10 Essential Services*	MPH 5101: Fundamentals of Public Health MPH 5411: Public Health Management
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health	MPH 5101: Fundamentals of Public Health MPH 5105: Introduction to Environmental Health MPH 5103: Introduction to Epidemiology MPH 5102: Introduction to Biostatistics MPH 6202: Inferential Biostatistics
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program	MPH 5101: Fundamentals of Public Health MPH 5103: Introduction to Epidemiology MPH 5106: Communication in Public Health
5. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.	MPH 5101: Fundamentals of Public Health MPH 5103: Introduction to Epidemiology MPH 5200: Psychological Aspects of Public Health MPH 5401: Introduction to Health Care Administration
6. Explain the critical importance of evidence in advancing public health knowledge	MPH 5101: Fundamentals of Public Health MPH 5105: Introduction to Environmental Health
7. Explain effects of environmental factors on a population's health	MPH 5101: Fundamentals of Public Health MPH 5105: Introduction to Environmental Health MPH 5103: Introduction to Epidemiology MPH 5200: Psychological Aspects of Public Health MPH 5106: Communication in Public Health
8. Explain biological and genetic factors that affect a population's health	MPH 5101: Fundamentals of Public Health MPH 5105: Introduction to Environmental Health MPH 5103: Introduction to Epidemiology MPH 5106: Communication in Public Health
9. Explain behavioral and psychological factors that affect a population's health	MPH 5101: Fundamentals of Public Health MPH 5103: Introduction to Epidemiology MPH 5200: Psychological Aspects of Public Health MPH 5106: Communication in Public Health MPH 5401: Introduction to Health Care Administration

10. Explain the social, political and economic determinants of health and how they contribute to population health and health inequities	MPH 5101: Fundamentals of Public Health MPH 5200: Psychological Aspects of Public Health MPH 5106: Communication in Public Health
11. Explain how globalization affects global burdens of disease	MPH 5101: Fundamentals of Public Health MPH 5106: Communication in Public Health
12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (e.g., One Health)	MPH 5101: Fundamentals of Public Health MPH 5105: Introduction to Environmental Health

**Weakness**

The implementation of the modified course MPH 5101, Fundamentals of Public Health, as a “medullar” core course to comply with 2016 CEPH criteria started on August 2017. The course was assigned to a single faculty member who covered most topics but also invited other faculty members to discuss some topics out of his area of expertise. This is the first time that the course had been offered. Sadly, during that trimester Hurricane María hit our island requiring us to modify and make the structure of the course flexible due to some students living far from PHSU. Although all learning objectives were covered, the common thread of the course was a little bumpy.

**Plans**

There is always spacing to improve the course, especially after all the lessons learned after the hurricane. These students showed us their commitment, empathy and fast learning skills as health practitioners in the interventions conducted in nearby disadvantaged municipalities due to the hurricane landfall. After observing and realizing their capabilities and potential, we are confident that next year MPH 5101 will be more dynamic, and include more hands-on activities, to expose new students to a more diverse practical experience from a more structured academic offering.

## D2. MPH Foundational Competencies

**D2. 1 List the coursework and other learning experiences required for the program’s MPH degrees, including the required curriculum for each concentration. Information may be provided in the format of Template D2-1.**

The PHSU-PHP offers three different MPH specialties which are MPH general track, epidemiology, and environmental health. When new students are admitted to the MPH program, they are not required to enroll in a specialty. All new students enroll in the same core courses during their first year. During the third trimester of that first academic year, the students are required to attend to an orientation meeting where MPH track coordinators and faculty describe each specialty curriculum, what it is expected as a professional in that field, and examples of agencies or entities providing job opportunities. The students will be able to choose which specialty is aligned with their abilities, skills, job opportunities and their interests after their first-year core courses and attending the orientation meeting. Additional meetings with their coordinators are scheduled if requested to decide which track to follow.

The templates below include our PHP MPH curriculum. Please note that all three curricula are the same during the first year. Templates are being included twice, old curriculum and new curriculum, because of the modification to comply with 2016 CEPH criteria and the need to provide data from past academic years where old curricula were in place. The modification of curricula responded to a matrix designed to compare the level of compliance of the three MPH curricula with the new 2016 CEPH criteria. From that analysis, we obtained data to re-design all three specialties. The changes were minimal, more related to the addition of health services administration and health policy to all first-year students. From the three track specialties, MPH general track obtained the major modification to strengthen their curriculum to be more competitive when faced with public health in the real world.

<i>Template D2-1a: Requirements for MPH Degree, General Track</i>		
<b>OLD CURRICULUM (2015-2017)</b>		
<b>Course number</b>	<b>Course name</b>	<b>Credits</b>
<b>FIRST YEAR - CORE COURSES (29 CREDITS)</b>		
MPH-5101	Fundamentals of Public Health	3
MPH-5102	Introduction to Biostatistics	3
MPH-5310	Introduction to Environmental Health	3
MPH-5103	Introduction to Epidemiology	3
MPH-6202	Inferential Biostatistics	3
MPH-5201	Psychosocial Aspects of Public Health	3
MPH-5411	Public Health Management	3
MPH-5520	Bioethics and Public Health Law	2
MPH-5600	Communication in Public Health	3
IHD-919	Inter-Professional Perspectives in Health Disparities	1
MPH-7850	Practicum (200 HOURS)	2
<b>SECOND YEAR- GENERAL TRACK REQUIRED COURSES (13 CREDITS)</b>		
MPH -5502	Health Policy	2
MPH -5601	Scientific Writing	3
MPH- 7001	Program Planning & Evaluation in Public Health	2
MPH- 6601	Health Promotion & Disease Prevention	3
MPH- 5401	Introduction to Health Care Administration	3
<b>SELECTIVES (5 OR 6 CREDITS)</b>		

MPH- 5300	Scientific Basis of Health Interventions	2
MPH- 6030	Qualitative Methods	2
MPH- 6120	Survey Design	2
MPH- 7030	Research Methodology	3
MPH- 7711	Nutrition & Public Health	3
MPH- 7781	Risk Communication	2
<b>CULMINATING EXPERIENCE (2 OR 0 CREDITS)</b>		
MPH- 7920	Capstone I	1
MPH- 7930	Capstone II	1
MPH 7910	Comprehensive Exam	0
<b>ELECTIVES (SELECT 5-8 CREDITS)</b>		
MPH	Behavioral Aspects of Health Disorders	3
MPH 6111	Health Disparities	3
MPH 7071	Aging in Public Health	3
MPH 7791	Bioterrorism and Public Health	2
MPH 7761	Global Health	3
MPH 7771	Humanitarian Operation	3
MPH 7064	Food Safety	2
MPH 5104	Disaster Epidemiology	3
MPH 7043	Injury Epidemiology	2
MPH 7414	Environmental Epidemiology	2
	COURSES FROM EPIDEMIOLOGY AND ENVIRONMENTAL HEALTH TRACKS	
<b>GENERAL TRACK MPH DEGREE TOTAL CREDITS - 55</b>		



**plate D2-1a: Requirements for MPH Degree, General Track  
(CURRENT CURRICULUM 2017- 2018)**

Course number	Course name	Credits
<b>FIRST YEAR - CORE COURSES (31 CREDITS)</b>		
MPH-5101	Fundamentals of Public Health	3
MPH-5102	Introduction to Biostatistics	3
MPH-5105	Introduction to Environmental Health	2
MPH-5103	Introduction to Epidemiology	3
MPH-6202	Inferential Biostatistics	3
MPH-5200	Psychosocial Aspects of Public Health	2
MPH-5411	Public Health Management	3
MPH-5520	Bioethics and Public Health Law	2
MPH-5106	Communication in Public Health	2
MPH-5401	Introduction to Health Care Administration	3
MPH-5502	Health Policy	2
IHD-919	Inter-Professional Perspectives in Health Disparities	1
MPH 7850	Applied Practicum Experience	2
<b>SECOND YEAR- GENERAL TRACK REQUIRED COURSES (19 CREDITS)</b>		
MPH- 7030	Research Methodology	3
MPH- 7501	Behavioral Aspects of Health Disorders	2
MPH- 7001	Program Planning & Evaluation in Public Health	2
MPH- XXXX	Emergent Diseases	3
MPH- 5300	Scientific Basis of Health Interventions	2
MPH- 6601	Health Promotion & Disease Prevention	3
MPH- 7240	Self-Study Topic II: Community Workshop	1
MPH 5601	Scientific Writing	3
<b>ELECTIVES (SELECT 5 CREDITS)</b>		
MPH- 6030	MPH- 6030 Qualitative Methods	2
MPH- 6120	MPH- 6120 Survey Design	2
MPH- 7711	MPH- 7711 Nutrition & Public Health	3
MPH- 7781	MPH- 7781 Risk Communication	2
MPH- 7210	MPH- 7210 Seminar	1
	COURSES FROM OTHER TRACKS	
<b>EXTRACURRICULAR GRADUATION REQUISITES (0 CREDITS)</b>		
PUBLIC HEALTH SEMINARS, CONFERENCES, WORKSHOPS, AMONG OTHER ACTIVITIES PROVIDED		
<b>INTEGRATIVE LEARNING EXPERIENCE (0 CREDITS)</b>		
MPH 7910	Comprehensive Exam	0
<b>GENERAL TRACK MPH DEGREE TOTAL CREDITS - 55</b>		

<b>Template D2-1b: Requirements for MPH Degree, Epidemiology Track OLD CURRICULUM (2015-2017)</b>		
<b>Course number</b>	<b>Course name</b>	<b>Credits</b>
<b>FIRST YEAR - CORE COURSES (29 CREDITS)</b>		
MPH-5101	Fundamentals of Public Health	3
MPH-5102	Introduction to Biostatistics	3
MPH-5310	Introduction to Environmental Health	3
MPH-5103	Introduction to Epidemiology	3
MPH-6202	Inferential Biostatistics	3
MPH-5201	Psychosocial Aspects of Public Health	3
MPH-5411	Public Health Management	3
MPH-5520	Bioethics and Public Health Law	2
MPH-5600	Communication in Public Health	3
IHD-919	Inter-Professional Perspectives in Health Disparities	1
MPH-7850	Practicum (200 HOURS)	2
<b>SECOND YEAR- EPIDEMIOLOGY TRACK REQUIRED COURSES (18 CREDITS)</b>		
MPH-7013	Advanced Epidemiology	3
MPH-5601	Scientific Writing	3
MPH-7333	Research Methods in Epidemiology	3
MPH-5212	Statistical Methods in Epidemiology	3
MPH-7753	Epidemiology of Infectious Disease	3
MPH-7073	Epidemiology of Chronic Disease	3
<b>SELECTIVES (2 OR 3 CREDITS)</b>		
MPH 5104	Disaster Epidemiology	3
MPH 7043	Injury Epidemiology	2
MPH 7414	Environmental Epidemiology	2
MPH 7703	Forensic Epidemiology	2
MPH 7063	Nutritional Epidemiology	3
<b>CULMINATING EXPERIENCE (2 OR 0 CREDITS)</b>		
MPH- 7920	Capstone I	1
MPH- 7930	Capstone II	1
MPH 7910	Comprehensive Exam	0
<b>ELECTIVES (SELECT 3-6 CREDITS)</b>		
MPH 6302	Survival Analysis	3
MPH 7781	Risk Communication	2
MPH 7711	Nutrition and Public Health	3
MPH 5300	Scientific Basis for Health Interventions	2
MPH 6120	Survey Design	2
MPH 6111	Health Disparities	3
MPH 7791	Bioterrorism and Public Health	2
MPH 7761	Global Health	3
	COURSES FROM GENERAL AND ENVIRONMENTAL HEALTH TRACKS	
<b>EPIDEMIOLOGY TRACK MPH DEGREE TOTAL CREDITS-55</b>		

<b>Template D2-1b: Requirements for MPH Degree, Epidemiology Track (CURRENT CURRICULUM 2017-2018)</b>		
<b>Course number</b>	<b>Course name</b>	<b>Credits</b>
<b>FIRST YEAR - CORE COURSES (31 CREDITS)</b>		
MPH-5101	Fundamentals of Public Health	3
MPH-5102	Introduction to Biostatistics	3
MPH-5105	Introduction to Environmental Health	2
MPH-5103	Introduction to Epidemiology	3
MPH-6202	Inferential Biostatistics	3
MPH-5200	Psychosocial Aspects of Public Health	2
MPH-5411	Public Health Management	3
MPH-5520	Bioethics and Public Health Law	2
MPH-5106	Communication in Public Health	2
MPH-5401	Introduction to Health Care Administration	3
MPH-5502	Health Policy	2
IHD-919	Inter-Professional Perspectives in Health Disparities	1
MPH 7850	Applied Practicum Experience	2
<b>SECOND YEAR- EPIDEMIOLOGY TRACK REQUIRED COURSES (17 CREDITS)</b>		
MPH-7013	Advanced Epidemiology	3
MPH-7333	Research Methods in Epidemiology	3
MPH-5212	Statistical Methods in Epidemiology	3
MPH-7753	Epidemiology of Infectious Disease	3
MPH-7073	Epidemiology of Chronic Disease	3
MPH-7023	Applied Epidemiology and Surveillance	2
<b>ELECTIVES (SELECT 7 CREDITS)</b>		
MPH-5601	Scientific Writing	3
MPH-5104	Disaster Epidemiology	3
MPH-7063	Nutritional Epidemiology	3
MPH-7703	Forensic Epidemiology	2
MPH-7043	Injury Epidemiology	2
MPH-7414	Environmental Epidemiology	2
	COURSES FROM OTHER TRACKS	
<b>EXTRACURRICULAR GRADUATION REQUISITES (0 CREDITS)</b>		
PUBLIC HEALTH SEMINARS, CONFERENCES, WORKSHOPS, AMONG OTHER ACTIVITIES PROVIDED		
<b>INTEGRATIVE LEARNING EXPERIENCE (0 CREDITS)</b>		
MPH 7910	Comprehensive Exam	0
<b>EPIDEMIOLOGY TRACK MPH DEGREE TOTAL CREDITS - 55</b>		

<b>Template D2-1c: Requirements for MPH Degree, Environmental Health Track OLD CURRICULUM (2015-2017)</b>		
<b>Course number</b>	<b>Course name</b>	<b>Credits</b>
<b>FIRST YEAR - CORE COURSES (29 CREDITS)</b>		
MPH-5101	Fundamentals of Public Health	3
MPH-5102	Introduction to Biostatistics	3
MPH-5310	Introduction to Environmental Health	3
MPH-5103	Introduction to Epidemiology	3
MPH-6202	Inferential Biostatistics	3
MPH-5201	Psychosocial Aspects of Public Health	3
MPH-5411	Public Health Management	3
MPH-5520	Bioethics and Public Health Law	2
MPH-5600	Communication in Public Health	3
IHD-919	Inter-Professional Perspectives in Health Disparities	1
MPH-7850	Practicum (200 HOURS)	2
<b>SECOND YEAR- ENVIRONMENTAL HEALTH TRACK REQUIRED COURSES (18 CREDITS)</b>		
MPH-7064	Food Safety	2
MPH-7444	Air and Hazardous Waste Exposure Assessment	3
MPH-7454	Water Quality Measurements	2
MPH-7074	Environmental and Occupational Diseases	2
MPH-7414	Environmental Epidemiology	2
MPH-7024	Environmental Toxicology	2
MPH-7484	Environmental Laboratory	3
<b>SELECTIVES (2 OR 3 CREDITS)</b>		
MPH 7032	Geographic Information Systems	2
MPH 7701	Fundamentals of Industrial Hygiene	3
MPH 7402	Environmental Management and regulations	2
<b>CULMINATING EXPERIENCE (2 OR 0 CREDITS)</b>		
MPH- 7920	Capstone I	1
MPH- 7930	Capstone II	1
MPH 7910	Comprehensive Exam	0
<b>ELECTIVES (SELECT 3-6 CREDITS)</b>		
MPH-7404	Environmental Health Consulting	2
MPH-7494	Environmental Microbiology	2
MPH-7474	Statistical Methods in Environmental Health	2
MPH- 7781	Risk Communication	2
MPH-7791	Bioterrorism and Public Health	2
MPH- 7761	Global Health	3
	COURSES FROM GENERAL AND EPIDEMIOLOGY TRACKS	
<b>ENVIRONMENTAL HEALTH TRACK MPH DEGREE TOTAL CREDITS – 55</b>		

<b>Template D2-1c: Requirements for MPH Degree, Environmental Health Track NEW CURRICULUM (2017-2018)</b>		
<b>Course number</b>	<b>Course name</b>	<b>Credits</b>
<b>FIRST YEAR - CORE COURSES (31 CREDITS)</b>		
MPH-5101	Fundamentals of Public Health	3
MPH-5102	Introduction to Biostatistics	3
MPH-5105	Introduction to Environmental Health	2
MPH-5103	Introduction to Epidemiology	3
MPH-6202	Inferential Biostatistics	3
MPH-5200	Psychosocial Aspects of Public Health	2
MPH-5411	Public Health Management	3
MPH-5520	Bioethics and Public Health Law	2
MPH-5106	Communication in Public Health	2
MPH-5401	Introduction to Health Care Administration	3
MPH-5502	Health Policy	2
IHD-919	Inter-Professional Perspectives in Health Disparities	1
MPH 7850	Applied Practicum Experience	2
<b>SECOND YEAR- ENVIRONMENTAL HEALTH TRACK REQUIRED COURSES (19 CREDITS)</b>		
MPH-7064	Food Safety	2
MPH-XXXX	Air and Hazardous Waste Exposure Assessment	2
MPH-7454	Water Quality Measurements	2
MPH-7074	Environmental and Occupational Diseases	2
MPH-7414	Environmental Epidemiology	2
MPH-7024	Environmental Toxicology	2
MPH-XXXX	Environmental Laboratory	2
MPH-7434	Risk Assessment	2
MPH-7030	Research Methodology	3
<b>ELECTIVES (SELECT 5 CREDITS)</b>		
MPH-7032	Geographic Information Systems	2
MPH-7701	Fundamentals of Industrial Hygiene	3
MPH-7402	Environmental Management and Regulations	2
MPH-7404	Environmental Health Consulting	2
MPH-7494	Environmental Microbiology	2
MPH-7474	Statistical Methods in Environmental Health	2
	COURSES FROM OTHER TRACKS	
<b>EXTRACURRICULAR GRADUATION REQUISITES (0 CREDITS)</b>		
PUBLIC HEALTH SEMINARS, CONFERENCES, WORKSHOPS, AMONG OTHER ACTIVITIES PROVIDED		
<b>INTEGRATIVE LEARNING EXPERIENCE (0 CREDITS)</b>		
MPH 7910	Comprehensive Exam	0
<b>ENVIRONMENTAL HEALTH TRACK MPH DEGREE TOTAL CREDITS - 55</b>		

**D2 -2- Provide a matrix, in the format of Template D2-1 that indicates the assessment activity for each of the foundational competencies.**

All MPH core competencies are covered during the first year by all MPH students. The template D2-2a below shows the old PHP public health core competencies selected from the ASPPH association in compliance with 2011 CEPH criteria. The matrix below shows the courses and the corresponding activity or assignment that allows us to assess compliance with CEPH. Although only one course with activities had been provided, competencies are covered multiple times in other courses or PHP activities. Some of these competencies are also covered in several second-year specialty required courses.

<b>Template D2-2a: Assessment of Competencies for Core Courses in MPH Tracks (General Track, Epidemiology &amp; Environmental Health) - OLD CURRICULUM 2015-2017</b>		
<b>Competency</b>	<b>Course number(s) or other educational requirements</b>	<b>Specific assessment opportunity</b>
<b>Biostatistics</b>		
Apply descriptive and inferential methodologies to different study designs to answer Public health questions	MPH 5102: Introduction to Biostatistics	Descriptive statistical analysis exercises, hypothesis tests exercises
Interpret results of statistical analyses found in public health studies	MPH 6202: Inferential Biostatistics	Written assignments
<b>Environmental Health</b>		
Describe the direct and indirect human, ecological and safety effects of major environmental and occupational agents.	MPH 5310: Introduction to Environmental Health	Environmental research-based presentation –epidemiology study
Describe federal and state regulatory programs, guidelines and authorities that control environmental health issues.	MPH 5310: Introduction to Environmental Health	Lecture
Specify approaches for assessing, preventing and controlling environmental hazards that pose risks to human health and safety.	MPH 5310: Introduction to Environmental Health	Environmental research-based presentation –epidemiology study
<b>Epidemiology</b>		
Describe a public health problem in terms of magnitude, person, time and place.	MPH 5103: Introduction to Epidemiology	Written assignments
Apply different epidemiologic study designs to address Public Health problems.	MPH 5103: Introduction to Epidemiology	Written assignments
Apply principles of Epidemiology to prevention of Public Health problems and diseases.	MPH 5103: Introduction to Epidemiology	Written assignments
<b>Health and Policy Management</b>		
Identify the main components and issues of the organization, financing and delivery of health services and public health systems in the US.	MPH 5411: Public Health Management	Exam 1 – Final project: students developed a public health program from scratch identifying main components of a program
Describe the legal and ethical bases for public health and health services	MPH 5101: Introduction to Public Health	Lecture and application of ethics aspects through different scenarios

Apply "systems thinking" for resolving organizational problems	MPH 5411: Public Health Management	Homework: provide different journal articles with different public health situations in which students develop managements resolving strategies
<b>Social and Behavioral Sciences</b>		
Identify basic theories, concepts and models from a range of social and behavioral disciplines that are used in public health research and practice.	MPH 5201: Psychological Aspects of Public Health	Paper presentations with applications of the different models
Identify the causes of social and behavioral factors that affect health of individuals and populations.	MPH 5201: Psychological Aspects of Public Health	Oral presentations and discussion of papers
Apply evidence-based approaches in the development and evaluation of social and behavioral science interventions.	IHD-919	Study and understand course video covering the topic
<b>Communication and informatics</b>		
Describe how the public health information infrastructure is used to collect, process, maintain, and disseminate data.	MPH 5600: Communication & Informatics in Public Health	Test 2
Use information technology to access, evaluate, and interpret public health data	MPH 5600: Communication & Informatics in Public Health	Test 2
Use informatics methods and resources as strategic tools to promote public health	MPH 5600: Communication & Informatics in Public Health	Class exercise (CDC communication index)
<b>Diversity and Culture</b>		
Explain how professional ethics and practices relate to equity and accountability in diverse community settings.	MPH 5520: Bioethics & Public Health Law	Summative test 1 & 2; disparities health exercises
<b>Leadership</b>		
Describe alternative strategies for collaboration and partnership among organizations, focused on public health goals.	MPH 5411: Public Health Management	Exam 1: Myers-Briggs Interactive Session
<b>Professionalism</b>		
Promote high standards of personal and organizational integrity, compassion, honesty and respect for all people.	MPH 5600: Communication & Informatics in Public Health	Case study
<b>Program Planning</b>		
Differentiate among goals, measurable objectives, related activities, and expected outcomes for a public health program.	MPH 5600: Communication & Informatics in Public Health	Class exercises (development of smart objectives and SWOT analysis)
<b>Systems Thinking</b>		
Assess the strengths and weaknesses of applying the systems approach to public health problems	MPH 5411: Public Health Management	Final exam

The template D2-2a below shows the new 2016 CEPH public health core competencies implemented in the PHSU- PHP since August 2017. The matrix shows the courses and the correspondent activity or assignment that allows us to assess compliance with CEPH. The foundational competencies are all covered in core courses offered in the first year for all MPH students. Although only one course with activities had been provided, competencies are covered multiple times in other courses or PHP activities. Some of these competencies are also covered in several second-year specialty required courses.

<b>Template D2-2b: Assessment of Competencies for Core Courses in MPH Tracks (General Track, Epidemiology &amp; Environmental Health) - NEW CURRICULUM 2017-2018</b>		
<b>Competency</b>	<b>* Course number(s) or other educational requirements</b>	<b>Specific assessment opportunity</b>
<b>Evidence-based Approaches to Public Health</b>		
1. Apply epidemiological methods to the breadth of settings and situations in public health practice	MPH 5103: Introduction to Epidemiology	Exam
2. Select quantitative and qualitative data collection methods appropriate for a given public health context	MPH 5105: Introduction to Environmental Health	Survey administration and data entry will be covered at a community-based research in Ponce Playa
3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate	MPH 5102: Introduction to Biostatistics	Quiz, Portfolio, Final examination
4. Interpret results of data analysis for public health research, policy or practice	MPH 6202: Inferential Biostatistics	Exam
<b>Public Health &amp; Health Care Systems</b>		
5. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings	MPH 5101: Fundamentals of Public Health	Exam
6. Discuss how structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels	MPH 5401: Introduction to Health Care Administration	Quiz
<b>Planning &amp; Management to Promote Health</b>		
7. Assess population needs, assets and capacities that affect communities' health	MPH 5411: Public Health Management	Exam #1
8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs	MPH 5520: Bioethics & Public Health Law	Summative test 1 & 2, Disparities in health exercise, Comprehensive bioethics analysis of a public health situation (final presentation)



9. Design a population-based policy, program, project or intervention	MPH 5105: Introduction to Environmental Health	Ponce Playa Community Based Research Workshop
10. Explain basic principles and tools of budget and resource management	MPH 5411: Public Health Management	Exam #2, Class project: to develop from scratch a public health program for an assigned specific situation
11. Select methods to evaluate public health programs	MPH 5411: Public Health Management	Exam #1
<b>Policy in Public Health</b>		
12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence	MPH 5520: Bioethics & Public Health Law	Summative test 1 & 2, Deductive analysis bioethics methods exercise, Comprehensive bioethics analysis of a public health situation (final presentation)
13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes	MPH 5411: Public Health Management	Exam #2
14. Advocate for political, social or economic policies and programs that will improve health in diverse populations	IHD 919: Inter- Professional Perspectives in Health Disparities	Video conference related to these topics final examination
15. Evaluate policies for their impact on public health and health equity	<ul style="list-style-type: none"> <li>MPH 5502: Health Policy</li> </ul>	<ul style="list-style-type: none"> <li>Assignment, case presentations and exam</li> </ul>
<b>Leadership</b>		
16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making	MPH 5401: Introduction to Health Care Administration	Discussion/Reaction Forum, Quiz
17. Apply negotiation and mediation skills to address organizational or community challenges	MPH 5411: Public Health Management	Exam #3
<b>Communication</b>		
18. Select communication strategies for different audiences and sectors	MPH 5106: Communication in Public Health	Test 2, Final project, Class exercise (CDC communication index)
19. Communicate audience-appropriate public health content, both in writing and through oral presentation	<ul style="list-style-type: none"> <li>MPH 5200: Psychological Aspects of Public Health</li> </ul>	<ul style="list-style-type: none"> <li>The student will prepare an oral presentation about different assigned topics. A rubric will be provided for assessment.</li> </ul>

20. Describe the importance of cultural competence in communicating public health content	MPH 5106: Communication in Public Health	Case study, Test
<b>Inter-professional Practice</b>		
21. Perform effectively on inter-professional teams	MPH 5411: Public Health Management	Class project: to develop from scratch a public health program for an assigned specific situation
<b>Systems Thinking</b>		
22. Apply systems thinking tools to a public health issue	MPH 5102: Introduction to Biostatistics	Quizzes, lectures, portfolio, final examination

**D2.3- Include the most recent syllabus from each course listed in template D2-1.**

All syllabi from courses listed and offered during academic year 2017-2018 above will be provided in the electronic file. However, modified syllabuses for the first trimester of academic year 2018-2019 will be provided for your revision during the site visit. Your feedback will allow us to improve all MPH curriculum syllabi.

**D2.4 - If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.**

**Strengths**

We have requested each faculty member their activities or mode of assessment of competencies to construct the D2-2 template (matrix). This exercise has been crucial in two aspects: (1) to identify the strengths and weaknesses in the former MPH curriculum in response to the new 2016 CEPH foundational competencies, and (2) to re-design all three MPH curricula. We are very confident the MPH curriculum is now more robust, and allows our students develop the necessary skills to compete and succeed in the real world. This was especially evident after the worst natural disaster we suffered with Hurricane María, where we observed how the new curriculum responded to local and nearby communities' expectations and immediate needs.

**Weakness**

The limitation that we could identify is related to the difficulty in hiring faculty with strong experience in health policy.

**Plans**

We are moving in the right direction by using flip modality classes that include videos (recorded lectures), “go to meeting” lectures and requiring our students to participate to public hearings or regular or extraordinary sessions of the PR Senate or House of Representatives where health policies are discussed.

### **D3. Dr.PH Foundational Competencies**

**D3.1 - List the coursework and other learning experiences required for the program's Dr.PH degree.**

Since 2007, the PHSU-PHP offers a Dr.PH with a specialty in Epidemiology that is unique in Puerto Rico and the Caribbean. The template D3-1a below includes the curriculum that follows 2011 CEPH criteria and was in effect until May 2017.

<b>Template D3-1a: Requirements for Dr.PH Degree, Epidemiology Specialty OLD CURRICULUM (2012 - 2017)</b>		
<b>Admissions Courses Pre-requisites</b>		
MPH-5102	Introduction to Biostatistics	3
MPH-5310	Introduction to Environmental Health	3
MPH-5103	Introduction to Epidemiology	3
MPH-6202	Inferential Biostatistics	3
MPH-5201	Psychosocial Aspects of Public Health	3
MPH-5411	Public Health Management	3
MPH-5511	Bioethics and Public Health Law	3
<b>PRE-REQUISITES TOTAL CREDITS</b>		<b>21</b>
<i>Courses to enroll if their master's degree is not in Public Health</i>		
<b>REQUIRED COURSES (48 credits)</b>		
<b>Course number</b>	<b>Course name</b>	<b>Credits</b>
DPH 6010	Epidemiological Research Methods	3
DPH 7015	Biostatistics for Epidemiology	3
DPH 6203	Clinical Trials	3
DPH 6601	Grant Writing in Epidemiology	3
DPH 6103	Epidemiology of Diseases of Major Public Health Importance	2
DPH 6253	Survey Questionnaire Design in Public Health; Epidemiology – Test Construction	3
DPH 7002	Advanced Biostatistics	3
DPH 7047	Epidemiological Data Analysis	3
IHD-919	Inter-Professional Perspectives in Health Disparities	1
DPH 7083	Consulting Practicum	3
<b>ELECTIVE COURSES IN BIOSTATISTICS (SELECT 3 CREDITS)</b>		
DPH 7163	Sampling	3
DPH 7201	Meta-analysis	3
DPH 5601	Writing Papers in Public Health	3
<b>ELECTIVE COURSES IN EPIDEMIOLOGY (SELECT 6 CREDITS)</b>		
DPH 7173	Social Epidemiology	3
DPH 6133	Epidemiology of Work Related Diseases	3
DPH 6153	Epidemiology of Transmissible Diseases	3
DPH 7193	Cancer Epidemiology	3
DPH 6123	Cardiovascular Epidemiology	3

DPH 7113	Mental Health Epidemiology	3
<b>ELECTIVE COURSES (SELECT 9 CREDITS)</b>		
DPH 7181	Public Health Education	3
DPH 6340	Health Services Administration and Management	3
DPH 6350	Planning and Evaluation Health Programs	3
DPH 6320	Teaching Epidemiology	3
DPH 7184	Demography	3
DPH 7023	Applied Epidemiology and Surveillance	3
DPH 5502	Health Policy	3
DPH 7143	Epidemiology of Tobacco	3
DPH 7073	Epidemiology of Chronic Diseases	3
DPH 7200	Bias	3
DPH7103	Genetic Epidemiology	3
DPH 7153	Epidemiology of Arthritis, Autoimmune and Musculoskeletal Disease	3
DPH 5734	Fundamentals of Pathophysiology	3
DPH 7133	Environmental Problems & Solutions in Epidemiology	3
DPH 6330	Health Economics	3
DPH 7123	Laboratory Rotation	3
DPH 6310	Legal Issues in Epidemiology	3
DPH 7024	Toxicology	3
DPH 7043	Injury Epidemiology	3
DPH 7700	Independent Study: Special project	3
DPH 7014	Environmental Epidemiology	3
DPH 7183	Post Market Surveillance	3
DPH 7010	Epidemiology Communicable and Tropical Diseases	3
DPH 7300	Applied Public Health Project	3
<b>CULMINATING EXPERIENCE</b>		
	COMPRENHENSIVE EXAM	0
DPH 8005	DISSERTATION	18
<b>Dr.PH EPIDEMIOLOGY DEGREE TOTAL CREDITS - 63</b>		

Students admitted to the Dr.PH program for the academic year 2017-2018 enrolled in a new curriculum in response to 2016 CEPH criteria. The template D3-1b below shows the new Dr. PH epidemiology curriculum in compliance with 2016 CEPH foundational competencies. The re-designed curriculum is now more robust and specially more aligned with what is expected from a professional doctoral degree, a Dr.PH, and not with an academic doctoral degree, Ph.D., as was before.

<b>Template D3-1a: Requirements for Dr.PH Degree, Epidemiology Specialty</b>		
<b>Admissions Courses Pre-requisites</b>		
MPH-5101	Fundamentals of Public Health*	3
MPH-5102	Introduction to Biostatistics	3
MPH-5310	Introduction to Environmental Health	3
MPH-5103	Introduction to Epidemiology	3
MPH-6202	Inferential Biostatistics	3
MPH-5201	Psychosocial Aspects of Public Health	3
MPH-5411	Public Health Management	3
MPH-5511	Bioethics and Public Health Law	3
	<b>PRE-REQUISITES TOTAL CREDITS</b>	<b>21</b>
* Enrolled if master's degree in PH is not from a CEPH accredited program or school OR if master's degree it is not in PH		
<b>REQUIRED COURSES (48 credits)</b>		
<b>Course number</b>	<b>Course name</b>	<b>Credits</b>
DPH 6010	Epidemiological Research Methods	3
DPH 6011	Epidemiological Research Methods Application	3
DPH 6300	Public Health Leadership & Advocacy	3
DPH 7015	Biostatistics for Epidemiology	3
DPH 7163	Sampling	3
DPH 5503	Bioethics in Public Health	3
DPH 6340	Health Services Administration and Management	3
DPH 6253	Survey Questionnaire Design in Public Health; Epidemiology – Test Construction	3
DPH 7002	Advance Biostatistics	3
DPH 7047	Epidemiological Data Analysis	3
DPH 6350	Planning and Evaluation Health Programs	3
DPH 6320	Teaching Epidemiology	3
DPH 7184	Demography	3
DPH 7023	Applied Epidemiology and Surveillance	3
DPH 5502	Health Policy	3
IHD-919	Inter-Professional Perspectives in Health Disparities	1
DPH XXXX	Consulting Practicum	2
<b>ELECTIVE COURSES (Select 6 credits)</b>		
DPH 6203	Clinical Trials	3
DPH 7181	Public Health Education	3
DPH 7143	Epidemiology of Tobacco	3

DPH 6601	Grant Writing in Epidemiology	3
DPH 6103	Epidemiology of Diseases of Major Public Health Importance	3
DPH 7201	Meta-analysis	3
DPH 5601	Writing Papers in Public Health	3
DPH 7073	Epidemiology of Chronic Diseases	3
DPH 7173	Social Epidemiology	3
DPH 6133	Epidemiology of Work Related Diseases	3
DPH 6153	Epidemiology of Transmissible Diseases	3
DPH 7193	Cancer Epidemiology	3
DPH 6123	Cardiovascular Epidemiology	3
DPH 7113	Mental Health Epidemiology	3
DPH 7200	Bias	3
DPH7103	Genetic Epidemiology	3
DPH 7153	Epidemiology of Arthritis, Autoimmune and Musculoskeletal Disease	3
DPH 5734	Fundamentals of Pathophysiology	3
DPH 7133	Environmental Problems & Solutions in Epidemiology	3
DPH 6330	Health Economics	3
DPH 7123	Laboratory Rotation	3
DPH 6310	Legal Issues in Epidemiology	3
DPH 7024	Toxicology	3
DPH 7043	Injury Epidemiology	3
DPH 7700	Independent Study: Special project	3
DPH 7014	Environmental Epidemiology	3
DPH 7183	Post Market Surveillance	3
DPH 7010	Epidemiology Communicable and Tropical Diseases	3
DPH 7300	Applied Public Health Project	3
	<b>INTEGRATIVE LEARNING EXPERIENCE</b>	
	COMPRENHENSIVE EXAM	0
DPH XXXX	DISSERTATION	9
<b>Dr.PH EPIDEMIOLOGY DEGREE TOTAL CREDITS - 63</b>		



**D3.2 - Provide a matrix, in the format of Template D3-2 that indicates the assessment activity for each of the foundational competencies**

The template below shows the old PHP Dr.PH core competencies selected from the ASPPH association and in compliance with 2011 CEPH criteria. The matrix shows the courses and the correspondent activity or assignment that allows us to assess compliance with CEPH. Although only one course with activities had been provided, competencies are covered multiple times in other courses or PHP activities.

<b>Template D3-2a OLD COMPETENCIES &amp; OLD Dr.PH CURRICULUM</b>		
<b>Assessment of Core Competencies for Dr.PH in Epidemiology</b>		
<b>Competency</b>	<b>* Course number(s) and name(s)</b>	<b>Specific assignment(s) that allow assessment</b>
<b>Advocacy</b>		
Influence health policy and program decision making based on scientific evidence, stakeholder input, and public opinion data	DPH 7002: Advanced Biostatistics	Exercises
<b>Communication</b>		
Employ evidence-based communication program models for dissemination research and evaluation outcomes	DPH 7047: Data Analysis in Epidemiology	Group projects present findings of data analysis in a written report and oral presentation
<b>Community/Cultural Orientation</b>		
Conduct community based participatory intervention and research projects	DPH 6601: Grants Writing	Students explore the community needs and experiences and design a research project based on these issues
Access cultural, environmental, and social justices influences on the health of communities	DPH 6103: Epidemiological Diseases of Major Public Health Importance	Lecture
Implements culturally and linguistically appropriate programs, services, and research	DPH 6103: Epidemiological Diseases of Major Public Health Importance	Lecture
Develop collaborative partnerships with community, policies makers, and other relevant groups	DPH7015: Biostatistics for Epidemiology	Problem based Learning Groups discussions
<b>Leadership</b>		
Collaborate with diverse groups	DPH7015: Biostatistics for Epidemiology	Individual assignments

Demonstrates a commitment to personal and professional values	DPH 6010: Research Methods in Epidemiology	Final presentation, homework to analyze papers, group discussions about methodology
<b>Professionalism and Ethics</b>		
Differentiate among the administrative, legal, ethical, and quality assurance dimensions of research and practice	DPH7015: Biostatistics for Epidemiology	Individual assignments and work groups discussions (cluster analysis); data review
Design strategies for resolving ethical concerns in research, law and regulations	DPH 6203: Clinical Trials	Written assignments
Develop tools that protect the privacy of individuals and community involved in health programs, policies and research	DPH 6253: Survey Questionnaire Design in Public Health; Epidemiology – Test Construction	Questionnaire Designing

The template D3-2b below shows the new Dr.PH core competencies implemented in the PHSU-PHP since August 2017. The matrix shows the courses and the correspondent activity or assignment that allows us to assess compliance with CEPH. The core competencies are all covered during the two first years of the doctoral student. Although only one course with activities had been provided in the matrix, competencies are covered multiple times in other courses or PHP activities.

<b>Template D3-2b: Assessment of Foundational Competencies for Dr.PH in Epidemiology Concentration NEW 2017-2018</b>		
<b>Competency</b>	<b>*Course number(s) and name(s)</b>	<b>Specific assignment(s) that allow assessment</b>
<b>Data &amp; Analysis</b>		
1. Explain qualitative, quantitative, mixed methods and policy analysis research and evaluation methods to address health issues at multiple (individual, group, organization, community and population) levels	DPH 6010: Epidemiological Research Methods	Scientific publication review
2. Design a qualitative, quantitative, mixed methods, policy analysis or evaluation project to address a public health issue	DPH 7015: Biostatistics for Epidemiology	Group presentation, class discussion, assignments
3. Explain the use and limitations of surveillance systems and national surveys in assessing, monitoring and evaluating policies and programs and to address a population's health	DPH 7023: Applied Epidemiology and Surveillance	Laboratory assessment, Exam & Final project.
<b>Leadership, Management &amp; Governance</b>		
4. Propose strategies for health improvement and elimination of health inequities by organizing stakeholders, including researchers, practitioners, community leaders and other partners	DPH 6011: Epidemiological Research Methods Applied	Designing/working a Research project under the supervision of a faculty-researcher
5. Communicate public health science to diverse stakeholders, including individuals at all levels of health literacy, for purposes of influencing behavior and policies	DPH 6300: Public Health Leadership & Advocacy	Test
6. Integrate knowledge, approaches, methods, values and potential contributions from multiple professions and systems in addressing public health problems	DPH 7002: Advance Biostatistics	Designing of a group project for data analysis and report
7. Create a strategic Plans	DPH 6350: Planning & Evaluation of Health Programs	Group Project
8. Facilitate shared decision making through negotiation and consensus-building methods	DPH 7047: Epidemiological Data Analysis	Data analysis group project and report
9. Create organizational change strategies	DPH 6340: Health Services Administration & Management	Summative evaluations, comprehensive exercise and final presentation
10. Propose strategies to promote inclusion and equity within public health programs, policies and systems	DPH 6011: Epidemiological Research Methods Applied	Designing a research project in public Health under the supervision of a faculty-researcher
11. Assess one's own strengths and weaknesses in leadership capacities including cultural proficiency	DPH 6300: Public Health Leadership & Advocate	Students presentation and final exam

12. Propose human, fiscal and other resources to achieve a strategic goal	DPH 6340: Health Services Administration & Management	Summative evaluations, comprehensive exercise and final presentation
13. Cultivate new resources and revenue streams to achieve a strategic goal	DPH 6340: Health Services Administration & Management	Summative evaluations, comprehensive exercise and final student's presentation
<b>Policy &amp; Programs</b>		
14. Design a system-level intervention to address a public health issue	DPH 6010: Epidemiological Research Methods	Paper peer review
15. Integrate knowledge of cultural values and practices in the design of public health policies and programs	DPH 5502: Health Policy	Group project
16. Integrate scientific information, legal and regulatory approaches, ethical frameworks and varied stakeholder interests in policy development and analysis	DPH 5503: Bioethics in Public Health	Summative test 1 and 2, deductive analysis bioethics methods exercise, comprehensive bioethics analysis of a public health situation final presentation
17. Propose interprofessional^ team approaches to improving public health	DPH 6253: Survey Questionnaire Design in Public Health – Epidemiology Test Construction	Consult different professionals of different professions to be expert judges to validate the questionnaire
<b>Education &amp; Workforce Development</b>		
18. Assess an audience's knowledge and learning needs	DPH 6320: Teaching Epidemiology	Public Health intervention designing
19. Deliver training or educational experiences that promote learning in academic, organizational or community settings	DPH 6253: Survey Questionnaire Design in Public Health – Epidemiology Test Construction	Reflections about all class presentations; Oral presentations from all students
20. Use best practice modalities in pedagogical practices	DPH 7002: Advance Biostatistics	Oral & written presentation of group project

**D3-3 - Include the most recent syllabus from each course listed in template D3-1.**

All syllabi from courses listed and offered during academic year 2017-2018 above will be provided in the electronic file. However, modified syllabuses for the first trimester of academic year 2018-2019 will be provided for your revision during the site visit. Your feedback will allow us to improve all Dr.PH curriculum syllabuses.

**D3-4 - If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.**

As we described before for the MPH curriculum, the exercise of assessing each competency by using the D3-2 template (matrix) had been medullar for identifying our strengths and weaknesses in the former Dr.PH curriculum in response to new 2016 CEPH foundational competencies, and to re-design it to produce a robust, competence-based curriculum, just what any professional degree student would need to succeed in the public health field.

**Strengths**

The most important strength of re-designing the Dr.PH with competencies to be aligned with a professional degree is related to the specific skills that our students are developing. These skills will give them the opportunity to engage into dissertations modalities that are more practical and community-oriented. They will be capable of designing educational programs or interventions, and design health policies. We also expect them to deliver results sooner, resulting in an increased graduation rate.

**Weaknesses**

There is a limitation related to the recruitment of more experienced and qualified faculty to deliver the new courses.

**Plans**

Although the recruitment of more experienced and qualified faculty to deliver new courses is certainly a challenge, the PHP is providing opportunities to engage faculty with the desired expertise by offering different teaching modalities such as the flip classroom with the use of recorded videos, go-to-meeting or Skype lectures and other alternative non-classroom activities.

#### **D4. PHSU PHP MPH & Dr.PH Concentration Competencies**

**D4-1- Provide a matrix, in the format of Template D4-1 that lists at least five competencies in addition to those defined in Criterion D2 or D3 for each MPH or Dr.PH concentration or generalist degree, including combined degree options, and indicate at least one assessment activity for each of the listed competencies.**

The Template D4-1 (matrix) below shows the assessment of MPH general track concentration old competencies through the previous curriculum and the corresponding activity or assignment that allowed assessment. Although only one specialty course had been included in the matrix, competencies are also covered in multiple courses throughout the student curriculum.

<b>Template D4-1: Assessment of Competencies for MPH in General Track Concentration OLD (2007-2017)</b>		
<b>Competency</b>	<b>Course number(s) or other educational requirements</b>	<b>Specific assignment(s) that allow assessment</b>
1. Identify the main components in the policy process and actions to implement policies that improve population health and eliminate health disparities.	MPH 5502: Health Policy	Class Lecture
2. Develop community and organizational health initiatives through implementation of program Planning, evaluation and management principles.	MPH 7701: Program Planning & Evaluation	Oral presentation, stakeholder analysis, discussion forum
3. Integrate appropriate partners, stakeholders and constituencies by using collaborative strategies in the design and implementation of health policies, interventions and programs	MPH 7701: Program Planning & Evaluation	Oral presentation, stakeholder analysis, discussion forum
4. Describe the importance of social, behavioral, biological, environmental and community determinants in the population health outcomes from the onset to the solutions of public health situations.	MPH 5401: Introduction to Health Care Administration	Quiz
5. Identify resources, methodologies and application of community-based participatory research.	MPH 5601: Scientific Writing	Develop presentations and review paper based on specific student interests. For the class work students need to search for current scientific literature and need to be able to process the information and present it to the rest of the class.
6. Communicate as a leader to share communities' needs and advance public health initiatives.	MPH 5401: Introduction to Health Care Administration	Discussion/reaction forum, oral presentation, quiz

7. Distinguish ethical principles and considerations that apply in public health service, policy and research at individual and population level.	MPH 5502: Health Policy	Class Lecture
8. Use program Planning and evaluation data to develop or improve public health programs and initiatives.	MPH 6601: Health promotion & Disease Prevention	Students oral presentation
9. Apply the system approach to public health problems taking in consideration socioeconomic and demographic context, history and culture.	MPH 5601: Scientific Writing	Develop presentations and review paper based on specific student interests. For class work students need to search for current scientific literature and need to be able to process the information and present it to the rest of the class.



The Template D4-1.2 (matrix) below shows the MPH general track concentration new competencies for re-designed (2017) curriculum and the correspondent activity or assignment that allowed assessment. Although only one specialty course had been included in the matrix, competencies are also covered in multiple courses throughout the student curriculum. Matrixes with additional courses, specialty competencies and assessment activities will be provided for your revision during the site visit.

<b>Template D4-1.2: Assessment of Competencies for MPH in General Track Concentration NEW (2017-present)</b>		
<b>Competency</b>	<b>Course number(s) or other educational requirements</b>	<b>Specific assignment(s) that allow assessment</b>
1. Apply the principles of program Planning, development, budgeting, management and evaluation in organizational and community initiatives.	MPH 7701: Program Planning & Evaluation	Discussion/reaction forum, oral presentations (community-dissemination), quiz
2. Identify basic theories, concepts and models from a range of social and behavioral disciplines that are used in public health research and practice	MPH 7501: Behavioral Aspects of Health Disorders	Group discussion presentations of assigned topics. A rubric will be provided for assessment.
3. Describe the role of social and community factors in both the onset and solution of public health problems	MPH 7240: Self-Study Topic II: Community Workshop	Students presentations and class discussions, quiz
4. Describe how social, behavioral, environmental, and biological factors contribute to specific individual and community health outcomes.	MPH XXXX: Emergent Diseases	Develop a community program for the prevention and control of emergent diseases
5. Identify resources, methodologies and application of research in public health.	MPH 7030: Research Methodology	Test 1 &2, Final Project
6. Apply ethical principles to public health program Planning, implementation and evaluation.	MPH 6601: Health Promotion & Disease Prevention	Educative interventions in community
7. Differentiate between linguistic competence, cultural competency, and health literacy in public health practice	MPH 7240: Self-Study Topic II: Community Workshop	Homework assignment, final presentation (discussion panel)

<p>8. Apply evidence-based principles and the scientific knowledge base to critical evaluation and decision-making in public health.</p>	<p>MPH 5300: Scientific Basis of Health Interventions</p>	<p>Each student must present a current public health news article every week and the group discuss what they believe and what they do not believe and why. As a group we discuss every article from different angles. Students also prepare two presentations about a public health topic that they are interested in and introduce the topic, explain the mechanism, give statistical data about the health condition, and present treatments.</p>
<p>9. Apply the core functions of assessment, policy development, and assurance in the analysis of public health problems and their solutions</p>	<p>MPH 7701: Program Planning &amp; Evaluation</p>	<p>Discussion/reaction forum, quiz</p>

The Template D4-1.3 (matrix) below shows the assessment of MPH epidemiology track concentration old competencies through the previous curriculum and the correspondent activity or assignment that allowed assessment. Although only one specialty course had been included in the matrix, competencies are also covered in multiple courses throughout the student curriculum.

<b>Template D4-1.3: Assessment of Competencies for MPH in Epidemiology Track Concentration OLD (2007-2017)</b>		
<b>Competency</b>	<b>Course number(s) or other educational requirements</b>	<b>Specific assignment(s) that allow assessment</b>
1. Use different types of indicators to implement strategies to address public health problems.	MPH 7073: Epidemiology of Chronic Diseases	Assignments, exams, presentations, monograph
2. Design, conduct and evaluate interventions and health programs that are consistent with existing health needs.	MPH 7073: Epidemiology of Chronic Diseases	Project groups to design an intervention applied to chronic health diseases
3. Adequately describe the health needs of a population by the appropriate interpretation of indicators of risk, morbidity, disability and mortality.	MPH 7013: Advance Epidemiology	Special project working on the methodology of a study design.
4. Design, implement, interpret and evaluate systems of epidemiologic surveillance and use the results to support decisions about public health.	MPH 7753: Epidemiology of Infectious Diseases	Evaluate epidemiological surveillance systems
5. Appreciate the importance of the natural history of diseases for the implementation of prevention interventions and disease control.	MPH 7073: Epidemiology of Chronic Diseases	Exam, final project presentation of monograph
6. Manage and interpret the role of risk factors in the causation of health problems in the population.	MPH 5212: Statistical Methods in Epidemiology	Performance of bivariate and statistical analysis of epidemiology studies data sets
7. Conduct epidemiologic studies during disease outbreaks that will allow addressing the disease in its epidemic form.	MPH 7753: Epidemiology of Infectious Diseases	CDC outbreak exercise
8. Develop an ethical commitment as a health care professional.	MPH 7333: Research Methods in Epidemiology	Test 1
9. Develop critical thinking capacity.	MPH 5601: Scientific Writing	Develop presentations and review paper based on specific students interests; For class work, students need to search for current

		scientific literature and need to be able to process the information and present it to the rest of the class.
10. Develop capacity for team-work.	MPH 7333: Research Methods in Epidemiology	Final Project
11. Appropriately relate to relevant organizations and to the development of human resources in Public Health.	MPH 5212: Statistical Methods in Epidemiology	Voluntary work in a research project to support statistical analysis; journal club assignments to evaluate peer review journal papers focused on public health issues.

The Template D4-1.4 (matrix) below shows the MPH epidemiology track concentration new competencies for re-designed (2017) curriculum and the corresponding activity or assignment that allowed assessment. Although only one specialty course had been included in the matrix, competencies are also covered in multiple courses throughout the student curriculum.

<b>Template D4-1.4: Assessment of Competencies for MPH in Epidemiology Track Concentration NEW (2017-present)</b>		
<b>Competency</b>	<b>Course number(s) or other educational requirements</b>	<b>Specific assignment(s) that allow assessment</b>
1. Identify and design the methodology of basic epidemiologic study designs (e.g., cross-sectional, case-control, cohort, and randomized controlled trial) to address hypotheses under different circumstances.	MPH 7013: Advance Epidemiology	Special project: working groups on the methodology for a study design.
2. Design and conduct a population-based study using secondary data from reliable data source, such as: public health surveillance systems, regarding a priority health-related phenomenon.	MPH 7023: Applied Epidemiology & Surveillance	Designing and evaluation of different surveillance systems (team of two), written and oral reports
3. Utilize the application of statistical and epidemiological methods that are critical to epidemiologic inquiry including a qualitative component; manage and manipulate data sets in statistical and qualitative analysis software packages	MPH 5212: Statistical Methods in Epidemiology	Using of SPSS, SAS among other statistical software to: development of data sets and to performance bivariate and statistical analysis of epidemiology studies data sets.
4. Adequately describe the health needs of a population by the appropriate interpretation of indicators of risk, morbidity, disability, mortality and burden of diseases.	MPH 7753: Epidemiology of Infectious Diseases	CDC outbreak exercise (e.g., incidence, relative risk, descriptive statistics, etc.).
5. Apply epidemiologic thinking and a public health approach to a model (e.g., outbreak) to explain exposures and potential associations that influence health and disease at the community and population levels.	MPH 7073: Epidemiology of Chronic Diseases	Final student's presentation, Exam
6. Recognize potential ethical and legal issues and implement the concepts of ethical conduct and legal principles of research in epidemiologic studies.	MPH 7333: Research Methods in Epidemiology	Test 1
7. Use laboratory technologies to develop disease severity indicators in epidemiological studies.	MPH 7753: Epidemiology of Infectious Diseases	CDC outbreak exercise

The Template D4-1.5 (matrix) below shows the assessment of MPH environmental health track concentration old competencies through the previous curriculum and the corresponding activity or assignment that allowed assessment. Although only one specialty course had been included in the matrix, competencies are also covered in multiple courses throughout the student curriculum.

<b>Template D4-1.5: Assessment of Competencies for MPH in Environmental Health Track Concentration OLD (2007-2017)</b>		
<b>Competency</b>	<b>Course number(s) or other educational requirements</b>	<b>Specific assignment(s) that allow assessment</b>
1. Identify sources, means of exposure, and control methods for the principal chemical, physical and biological agents that affect human health.	MPH 7454: Water Quality Measurements	Exam I (clean water act; Puerto Rico Water Quality background and challenge; lakes, rivers wetlands and groundwater; PR Water Quality Standards 2016; safe Drinking Water Act  Assignment 1  Quiz 1, Quiz 2  Student's oral presentation (critical analysis) about assigned environmental papers.  Group project students' oral presentations  Movie critical analysis  Exam II
2. Develop designs and interpret risk evaluations for human health.	MPH 7434: Risk Assessment	Class discussion, Test 2, Cases evaluation and presentation related to the analysis of a superfund site in Puerto Rico
3. Develop effective risk communication techniques.	MPH 7064: Food Safety	Poster presentation Video report No 1 Video report No 2 Video report No 3 Exam 2
4. Evaluate the impact of environmental intervention on human health.	MPH 7454: Water Quality Measurements	Exam I, group-case study, movie
5. Develop preventive measures and environmental control for public health.	MPH 7074: Environmental and occupational diseases	Exam 1
6. Write reports related to field investigations.	MPH 7444: Air & Hazardous Waste Assessment	Project related to the identification of sources of contamination and their impacts
7. Use appropriate statistical tools for each individual situation.	MPH 7414: Environmental Epidemiology	Class lectures and assignments

8. Establish pertinent recommendations after analyzing data of a research project.	MPH 7414: Environmental Epidemiology	Final project
9. Recognize environmental health problems as an indispensable component of public health.	MPH 7024: Environmental Toxicology	Movie critical analysis
10. Apply ethical and legal values in any public health investigation.	MPH 7484: Environmental Laboratory	Write laboratory reports in journals formats

The Template D4-1.6 (matrix) below shows the MPH environmental health track concentration new competencies for re-designed (2017) curriculum and the corresponding activity or assignment that allowed assessment. Multiple courses and assessment activities by each competency had been included in the matrix.

<b>Template D4-1.6: Assessment of Competencies for MPH in Environmental Health Track Concentration NEW (2017-present)</b>		
<b>Competency</b>	<b>Course number(s) or other educational requirements</b>	<b>Specific assignment(s) that allow assessment</b>
1. Identify sources, means of exposure, and control methods for the principal chemical, physical and biological agents that affect human health.	MPH 7454: Water Quality Measurements	Exam 1 (clean water act; Puerto Rico Water Quality background and challenge; lakes, rivers wetlands and groundwater; PR Water Quality Standards 2016; safe Drinking Water Act  Assignment 1  Quiz 1, Quiz 2  Student's oral presentation (critical analysis) about assigned environmental papers.  Group project students' oral presentations  Movie critical analysis  Exam II
2. Develop designs and interpret risk evaluations for human health.	MPH 7030: Research Methodology	
3. Develop effective risk communication techniques.	MPH 7064: Food Safety	Poster presentation  Video report No 1  Video report No 2  Video report No 3  Exam 2
4. Evaluate the impact of environmental intervention on human health.	MPH 7024: Environmental Toxicology	oral presentation
	MPH 7074: Environmental and occupational diseases	
5. Develop preventive measures and environmental control for public health.	MPH 7444: Air & Hazardous Waste Assessment	project related to the identification of sources of contamination and their impacts
6. Draft reports related to field investigations.	MPH 7414: Environmental Epidemiology	lectures and assignments



	MPH 7434: Risk Assessment	Class discussion, test 2, case evaluation and presentations on a superfund site analysis in Puerto Rico
7. Recognize environmental health problems as an indispensable component of public health.	MPH 7484: Environmental Laboratory	Write laboratory reports in journal formats

The Template D4-1.7 (matrix) below shows the assessment of Dr. PH epidemiology concentration old competencies through the previous curriculum and the corresponding activity or assignment that allowed assessment. Although only one specialty course had been included in the matrix, competencies are also covered in multiple courses throughout the student curriculum.

<b>Template D4-1.7: Assessment of Competencies for Dr.PH in Epidemiology Concentration OLD (2012-2017)</b>		
<b>Competency</b>	<b>Course number(s) or other educational requirements</b>	<b>Specific assignment(s) that allow assessment</b>
1. Evaluate and assess risk and protective factors associated with public health problems.	DPH 7015: Biostatistics for Epidemiology	Lecture
2. Select and apply appropriated biostatistics methods and applications to support research and evaluations in the core areas of public health research and practice, including epidemiology, environmental, community and behavioral health, occupational health, public health management, policy and outcomes research.	DPH 7047: Epidemiology Data Analysis	Database exercise
3. Develop health surveillance systems to monitor population health, healthy equity, and public health services.	DPH 6010: Research Methods in Epidemiology	Scientific papers review
4. Demonstrate knowledge of the issues of bias, error, confounding, effect modification, sampling, and how they relate to the interpretation of study results.	DPH 7015: Biostatistics for Epidemiology	Group presentations, exam
5. Carry out appropriate sample size and power calculations to ensure that a study is sufficiently powered to achieve the scientific aims or address a specific research hypothesis.	DPH 7002: Advanced Biostatistics	Exercises
6. Educate and update other health professionals on epidemiologic methods and epidemiological information.	DPH 6103: Epidemiology of Diseases of Public Health Importance	Lecture
7. Conduct and analyze surveys of public health events and report the results for decision-making	DPH 6253: Survey Questionnaire Design in Public Health; Epidemiology- testy Construction	Data analysis exercise
8. Translate basic research into epidemiologic applications.	DPH 6010: Research Methods in Epidemiology	Exam, application of STROBE and CONSORT, methodology designing assignment, exam, final project presentation
9. Use computer software for data entry	DPH 7015: Biostatistics for	STATA workshop and exercises

and data base management and for summarizing, analyzing and displaying research results.	Epidemiology	
10. Critically review and interpret the scientific and statistical methods presented in public health and medical literature to identify strengths and weaknesses and identify potential biases in these studies.	DPH 6203: Clinical Trial	Special assignments
11. Apply underlying scientific and statistical principles and methods to design, Plans, and conduct a variety of public health and biomedical studies including cohort, case control, cross-sectional, and clinical trials.	DPH 7015: Biostatistics for Epidemiology	Comprehensive exercises using a data base with STATA
12. Describe the principles of screening and of surveillance systems to design and coordinate systems to track both chronic disease screening and epidemiologic outbreaks.	DPH 6253: Survey Questionnaire Design in Public Health; Epidemiology- testy Construction	Class discussion on screening and surveillance systems principles
13. Use methods of measurement-design data collection forms; determine the validity of the instrument; identify the presence and magnitude of measurement error; adjust for measurement error.	DPH 6253: Survey Questionnaire Design in Public Health; Epidemiology- testy Construction	Oral presentations
14. Understand the global, cultural, and social context of health problems and how they influence the conduct, interpretation, and dissemination of research studies.	DPH 6010: Research Methods in Epidemiology	Review of scientific papers, study designing methodology assignment

The Template D4-1.8 (matrix) below shows the Dr.PH epidemiology concentration new competencies for re-designed (2017) curriculum and the corresponding activity or assignment that allowed assessment. Although only one specialty course had been included in the matrix, competencies are also covered in multiple courses throughout the student curriculum.

<b>Template D4-1.8: Assessment of Competencies for Dr.PH in Epidemiology Concentration NEW (2017-present)</b>		
<b>Competency</b>	<b>Course number(s) or other educational requirements</b>	<b>Specific assignment(s) that allow assessment</b>
1. Evaluate and assess risk and protective factors associated with public health problems	DPH 7015: Biostatistics for Epidemiology	Assignments & exam
2. Demonstrate knowledge of the issues of bias, error, confounding, effect modification, sampling, and how they relate to the interpretation of study results.	DPH 7047: Epidemiology Data Analysis	Database exercise
3. Carry out appropriate sample size and power calculations to ensure that a study is sufficiently powered to achieve the scientific aims or address a specific research hypothesis.	DPH 7163: Sampling	Assignments, test, final project
4. Translate basic research into epidemiologic applications	DPH 6010: Research Methods in Epidemiology	Exam, application of STROBE and CONSORT, methodology designing assignment, exam, final project presentation
5. Use computer software for data entry and data base management and for summarizing, analyzing and displaying research results.	DPH 7023: Applied Epidemiology Surveillance	Assignments and final project
6. Critically review and interpret the scientific, statistical methods and epidemiological measures presented in public health and medical literature to identify strengths and weaknesses and identify potential biases in these studies.	DPH 7002: Advance Biostatistics	Exercises
7. Apply underlying scientific, statistical and epidemiological measures to design, plan, and conduct a variety of public health and biomedical studies including cohort, case control, cross-sectional, and clinical trials.	DPH 6011: Applied Epidemiological Research Methods	Develop a pilot research project
8. Use methods of measurement-design data collection forms; determine the validity of the instrument; identify the presence and magnitude of measurement error; adjunct for measurement error	DPH 6253: Survey Questionnaire Design in Public Health; Epidemiology- test Construction	Students oral presentations

**4-2 - For degrees that allow students to tailor competencies at an individual level in consultation with an advisor, the school or program must present evidence, including policies and sample documents, that demonstrate that each student and advisor create a matrix in the format of template D4-1 for the plans of study. Include a description of policies in the self-study document and at least five sample matrices in the electronic resource file.**

This criterion does not apply to our PHSU-PHP because no tailored competencies degree at an individual level in consultation with an advisor is allowed.

**D4-3 - Include the most recent syllabus for each course listed in Template D4-1, or written guidelines for any required elements listed in Template D4-1 that do not have a syllabus.**

All syllabi from courses listed in template D4-1 (a-d) above will be provided in the electronic resource file. However, revised syllabi for the first trimester of academic year 2018-2019 will be provided for your revision during the site visit. Your feedback to these syllabuses will be valuable to continuing our systematic syllabus revision for the entire academic year 2018-2019.

**D4-4 - If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.**

**Strengths**

We have requested from each faculty member their activities or mode of assessment of specialties competencies to construct the D4-1 (a-d) templates (matrixes). This has been medullar for identifying the strengths and weaknesses in the former MPH’s specialties (general, epidemiology, environmental health) and DrPH – epidemiology concentration competencies in response to the new tendencies and skills needed as health practitioners. These new tendencies, new curricula, job opportunities, actual public health issues, among other important criteria, are always discussed with our PHP External Advisee Committee.

After the PHSU-PHP preliminary self-study was revised by the CEPH committee, some recommendations were provided in relation to the MPH general and epidemiology specialty competencies to avoid duplicity with foundational competencies. On July 2018 these two tracks competencies were revised to comply with CEPH comments. These modified competencies are provided bellow and will be included in 2018-2019 academic year syllabi for your revision during the site visit.

<b>PUBLIC HEALTH PROGRAM</b>			
<b>NEW SPECIALTIES COMPETENCIES</b>			
<b>MPH &amp; DRPH - 2018-2019</b>			
<b>MPH Epi Track Competencies</b>	<b>MPH Environmental Health Track Competencies</b>	<b>MPH General Track Competencies</b>	<b>DrPH – Epidemiology Competencies</b>
Identify and design the methodology of basic epidemiologic study designs (e.g., cross-sectional, case-control, cohort, and randomized controlled trial) to address hypotheses under different circumstances	Identify sources, means of exposure, and control methods for the principal chemical, physical and biological agents that affect human health.	Apply the principles of program Planning, development, and evaluation in organizational and community initiatives.	Evaluate and assess risk and protective factors associated with public health problems.
Design and conduct a population-based study using secondary data from a reliable data source, such as: public health surveillance systems, regarding a priority health-related phenomenon.	Develop designs and interpret risk evaluations for human health.	Identify basic theories, concepts and models from a range of social and behavioral disciplines that are used in public health research and practice.	Demonstrate knowledge of the issues of bias, error, confounding, effect modification, sampling, and how they relate to the interpretation of study results.
Utilize the application of statistical and epidemiological methods that are critical to epidemiologic inquiry including a qualitative component; manage and manipulate data sets in statistical and qualitative analysis software packages.	Develop effective risk communication techniques.	Describe the role of social and community factors in both the onset and solution of public health problems	Carry out appropriate sample size and power calculations to ensure that a study is sufficiently powered to achieve the scientific aims or address a specific research hypothesis.

Adequately describe the health needs of a population by the appropriate interpretation of indicators of risk, morbidity, disability, mortality and burden of diseases.	Evaluate the impact of environmental intervention on human health.	Describe how social, behavioral, environmental, and biological factors contribute to specific individual and community health outcomes.	Translate basic research into epidemiologic applications.
Apply epidemiologic thinking and a public health approach to a model (e.g., outbreak) to explain exposures and potential associations that influence health and disease at the community and population levels.	Develop preventive measures and environmental control for public health.	Identify resources, methodologies and application of research in public health.	Use computer software for data entry and data base management and for summarizing, analyzing and displaying research results.
Recognize potential ethical and legal issues and implement the concepts of ethical conduct and legal principles of research in epidemiologic and population-based studies.	Write reports related to field investigations.		Critically review and interpret the scientific, statistical methods and epidemiological measures presented in public health and medical literature to identify strengths and weaknesses and identify potential biases in these studies.
Use laboratory technologies to develop disease severity indicators in epidemiological studies.	Use appropriate statistical tools for each individual situation.	Apply ethical principles to public health program planning, implementation and evaluation.	Apply underlying scientific, statistical and epidemiological measures to design, plans, and conduct a variety of public health and biomedical studies including cohort, case control, cross-sectional, and clinical trials.
	Establish pertinent recommendations after analyzing data of a research project.	Differentiate between linguistic competence, and health literacy in public health practice.	Use methods of measurement-design data collection forms; determine the validity of the instrument; identify the presence and magnitude of measurement error; adjunct for measurement error.
	Recognize environmental health problems as an indispensable component of public health.		



	Apply ethical and legal values in any public health investigation.	Apply evidence-based principles and the scientific knowledge base to critical evaluation and decision-making in public health.	
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**Weakness**

MPH and DrPH-epidemiology curricula were modified due to 2016 CEPH criteria, global and local public health tendencies and new challenges. These changes and the inclusion on some new courses always increase the challenge of recruiting experienced and qualified faculty. The location of PHSU in the southern part of Puerto Rico has been and will be a concern to draw the attention and retention of desirable faculty.

**Plans**

We are moving in the right direction by using flip modality classes that include videos (recorded lectures), “go to meeting” lectures and other teaching modalities. Also, due to the diverse and strong experienced trajectory of the PHP External Advisee Committee, we are confident that we will continue to attract and retain qualified faculty to comply with all our academic degrees offerings.

## **D5. MPH Applied Practice Experience (PHP)**

**D5 -1 - Present evidence that the program identifies competencies attained in APE for each MPH student in the format of Template D5-1. Include a description of policies in the self-study document and at least five sample matrices in the electronic resource file. (self-study document).**

### **a. Present evidence that the school or program identifies competencies attained in APE for each MPH student in the format of Template D5-1.**

The APE academic activity is a Planned, guided, supervised and evaluated experience designed to develop skills in basic Public Health concepts among the students and to demonstrate the application of these concepts through activities that are relevant to students' areas of specialization in Public Health (Accreditation Criteria. Public Health Programs. Council for Education of Public Health CEPH, 2016).

Regardless of the amount or level of prior experience, all students engage in one or more APE in which they are responsible for completion of at least one project that is meaningful for an organization and to advanced Public Health practice.

In the electronic student portal on the Moodle Platform, a course matrix has been elaborated for students to post their deliverables and provide evidence of their attained competencies. This mechanism or structure helps MPH students' Faculty Advisor and APE Coordinator not only to watch each student's performance but to identify the competencies attained.

In addition to the traditional internship, this year we are implementing the component of course-based activities documented by written curricular activities competency-based evaluations. The 2018 cohort developed this course component in combination with the traditional summer internship. We are currently identifying and incorporate more courses with available courses-related activities following CEPH 2016 indicators:

- course-based activities (e.g., performing a needed task for a public health or health care organization under the supervision of a faculty member as an individual or group of students)
- activities linked to service learning, as defined by the program, school or university
- co-curricular activities (e.g., service and volunteer opportunities, such as those organized by a student association)

Template D5-1 documents a series of course-based activities and internship-based products related to MPH students' competency achievements.

**Template D5-1 APE-based products that document MPH competency achievements**

Practice-based products that demonstrate MPH competency achievement	
Specific assignment(s) that demonstrate application or practice	Competency as defined in Criteria D2 and D4 (F) for foundational and (C) for concentration
COURSE-BASED ACTIVITIES	
Performing a needed task for a public health or health care organization under the supervision of a faculty member as an individual or group of students	The competency will be related to the defined course-based activity
INTERNSHIP	
Internship Proposal Activity (Report submitted to and evaluated by Student's Faculty Advisor and Internship Preceptor)	<p><b>Planning &amp; Management to Promote Health (F)</b>            D2-7. Assess population needs, assets and capacities that affect communities' health            D2-8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs            D2-9. Design a population-based policy, program, project or intervention            D2-10. Explain basic principles and tools of budget and resource management            D2-11. Select methods to evaluate public health programs</p> <p><b>General Track (C)</b>            C-38. Apply the principles of program planning, development, budgeting, management and evaluation in organizational and community initiatives.            C-40. Describe the role of social and community factors in both the onset and solution of public health problems            C-42. Identify resources, methodologies and application of research in public health.</p>
Activities Performance Report (Log submitted to and evaluated by Student's Internship Preceptor)	<p><b>Communication (F)</b>            D2-19. Communicate audience-appropriate public health content, both in writing and through oral presentation</p>
Student Midterm Internship Evaluation (Report submitted by the Student to the Internship Coordinator)	<p><b>Communication (F)</b>            D2-19. Communicate audience-appropriate public health content, both in writing and through oral presentation</p>
Preceptor Midterm Internship Evaluation (Report submitted the Preceptor to the Internship Coordinator)	<p><b>Communication (F)</b>            D2-19. Communicate audience-appropriate public health content, both in writing and through oral presentation</p>
Preceptor to Student Final Evaluation (Report submitted by the Preceptor to the Student's Faculty Advisor and to the Internship Coordinator)	<p><b>Communication (F)</b>            D2-19. Communicate audience-appropriate public health content, both in writing and through oral presentation</p>
Student to Preceptor Final Evaluation (Report submitted by the Student to the Student's Faculty Advisor and to the Internship Coordinator)	<p><b>Communication (F)</b>            D2-19. Communicate audience-appropriate public health content, both in writing and through oral presentation</p>
Poster presentation content checklist (Report submitted by the Student to the Student's Faculty Advisor and to	<p><b>Communication (F)</b>            D2-18. Select communication strategies for different</p>

the Internship Coordinator)	<p>audiences and sectors</p> <p>D2-19. Communicate audience-appropriate public health content, both in writing and through oral presentation.</p> <p>D2-40. Describe the role of social and community factors in both the onset and solution of public health problems</p> <p>D2-41. Describe how social, behavioral, environmental, and biological factors contribute to specific individual and community health outcomes.</p>
Activities, Competencies and Foundation Report (Report submitted by the Student to the Student's Faculty Advisor and to the Internship Coordinator)	<p><b>Communication</b></p> <p>D2-19. Communicate audience-appropriate public health content, both in writing and through oral presentation</p> <p><b>Note:</b> Based on the reported activities, different competencies accordingly to Criterion 2 could be attained.</p>
Final Internship Reflection (Report submitted by the Student to the Student's Faculty Advisor and to the Internship Coordinator)	<p><b>Communication</b></p> <p>D2-18. Select communication strategies for different audiences and sectors</p> <p>D2-19. Communicate audience-appropriate public health content, both in writing and through oral presentation.</p> <p>D2-40. Describe the role of social and community factors in both the onset and solution of public health problems</p> <p>D2-41. Describe how social, behavioral, environmental, and biological factors contribute to specific individual and community health outcomes.</p>
Internship Poster Presentation (presented by the student to an audience of peers at the Public Health Scientific Meeting and evaluated by Public Health Program Director and two Faculty Members)	<p><b>Communication</b></p> <p>D2-18. Select communication strategies for different audiences and sectors</p> <p>D2-19. Communicate audience-appropriate public health content, both in writing and through oral presentation.</p> <p>D2-40. Describe the role of social and community factors in both the onset and solution of public health problems</p> <p>D2-41. Describe how social, behavioral, environmental, and biological factors contribute to specific individual and community health outcomes.</p>

Five APE matrices are available at the Electronic Resource File (ERF). The students included are:

- ERF D5.1.1 Carla Camacho
- ERF D5.1.2 Delmary Amaro
- ERF D5.1.3 Fabián Ramírez
- ERF D5.1.4 Francis Quiñones
- ERF D5.1.5 Gerardo Ríos

From every student we documented his/her own matrix and the deliverables that support the matrix.

The internship activity of the previous students was done in different sites (community or health care organizations). The program has a partnership with the internship sites to help students to attain MPH related competencies as documented at ERF.

## **b. Include a description of policies in the self-study document**

The PHSU Public Health Program developed the APE MPH and DrPH Handbook. All policies and course correspondent materials are provided. The I Manual is included in the electronic resources file.

### **B.1 APE DEFINITION**

Public Health Program APE are a set of activities that allow each student to demonstrate attainment of at least five competencies, of which at least three must be foundational competencies (as defined in Criterion D2 of CEPH 2016 Accreditation Criteria. The competencies are not needed to be identical from student to student, but the applied experiences must follow the same structure to ensure that all students address at least five competencies as required. The applied experiences may also address additional foundational or concentration-specific competencies, if appropriate.

### **B.2 MPH PROGRAM APE STRUCTURE**

Following CEPH 2016 recommendations, the MPH APE course has a blended for-credit activities structure. The MPH APE opportunities are structured within the following components:

- Course-based activities performing a needed task for a public health or health care organization under the supervision of a faculty member as an individual or group of students. These activities are then assessed for approval of their correspondent competencies. At the end of the trimester, the student should provide a reflection/report for each activity to be accredited.
- Summer internship and reflection.
- Poster presentation

The course is a 2-credit activity distributed in a 1-year time period for course-based activities, in addition to a summer internship.

#### **B.2.1 IDENTIFIED APPROVED FIRST YEAR MPH COURSE WRITTEN ACTIVITIES**

The PHP-APE Committee identifies written activities required by some MPH faculty members for their first-year courses that fulfill the following characteristics (APE written activity rubric):

- Activities are spread through first year curricular period plus summer academic period internship.
- Activities are identified from the beginning of the correspondent courses as required.
- Activities must be written and evaluated.
- Activities are evaluated in a competency-oriented basis.
- While students may complete experiences as individuals or as groups in a structured experience, each student must present documentation demonstrating the attained individual competencies.
- Activities requiring the delivery of a written document should comply with the following characteristics:
  - Course-based activities (e.g., performing a needed task for a Public Health or health care organization under the supervision of a faculty member as an individual or group of students).
  - Activities linked to service learning, as defined by the program, school or university
  - Co-curricular activities (e.g., service and volunteer opportunities, such as those organized by a student association).
  - Each performed activity during the first year must allow students to demonstrate attainment of foundational competencies as defined in Criterion D2 of CEPH Accreditation Criteria.

## B.2.2 SUMMER INTERNSHIP

The APE summer internship is an academic field work designed to develop skills in basic Public Health concepts and demonstrate the application of these concepts through an APE that is relevant to students' areas of specialization in Public Health related-services institutions, clinical epidemiology related centers or in community settings.

This internship is a Planned, guided, supervised and evaluated experience that intends to answer specific needs, projects or initiatives from the site where the internship is performed. The intern brings knowledge, perspectives and skills that will benefit the site in terms of specific needs, projects and initiatives.

The APE summer internship is a 100-hr. activity. The internship must be structured to ensure that all students complete foundational experiences or concentration-specific competencies, whenever appropriate.

During the internship, students keep a complete log of the 100 hour worked activities where they report the performed activities at the site. This log is signed by the student and the preceptor and posted in the course portal in the Moodle platform.

Another deliverable that the students produce is a final report in which he or she documents the attained competencies. Three of these must be foundational competencies: the performed activities at the site, the abilities/skills/knowledge obtained during the internship, and how the internship influenced them in a personal and professional manner.

Students must elaborate a final poster to summarize the internship activity. This poster is presented at the Public Health Program Scientific Meeting. Starting in 2015, the PHSU Public Health Program has organized a yearly scientific meeting to present these posters and other oral presentations. In this activity, students interacted with different special and well known speakers related to Public Health, like Dr. Raul Castellanos, Director of the Office of Pan American Health Organization (PAHO) / World Health Organization (WHO), Puerto Rico Chapter; Attorney Ever Padilla, Executive Director of the Civil Rights Commission of Puerto Rico; Attorney Rafael Hernández Colón, former governor of Puerto Rico Commonwealth under whom legislation the Puerto Rico Environmental Protection Agency (EPA) Law was signed, the Puerto Rico Cardiovascular Center was created and the Federal initiatives for AIDS fight were implemented.

At the end of the internship, the preceptor will perform a final evaluation, confirming that the student complied with the following criteria: adherence to agency regulations, dressed appropriately for their role and responsibilities during the experience, maintained professionalism, confidentiality, and ethical standards, participated in professional and in-service activities as suggested by the preceptor, was able to contribute effectively in a team environment, delivered the expected work performance, discussed the poster content with the agency preceptor and finally, contributed to the agency goals and programmatic Plans'. This document is signed by both the preceptor and the student and uploaded to the course portal at the Moodle platform.

**D5- 2 - Provide documentation, including syllabi and handbooks, of the official requirements through which students complete the APE. (electronic resource file)**

The following documents are available at the **Electronic Resource File (ERF)**:

- ERF D5.2.1 2017-2018 MPH 7850 APE SYLLABUS (2 credits)
- ERF D5.2.2 APE 2017 MPH DPH Internship. What to Do (Tutorial)
- ERF D5.2.3 APE 2017 MPH DPH Internship. Where to Do It (Tutorial)
- ERF D5.2.4 APE 2017 MPH DPH Internship. With Whom to Do It (Tutorial)
- ERF D5.2.5 APE Handbook General & Student & Faculty 2017
- ERF D5.2.6 APE Handbook Preceptor & Site 2017
- ERF D5.2.7 APE Site Booklet
- ERF D5.2.8 1st PHP PHSU SCIENTIFIC MEETING PROGRAM
- ERF D5.2.9 2nd PHP PHSU SCIENTIFIC MEETING PROGRAM
- ERF D5.2.10 3rd PHP PHSU SCIENTIFIC MEETING PROGRAM
- ERF D5.2.11 Forms for performance and course monitoring to be posted at APE course portal on the Moodle platform

**D5 -3 - Provide samples of practice-related materials for individual students from each concentration or generalist degree. The samples must also include materials from students completing combined degree programs, if applicable. The school or program must provide samples of complete sets of materials (ie, the documents that demonstrate at least five competencies) from at least five students in the last three years for each concentration or generalist degree. If the school or program has not produced five students for which complete samples are available, note this and provide all available samples. (electronic resource file)**

During the last year the PHSU Public Health Program made the transition from CEPH 2011 to CEPH 2016 Accreditation Criteria. The 2018 students are those who transit the course full under CEPH 2016 criteria. The two previous cohorts, 2017 and 2016 performed the course under CEPH 2011 and the Association of Schools of Public Health (2007) criteria. That is the reason why it is possible that there will be no uniformity among the different sets of materials of the students.

### **Cohort 2018**

These students are directly impacted by CEPH 2016 guidelines. The students of this cohort began the APE course with two components: course-based activities (written curricular activities competency-based evaluated) and the internship. We are presenting evidence from 5 students that have attained at least 5 competencies (as defined in Criterion D2) in their first year of MPH program. The students prepared a reflection/ report from the course-based APE component (written curricular activities competency-based evaluation). This reflection includes the following information: 1) identification of the attained competency during the performed activity; 2) description of the performed activity from which the competency was attained; 3) identification of the skills, knowledge and attitudes that were gained through the activity, and 4) a documentation of how the activity impacted on them, personally and professionally. In the electronic resource file, you can gain access to the required evidence of this cohort.

Sets of practice-related material from five students' of 2018 cohort are available at the ERF. The students included in this component are:

- ERF D5.3.1 Carla Camacho
- ERF D5.3.2 Delmary Amaro
- ERF D5.3.3 Fabián Ramírez
- ERF D5.3.4 Francis Quiñones
- ERF D5.3.5 Gerardo Ríos

### **2017 Cohort**

The students of this cohort represent the very transition between CEPH 2011 and CEPH 2016 guidelines. The curricular design for these students only required the performance of the internship activity. For 2017 and previous cohorts, the competencies and learning objectives of this activity were taken from those proposed by the Association of Schools of Public Health (ASPH Education Committee, master's Degree in Public Health, Core Competency Development Project, Version 2.3, Word Format—Domains and Competencies Only, May 2007). Because of this, we are presenting a variety of deliverables as evidence when compared to the preceding cohort. Despite this fact, the students of this cohort also wrote a report of their internship that included the same elements of the report made by the 2018 Cohort students with their course-based activity competency evaluation. Sets of practice-related material from five students' of 2017 cohort are available at the ERF. The students included in this component are:

- ERF D5.3.6 Frances Plaza
- ERF D5.3.7 Stephanie López
- ERF D5.3.8 Taylin Zambrana
- ERF D5.3.9 Terry Rivera
- ERF D5.3.10 Viviana Rosario



## **2016 Cohort**

The students of this cohort completed their Practicum activity under the criteria of CEPH 2011 and ASPH 2007. The evidence of the attained competencies comes from their internship (same as the 2017 cohort) but, in contrast with the 2017 cohort, they didn't have to write a report of the internship the way that the 2017 cohort did. They documented activities and core competencies/interdisciplinary-cross cutting competencies in the PRACTICAL EXPERIENCE PROPOSAL ACTIVITY FORM, which can be referenced in the ERF for the students indicated below.

Sets of practice-related material from five students of the 2016 cohort are available at the ERF. The students included in this component are:

- ERF D5.3.11 Brenda Del Valle
- ERF D5.3.12 Emmanuel González
- ERF D5.3.13 Gamaliel Monge
- ERF D5.3.14 Joanina Crespo
- ERF D5.3.15 Kamalich Muñiz

**D5 -4 - If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)**

**Strengths**

The course-based activities component has just begun with the 2018 cohort and has had the enthusiastic cooperation of faculty members in providing the required activities.

One of the major strengths of the internship is the participation of faculty members that have contacts with the PR Health Department, the Red Cross, and the EPA, providing sites for the Practicum. For this reason, we can include a wider offer of different internship sites to our students: government (Department of Health, Environmental Protection Office), non-government (Autism Center in Ponce, Puerto Rico Renal Council), community-based (*Iniciativa Comunitaria*), clinical epidemiology (MedCenter, San Lucas Hospital), public-policy oriented (Puerto Rico Civil Rights Commission), and Public Health HIV Research (Centro ARARAT), among others. Students are provided with the APE Site Booklet (found in the ERF) with an offer of more than 20 different internship sites. Most of our students are fully bilingual and capable of performing their internship either in Puerto Rico or in the mainland.

The PHSU Deanship of Curriculum and Faculty Development has provided us with a robust technological platform (Moodle) for the submission of forms and monitoring of the internship.

Since 2015, during the months of May-April, the PHP has hosted the Public Health Program Scientific Meeting. This meeting that provides the students with the arena to present the posters prepared at the end of their internship.

This year we will be hosting our Public Health Program 4<sup>th</sup> Scientific Meeting.

Finally, the CEPH 2016 guidelines, by identifying learning objectives, domains and competencies, and clearly presenting a guide to competencies to be attained by the students in their Applied Practice Experience activity, is definitively an asset to the program.

**Weaknesses**

Sometimes it takes a long time to obtain agreement needed for internship approval. In terms of access to mainland internship sites, cost is an issue. Not all our students have the means to seek internships outside of the local / island territory.

Puerto Rico as an Island and from the political perspective, as a territory, Puerto Rico, sometimes, we have found difficulties to get access to Nationwide internship sites. Not all of our students have family in USA mainland and cost, sometimes would be a problem, limiting in some situations the access to local or state sites of internship.

As part of the transition from CEPH Accreditation Criteria 2011 to the CEPH Accreditation Criteria 2016 model, we are dealing with the changes from the Practicum course to the Applied Practice Experiences (APE) course. In this process we have identified that not all the activities included in the written curricular activities competency-based component of the APE course fulfil the requirement of “performing a needed task for a public health or health care organization under the supervision of a faculty member as an individual or group of students” or the requirement of activities linked to service learning.

We realized that during the internship, doctoral students have collected enough material to produce a new deliverable as a poster and this deliverable was not required to the DrPH students.

We have also realized that in some cases, the DrPH internship has not had the proper focus during the summertime. In consequence the supervision based on the summer Moodle Platform course portal has not been as successful as we have been expecting. From another perspective, having the internship during the summer has created two other difficulties: students must do their site and project search during the third trimester of class; and having the internship during the summer does not ensure the required close supervision from their thesis directors, who may be on vacation.

## Plans

We are working on preparing the agreement far in advance, so they do not interfere with the timing of the activity. We also are working on grouping all MOUs to become due around the same time frame, so it is easier to schedule renewal of documents.

We are screening nationwide internship sites that can provide tuition to our students, so the monetary factor doesn't play a role in access to adequate internships.

From now on, the course-based activities selected for the written curricular activities competency-based component of the APE course, will address a "needed task for a public health or health care organization under the supervision of a faculty member as an individual or group of students or from activities linked to service learning", as defined by the program.

From now on, we have added a new requirement of APE for doctoral students: a poster presentation of data obtained during their internship experience.

From now on, the students' internship site and project search time period will be performed during the summer, and internships will be spread during the first and second trimester of their MPH second academic year.

## **D6. DPH Applied Practice Experiences (SPH and PHP)**

**D6-1 - Present evidence that the school or program identifies competencies attained in applied practice experiences for each DrPH student in the format of Template D6-1. Include a description of policies in the self-study document and at least five sample matrices in the electronic resource file. (self-study document). Present evidence that the school or program identifies competencies attained in applied practice experiences for each DrPH student in the format of Template D6-1.**

The summer internship is an academic field work designed to develop skills in basic Public Health concepts and demonstrate the application of these concepts through an APE that is relevant to students' areas of specialization in Public Health related-services institutions, clinical epidemiology related centers or in community settings.

This internship is a planned, guided, supervised and evaluated experience that intends to answer specific needs, projects or initiatives from the site where the internship is performed. The intern brings knowledge, perspectives and skills that will benefit the site in terms of specific needs, projects and initiatives.

The DrPH APE summer internship is a 100-hr. activity. The internship must be structured to ensure that all students complete foundational experiences or concentration-specific competencies, whenever appropriate.

During the internship, students keep a complete log of the 100 hour worked activities where they report the performed activities at the site. This log is signed by the student and the preceptor and posted in the course portal in the Moodle platform.

Another deliverable that the students produce is a final report in which he or she documents the attained competencies. Three of these must be foundational competencies: the performed activities at the site, the abilities/skills/knowledge obtained during the internship, and how the internship influenced them in a personal and professional manner.

At the end of the internship, the preceptor must present a final evaluation in which the preceptor documents the following items regarding to the student: adhered to agency regulations, dressed appropriately for the role and responsibilities during the experience, maintained a professional attitude, confidentiality, and ethical standards; participated in professional and in-service activities as suggested by the preceptor, was able to adequately participate in a team environment, delivered the expected work performance, discussed the poster content with the agency preceptor and finally, contributed positively to the agency's goals and programmatic plans'. This document is signed by both the preceptor and the student and uploaded to the course portal in the Moodle platform.

### Template D6-1 Internship based products that document DPH competency achievements

Practice-based products that demonstrate DrPH competency achievement	
Specific assignment(s) that demonstrate application or practice	Competency as defined in criterion D3 or D4
<b>COURSE-BASED ACTIVITIES</b>	
Performing a needed task for a public health or health care organization under the supervision of a faculty member as an individual or group of students	The competency will be related to the defined course-based activity
<b>INTERNSHIP</b>	
Internship Proposal Activity (Report submitted to and evaluated by Student's Thesis Director and Internship Preceptor)	<p><b>Data &amp; Analysis</b>  D3-1. Explain qualitative, quantitative, mixed methods and policy analysis research and evaluation methods to address health issues at multiple (individual, group, organization, community and population) levels  D3-2. Design a qualitative, quantitative, mixed methods, policy analysis or evaluation project to address a public health issue</p> <p><b>Leadership, Management &amp; Governance</b>  D3-6. Integrate knowledge, approaches, methods, values and potential contributions from multiple professions and systems in addressing public health problems  D3-7. Create a strategic plan</p> <p><b>Policy &amp; Programs</b>  D3-14. Design a system-level intervention to address a public health issue</p> <p><b>PHSU PHP Epidemiology Concentration Competencies</b>  D3-21. Evaluate and assess risk and protective factors associated with public health problems.  D3-27. Apply underlying scientific, statistical and epidemiological measures to design, plans, and conduct a variety of public health and biomedical studies including cohort, case control, cross-sectional, and clinical trials</p>
Activities Performance Report (Log submitted to and evaluated by Student's Internship Preceptor)	<p><b>Leadership, Management &amp; Governance</b>  D3-11. Assess one's own strengths and weaknesses in leadership capacities, including cultural proficiency</p>
Student Midterm Internship Evaluation (Report submitted by the Student to the Internship Coordinator)	<p><b>Leadership, Management &amp; Governance</b>  D3-11. Assess one's own strengths and weaknesses in leadership capacities, including cultural proficiency</p>
Preceptor Midterm Internship Evaluation (Report submitted the Preceptor to the Internship Coordinator)	<p><b>Leadership, Management &amp; Governance</b>  D3-11. Assess one's own strengths and weaknesses in leadership capacities, including cultural proficiency  Communicate public health science to diverse stakeholders, including individuals at all levels of health literacy, for purposes of influencing behavior and policies</p>
Preceptor to Student Final Evaluation (Report submitted by the Preceptor to the Student's Thesis Director and to the Internship Coordinator)	<p><b>Leadership, Management &amp; Governance</b>  D3-11. Assess one's own strengths and weaknesses in leadership capacities, including cultural proficiency</p>
Student to Preceptor Final Evaluation (Report submitted by the Student to the Student's Thesis Director and to the Internship Coordinator)	<p><b>Leadership, Management &amp; Governance</b>  D3-11. Assess one's own strengths and weaknesses in leadership capacities, including cultural proficiency</p>

Activities, Competencies and Foundation Report (Report submitted by the Student to the Student's Thesis Director and to the Internship Coordinator)	<p><b>Leadership, Management &amp; Governance</b>  D3-5. Communicate public health science to diverse stakeholders, including individuals at all levels of health literacy, for purposes of influencing behavior and policies  <b>Note:</b> Based on the reported activities, different competencies accordingly to Criterion 2 could be attained.</p>
Final Internship Reflection (Report submitted by the Student to the Student's Thesis Director and to the Internship Coordinator)	<p><b>Leadership, Management &amp; Governance</b>  D3-4. Propose strategies for health improvement and elimination of health inequities by organizing stakeholders, including researchers, practitioners, community leaders and other partners  D3-5. Communicate public health science to diverse stakeholders, including individuals at all levels of health literacy, for purposes of influencing behavior and policies  D3-11. Assess one's own strengths and weaknesses in leadership capacities, including cultural proficiency</p>

Five APE matrices are available at the ERF. The students included are:

- ERF D6.1.1 Alejandro Alvarado
- ERF D6.1.2 Ángel Pérez
- ERF D6.1.3 Ariel Rodríguez
- ERF D6.1.4 Eva Gordian
- ERF D6.1.5 Idelmis Torres

We documented matrices and the deliverables that support the matrix for every student.

The internship activity of the previous students was done in different sites for each one (community or health care organizations). The PHP program has a partnership with the internship sites to help students to attain DrPH related competencies as documented at ERF.

To comply with the PHSU-PHP APE course according to the new CEPH 2016 criteria, we integrated in our syllabus the component of written curricular activities competency-based evaluation. We began with the 2017-18 DrPH group initiative. We are in the process of incorporating different courses in this APE component and we are working to increase the number of courses-related activities associated with the following CEPH 2016 indicators:

- course-based activities (e.g., performing a needed task for a public health or health care organization under the supervision of a faculty member as an individual or group of students)
- activities linked to service learning, as defined by the program, school or university
- co-curricular activities (e.g., service and volunteer opportunities, such as those organized by a student association)

We are confident that once the transition from CEPH 2011 to CEPH 2016 is completed, we will have all the course-related activities uploaded with the above indicators.

**D6-2 - Include a description of policies in the self-study document.**

The PHSU Public Health Program has prepared the Applied Practice Experience MPH and DrPH Handbook where the policies of the course are documented. The full manual is included in the electronic resources file.

**APE DEFINITION**

PHP applied APE are a set of activities that allow each DPH student to demonstrate a minimum of five foundational and/or concentration-specific competencies (as defined in Criteria D3 and D4) that are reinforced and/or assessed through application. The program may either choose at least one competency from the leadership, management and governance domain in Criterion D3 or choose a concentration-specific competency identified in Criterion D4 if it relates to leadership skills. Competencies may differ from student to student.

**DPH PROGRAM APE STRUCTURE**

The DPH APE opportunities are structured within the following components:

- Identified approved first year DPH course written curricular activities competency-based evaluation and related reports (course-based activities).
- Summer internship with internship report.

The course is a 2-credit activity distributed in a 1-year time plus a summer internship after the second year.

**D6-3 - Explain, with references to specific deliverables or other requirements, the manner through which the school or program ensures that the applied practice experience requires students to demonstrate leadership competencies. (self-study document).**

During the internship time, there are a series of DPH internship deliverables that are related to leadership competencies.

During the internship, students must submit an Activities Performance Report. This is a log submitted to and evaluated by Student's Internship Preceptor. In this log, students document the activities involved in their internship as they happen. Another deliverable is the Midterm Evaluation where students and preceptor certify if the internship is taking place as proposed and if there is a need to make any changes. There is a final deliverable where students and preceptors provide documentation related to the overall performance of the students during the internship.

These deliverables are related to the Leadership, Management & Governance D3-11 competency: Assess one's own strengths and weaknesses in leadership capacities, including cultural proficiency.

The Activities, Competencies and Foundation Report is a deliverable submitted by the student to the student's thesis director and to the internship coordinator. In this report, the student not only associate activities with competencies but also brings a foundation of such association. This deliverable is related to the Leadership, Management & Governance D3-5: Communicate public health science to diverse stakeholders, including individuals at all levels of health literacy, for purposes of influencing behavior and policies.

The Final Internship Reflection is a Report submitted by the Student to the student's thesis director and to the internship coordinator at the end of the internship. This report not only document the performed activities and related competencies attained during the internship but also document skills, knowledge and attained attitudes as well as how does the internship has impacted the student in a personal and professional manner. This deliverable is related to the Leadership, Management & Governance D3-4 competency: Propose strategies for health improvement and elimination of health inequities by organizing stakeholders, including researchers, practitioners, community leaders and other partners; D3-5 competency: Communicate public health science to diverse stakeholders, including individuals at all levels of health literacy, for purposes of influencing behavior and policies; and D3-11 competency: Assess one's own strengths and weaknesses in leadership capacities, including cultural proficiency.

In the course syllabus, DPH 7083 Syllabus Applied Practice Experiences course, there is the requirement that: *The applied practice experiences allow each student to demonstrate a minimum of five foundational and/or concentration-specific competencies (as defined in Criteria D3 and D4) that are reinforced and/or assessed through application. The program may either choose at least one competency from the leadership, management and governance domain in Criterion D3 or choose a concentration-specific competency identified in Criterion D4 if it relates to leadership skills. Competencies may differ from student to student.* The same information is documented in the APE Handbook General & Student & Faculty 2017. Both documents are available in the electronic resource file.



**D6 - 4 - Provide samples of practice-related materials for individual students from each concentration or generalist degree. The program must provide samples of complete sets of materials (i.e., the documents that demonstrate at least five competencies) from at least five students in the last three years for each concentration or generalist degree. If the school or program has not produced five students for which complete samples are available, note this and provide all available samples (electronic resource file).**

During the last year the PHSU Public Health Program has made the transition from CEPH 2011 to CEPH 2016. The 2018 students are those who took the course fully under CEPH 2016 criteria. The two previous cohorts, 2017 and 2016, took the course under CEPH 2011 and the Association of Schools of Public Health (2007) criteria. This is the explanation for the possible discrepancies among the different sets of student's materials.

### **2018 Cohort**

These students are directly impacted by CEPH 2016 guidelines. Besides the internship, the students of this cohort began the course-based activity component: course-based activities component of the Applied Practice Experience. We are presenting evidence from 5 students that have attained at least 5 competencies (as defined in Criterion D3) in their first year of DPH program. The students prepared a report based on the course-based activity APE component.

This report includes the following information: 1) Identification of the obtained competency during the performed activity; 2) description of the performed activity directly related to the competency; 3) identification of the skills, knowledge and attitudes that were gained through the activity, and 4) documentation of how the activity affected them, personally and professionally. Data for this cohort can be found in the ERF.

Sets of practice-related material from five students' of 2018 cohort are available in the **Electronic Resources File (ERF)**. The students included in this component are:

- ERF D6.3.1 Alejandro Alvarado
- ERF D6.3.2 Ángel Pérez
- ERF D6.3.3 Ariel Rodríguez
- ERF D6.3.4 Eva Gordian
- ERF D6.3.5 Idelmis Torres

### **2017 Cohort**

The students of this cohort are in the middle of the transition between CEPH 2011 and CEPH 2016 guidelines. The curricular design for these students only required the performance of the internship activity. For 2017 and previous cohorts, the competencies and learning objectives of this activity were taken from those proposed by the Association of Schools of Public Health (ASPH Education Committee, master's Degree in Public Health, Core Competency Development Project, Version 2.3, Word Format—Domains and Competencies Only, May 2007). Because of this, we are presenting a variety of deliverables as evidence when compared to the preceding cohort. Despite this fact, the students of this cohort also wrote a report of their internship that included the same elements of the report made by the 2018 Cohort students with their course-based activity competency evaluation

Sets of practice-related material from five students' of 2018 cohort are available in the **Electronic Resources File (ERF)**. The students included in this component are:

- ERF D6.3.6 Judith Kilgore
- ERF D6.3.7 María Pacheco
- ERF D6.3.8 Melissa Torres
- ERF D6.3.9 Luz Méndez
- ERF D6.3.10 Robert Rodríguez

## **2016 Cohort**

The students of this cohort did their Practicum activity under the criteria of CEPH 2011 and ASPH 2007. The evidence of the attained competencies comes from their internship (same as the 2017 cohort) but, in contrast with the 2017 cohort, they didn't have to write a report of the internship the way that the 2017 cohort did. They documented activities and core competencies/interdisciplinary-cross cutting competencies in the PRACTICAL EXPERIENCE PROPOSAL ACTIVITY FORM, which can be referenced in the **Electronic Resources File (ERF)**. for the students indicated below.

Sets of practice-related material from five students' of 2016 cohort are available in the **Electronic Resources File (ERF)**. The students included in this component are:

- ERF D6.3.11 Johanna Corchado
- ERF D6.3.12 Jesús Hernandez
- ERF D6.3.13 Maitelisse Rivera
- ERF D6.3.14 Siomara Pérez
- ERF D6.3.15 Roberta Lugo

**D6-5 - If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)**

**Strengths**

The course-based activities component has just begun with the 2018 cohort and has had the enthusiastic cooperation of faculty members in providing the required activities.

One of the major strengths of the internship is the participation of faculty members that have contacts with the PR Health Department, the Red Cross, and the EPA, providing sites for the Practicum. For this reason, we can include a wider offer of different internship sites to our students: government (Department of Health, Environmental Protection Office), non-government (Autism Center in Ponce, Puerto Rico Renal Council), community-based (*Iniciativa Comunitaria*), clinical epidemiology (MedCenter, San Lucas Hospital), public-policy oriented (Puerto Rico Civil Rights Commission), and Public Health HIV Research (Centro ARARAT), among others. Students are provided with the APE Site Booklet (found in the ERF) with an offer of more than 20 different internship sites.

Most of our students are fully bilingual and capable of performing their internship either in Puerto Rico or in the mainland.

The PHSU Deanship of Curriculum and Faculty Development has provided us with a robust technological platform (Moodle) for the submission of forms and monitoring of the internship.

Since 2015, during the months of May-April, the PHP has hosted the Public Health Program Scientific Meeting. This meeting that provides the students with the arena to present the posters prepared at the end of their internship. This year we will be hosting our Public Health Program 4<sup>th</sup> Scientific Meeting.

Finally, the CEPH 2016 guidelines, by identifying learning objectives, domains and competencies, and clearly presenting a guide to competencies to be attained by the students in their Applied Practice Experience activity, is definitively an asset to the program.

**Weaknesses**

Sometimes it takes a long time to obtain agreements needed for internship approval. Our students are still able to participate in the internships even under those conditions.

In terms of access to mainland internship sites, cost is an issue. Not all our students have the means to seek internships outside of the local / island territory.

Puerto Rico as an Island and from the political perspective, as a territory, Puerto Rico, sometimes, we have found difficulties to get access to Nationwide internship sites. Not all of our students have family in USA mainland and cost, sometimes would be a problem, limiting in some situations the access to local or state sites of internship.

As part of the transition from CEPH 2011 to the CEPH 2016 model, we are dealing with the changes from the Practicum course to the Applied Practice Experiences (APE) course. In this process we have identified that not all the activities included in the written curricular activities competency-based component of the APE course fulfil the requirement of “performing a needed task for a public health or health care organization under the supervision of a faculty member as an individual or group of students” or the requirement of activities linked to service learning.

We realized that during the internship, doctoral students have collected enough material to produce a new deliverable as a poster and this deliverable was not required to the DrPH students.

We have also realized that in some cases, the DrPH internship has not had the proper focus during the summertime. In consequence the supervision based on the summer Moodle Platform course portal has not been as successful as we have been expecting. From another perspective, having the internship during the summer has created two other difficulties: students must do their site and project search during the third trimester of class; and having the internship during the summer does not ensure the required close supervision from their thesis directors, who may be on vacation.

## **Plans**

We are working on preparing the institutional agreements far in advance, so they do not interfere with the timing of the activity. We also are working on grouping all MOUs to become due around the same time frame, so it is easier to schedule renewal of documents.

We are screening nationwide internship sites that can provide tuition to our students, so the monetary factor doesn't play a role in access to adequate internships.

From now on, the course-based activities selected for the written curricular activities competency-based component of the APE course, will address a "needed task for a public health or health care organization under the supervision of a faculty member as an individual or group of students or from activities linked to service learning", as defined by the program.

From now on, we have added a new requirement of APE for doctoral students: a poster presentation of data obtained during their internship experience.

From now on, the students' internship site and project search time will be performed during the summer, and internships will be spread during the first and second trimester of the academic year that follows their approval of the comprehensive exam.

**D7. MPH Integrative Learning Experience**

**D7-1 - List, in the format of Template D7-1, the integrative learning experience for each MPH concentration, generalist degree or combined degree option that includes the MPH. The template also requires the school or program to explain, for each experience, how it ensures that the experience demonstrates synthesis of competencies.**

**Template D7-1**

<b>MPH Integrative Learning Experience for the General, Epidemiology and Environmental Concentrations</b>	
<b>Integrative learning experience (list all options)</b>	<b>How competencies are synthesized</b>
Comprehensive Exam for all tracks	<p><i>Reflection: Learning &amp; Achievement of Public Health Competencies, Essential Services and Core Functions</i></p> <p>Achievement of at least 70% of competencies in the Comprehensive Exam</p>

Starting with the entering class of 2017, the Integrative Learning Experience (ILE) for the Public Health Program of PHSU will be the integrating experience, requisite for graduation in the Master in Public Health (MPH) of Ponce Health Sciences University (PHSU), and for the Council on Education for Public Health. It provides an opportunity for students to reflect on, integrate and synthesize the knowledge and skills acquired during classroom and practice experiences, while pursuing their public health degree. The Integrative Learning Experience will serve as evidence of compliance with the public health and concentration competencies and will occur after the majority of course requirements are completed.

In order to transition into the new concept of Integrative Learning Experience and to fine-tune logistics and procedures, the Public Health Program of PHSU will pilot an essay-format Comprehensive Exam and the *Reflection: Learning & Achievement of Public Health Foundational and Concentration-Specific Competencies; Essential Services; and Core Functions* (refer to the electronic resource file) with the entering class of 2016 (who will be in their last trimester of their second MPH year). Students from the entering class of 2017 (and who will premiere the Integrative Learning Experience), will submit an **Action Plans** (refer to the electronic resource file), during the third trimester of the first MPH year, describing their educational and professional goals, in relation to the Public Health Competencies; Essential Services; and Core Functions. Students will first identify their educational and professional goals; specific action steps to complete their goals; strengths; barriers; how they can reduce barriers; resources; and deadline. Then, students will select a minimum of five key competencies in which at least three are from the MPH foundational competencies and at least two from the concentration. These will be their focus throughout their coursework to help achieve their educational and professional goals. During the last trimester of the second year, students will submit the *Reflection: Learning & Achievement of Public Health Foundational and Concentration-Specific Competencies; Essential Services; and Core Functions* (refer to the electronic resource file). The purposes of this reflection are to: (1) analyze and reflect on the overall growth and development achieved throughout the coursework in the public health competencies, essential services and core functions, in relation to their educational and professional objectives; and (2) analyze the connection between classroom learning and other practical experiences. In addition, compliance with the competencies on the Comprehensive Exam will be assessed based on achievement of at least 70% of the total score of the exam.

**D7 -2 - Briefly summarize the process, expectations and assessment for each integrative learning experience. (self-study document)**

From 2015-2018, the core public health competencies that have guided the MPH are related to: behavioral sciences; biostatistics; environmental health; epidemiology; and health policy/management. The cross-cutting competencies have been: social and behavioral sciences; communication and informatics; diversity and culture; leadership; professionalism; program Planning; and systems thinking. Each area has detailed competencies (refer to the electronic file) established by the Public Health Program, according to the Association of Schools & Programs of Public Health (ASPPH).

In the following sections, we will describe the process, expectations and assessments followed from 2015-2019. During the 2015-16 and 2016-17 academic years, our Culminating Experience consisted of two (2) options: a Capstone Project and a Comprehensive Exam. The entering class of 2016 (2<sup>nd</sup> MPH year, 2017-18) was changed to a sole option of an essay-format Comprehensive Exam for its Culminating Experience, in preparation to the transition to the upcoming Integrative Learning Experience (essay-format Comprehensive Exam only) starting with the entering class of 2017.

**Process**

The Public Health Culminating / Integrative Learning Experience general process is summarized in Table 1, which includes general steps and specific details per option.

**Table D7-1: Steps for the Culminating/Integrative Experience by Option**

GENERAL STEPS	CULMINATING EXPERIENCE		
	CAPSTONE	COMPREHENSIVE EXAM	INTEGRATIVE LEARNING EXPERIENCE (ILE)
1. Assignment of Faculty Advisor 2. Complete general eligibility criteria: a. Good academic standing b. Completed most of their coursework: i. 27 core credits for the CE and 29 for the ILE) ii. 15 concentration/ track credits c. Completed, waived or concurrently completing Practicum 3. Register in: a. CE (August 2015- May 2017) i. MPH 7920- <i>Culminating Experience: Capstone Project I</i> (2 <sup>nd</sup> trimester, 2 <sup>nd</sup> MPH year) ii. MPH 7930-	Identify a Capstone Project based on interest and career development goals.	Devise and establish study schedule Attend review/preparation sessions	Identify educational and professional goals, in consultation with ILE Faculty Advisor. During 3 <sup>rd</sup> trimester of first MPH year, submit Action Plans. Devise and establish study schedule Attend review/preparation sessions

<p><i>Culminating Experience: Capstone Project II</i> (with written approval from Capstone Faculty Advisor) (3<sup>rd</sup> trimester, 2<sup>nd</sup> MPH year)</p> <p>b. CE (August 2017- May 2018)</p> <p>c. ILE (Starting in August 2017)</p> <p>4. Participate in Orientation Sessions.</p> <p>5. Complete the evaluation requirements for the specific course.</p> <p>6. Meeting with the Faculty Advisor at least 3 times per trimester during Culminating/Integrative Learning Experience-related coursework.</p>			
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The Capstone Project (August 2015-May 2017) was divided in three (3) distinct stages: Pre-Capstone, Capstone I (MPH 7920- *Culminating Experience: Capstone Project I*), and Capstone II (MPH 7930- *Culminating Experience: Capstone Project II*). The Capstone Project was completed over the course of the academic year of the expected graduation date, starting on the first trimester. The first draft of the *Introduction Chapter* of the Capstone Project had to be submitted to the Capstone Faculty Advisor prior to registration in MPH 7920- *Culminating Experience: Capstone Project I*. This draft was prepared as part of the requirements of the course MPH 7030- *Research Methodology* and MPH 7333- *Research Methodology in Epidemiology*, counting for 30% (2015-16) and 20% (2016-17) of the total course grade. These percentages were based on agreements with the course instructors of the respective academic years. These courses were chosen because students receive theoretical information and practical applications via class discussions, assignments and projects that could help them to start developing their *Introduction Chapter* for the Capstone Project Proposal. The draft was reviewed and graded by the Capstone Faculty Advisor of each student, in order to start developing the mentor/mentee relationship from an early stage in the academic year and the grade was informed to the MPH 7030/7333 course instructors. The drafts of students who were not interested in registering in Capstone I and Capstone II (thus choosing the Comprehensive Exam option) were reviewed and evaluated by the MPH 7030/7333 course instructor. Students who were not registered in the MPH 7030/MPH 7333 courses but who were interested in Capstone I and II, were also responsible for submitting an *Introduction Chapter* to their Capstone Faculty Advisor, by the same due date, to have a consistent schedule among all students. The resulting evaluation and feedback from the Capstone Faculty Advisor became the foundation to develop the proposal for the next stage of the process, MPH 7920- *Culminating Experience: Capstone Project I*, which will be described next.

The second stage of the Culminating Experience was the course MPH 7920- *Culminating Experience: Capstone Project I*. Through the development and implementation of the Capstone Project, students applied public health competencies and principles in a selected domain of professional public health practice. The type of project determined the specific competencies and activities to be applied. Although the Capstone Project was self-directed, students could ask for input/feedback throughout its development, but everyone had to independently prepare a unique product. Thus, the Capstone Faculty Advisor's role was as a resource and a facilitator of the learning process. Although the main recommendation was to relate the projects to the students' MPH concentration area, they could take on many different structures and formats based on the experiences. Therefore, the course followed a flexible structure to address the various kinds of projects, diverse public health interests of, and challenges faced by the students. Examples of projects included follow:

- **Public Policy Analysis:** Development, analysis of implications or assessment of a current or proposed health policy, legislation, administrative rule or advocacy Plans. The analysis must be based in some public policy model or framework or review of an actual or proposed policy intervention. This involves critical reading and may include key informant interviews and other sources.
- **Program Planning or Development:** Development of a Plans to implement a public health program/intervention. The project should be evidence-based and address public health issues.

- **Program Evaluation:** Evaluation/monitoring of an existing public health program, such as process evaluation, monitoring of outputs and outcomes, impact assessment, and/or cost analysis.
- **Community Assessment:** Gathering, analyzing and reporting information about the needs of a community and the resources that are available in that community to meet those needs and the barriers or gaps to fulfill them. The information could come from various sources: information collected already, interviews, focus groups, and public forums.
- **Capacity Building Project:** Project that develops a training program in some public health area to assist an organization or group of individuals to acquire public health skills or competencies. It could include direction for future capacity building or an evaluation of current capacity building program.
- **Survey Development and Implementation:** Design a new questionnaire/survey or validate an existing one using reliability and validity analysis.
- **Applied Research**
  - Data analysis (qualitative or quantitative approaches to address a public health research question)
  - Epidemiological/Environmental Investigation
  - Analysis of secondary data, surveillance reports, outbreak investigations, and studies to identify risk factors related to disease development or worsening.
- **Other public health project**

The final products of the Capstone Project I was: (1) a Capstone Project Proposal approved by the Capstone Faculty Advisor; (2) *MPH Public Health Competencies and Domains to be Addressed in the Capstone Project Form*; and (3) an authorization letter from the PHSU Institutional Review Board (IRB), if applicable. Thus, it was expected that at the end of the second trimester, students would be ready to implement their projects in the third stage of the Capstone Project, the course MPH 7930- *Culminating Experience: Capstone Project II* in the third trimester. During the last trimester in MPH 7930, students had to complete their projects, analyze their data (as applicable) and disseminate their results. Thus, the final products of the Capstone Project II were a formal: (1) Capstone Project manuscript approved by the Capstone Faculty Advisor (40-page minimum); (2) Oral Presentation in the annual Public Health Program Scientific Meeting; and (3) two compact discs (CDs) (one for the Public Health Program and the other for the PHSU library). A third CD could be requested for the Capstone Faculty Advisor.

The oral presentation of projects at the Public Health Program's Scientific Meeting was open to students, faculty, interested parties, and the community. Delivering the oral presentations in this professional setting, instead of the classroom, had the following benefits: (1) adding a professional experience to students that could be included in their resumes; and (2) contributed new knowledge to the academic and general community. In the oral presentation, students included a summary of all the basic components of the Capstone Project; as well as a reflection of how public health competencies, essential services and core functions had been fulfilled with the Capstone Project experience. Each student was allocated 15 minutes for the Capstone Project oral presentation, including 5 minutes for a question and answer session. The information included in the oral presentations was: Title and student information; Background and Significance; Model/Theory/Framework/Best Practices/Regulations (as applicable to MPH concentration/track); Hypothesis/Objectives/Research Questions; Methods/Project Description; Results/Outcomes; Conclusion/Discussion/Limitations; Recommendations/Public Health Implications; Analysis of Competencies, Essential Services & Core Functions of Public Health Reflection; and Personal Reflection. In the next section, we will describe the scheduled followed in the Capstone Project.

## Schedule

The general schedule for the Capstone Project (2015-16 and 2016-17) assignments and meetings is listed in the following Table 2, which provides a guidance of what amount of work had to be completed by each week to finish by the expected graduation date. The MPH Culminating Experience Coordinator discussed the specific dates each year, according to the academic calendar. Capstone Faculty Advisors decided how to monitor the progress of their students. If students did not submit the required final products by the end of the trimester or before, they were not being able to progress into the next stage.



**D7 – 3 - Provide documentation, including syllabi and/or handbooks that communicate integrative learning experience policies and procedures to students. (electronic resource file)**

Refer to the **Electronic Resources File (ERF)**.

**D7 -4 - Provide documentation, including rubrics or guidelines that explain the methods through which faculty and/or other qualified individuals assess the integrative learning experience with regard to students' demonstration of the selected competencies. (electronic resource file)**

Refer to the **Electronic Resources File (ERF)**.

**D7 -5 - Include completed, graded samples of deliverables associated with each integrative learning experience option from different concentrations, if applicable. The program must provide at least 10% of the number produced in the last three years or five examples, whichever is greater. (electronic resource file)**

Refer to the **Electronic Resources File (ERF)**.

**D7 -6 - If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.**

The Integrative Learning Experience will premiere with the entering class of 2017. Its first stage, submission of the *Action Plans* will occur on the last trimester of their first MPH year (February – May 2018) and their essay-format Comprehensive Exam will be held during the last trimester of their second MPH year (February - May 2019). Thus, at this moment, no evaluation data is available to assess its strengths and weaknesses. However, the Public Health Program will conduct a SWOT (Strengths/Weaknesses/ Opportunities/Threats) analysis with faculty and first- and second-year students to identify data needed for improvement. In addition, experiences with the entering class of 2016 (who are currently finishing their second MPH year) will serve to gauge the change from two current options (Capstone Project and Comprehensive Exam) in the Culminating Experience to a sole activity (Comprehensive Exam) with a new format (all required essay questions), which will become the foundation for the Integrative Learning Experience. Going from a small to many students' takings the Comprehensive Exam could present challenges, which may be viewed as a weakness. However, the process followed during academic year 2017-18 will help to fine-tune logistics and procedures for the upcoming Integrative Learning Experience. Last, several factors (viewed as strengths) of the current Culminating Experience will contribute to the success of the upcoming Integrative Learning Experience such as:

Faculty and students are kept informed about the logistics and process in a systematic manner, which helps the process to run smoothly:

- The MPH Culminating/Integrative Learning Experience Coordinator has been the same since 2014 which offers continuity to/knowledge of/experience in the process. This will be helpful in building a strong base to develop the upcoming Integrative Learning Experience.
- The Culminating Experience of the Public Health Program of PHSU has been evolving in each version since its inception. It is well prepared to transition into the Integrative Learning Experience.

## **D8. Dr.PH Integrative Learning Experience**

**D8 -1 - List, in the format of Template D8-1, the integrative learning experience for each Dr.PH concentration, generalist degree. The template also requires the school or program to explain, for each experience, how it ensures that the experience demonstrates synthesis of competencies.**

Starting with the entering class of 2017, the Integrative Learning Experience (ILE) for the Public Health Program of PHSU will be the integrating experience, requisite for graduation in the Dr.PH- Epidemiology concentration of Ponce Health Sciences University (PHSU), and for the Council on Education for Public Health. It provides an opportunity for students to reflect on, integrate and synthesize the knowledge and skills acquired during classroom and practice experiences, while pursuing their public health degree. ILE will serve as evidence of compliance with the public health and concentration competencies and will occur after all course requirements are completed. Students qualify for comprehensive exams and dissertation after completing all course work (52 credits).

The template D8-1 below provides the two integrative learning experiences that will be required to all Dr.PH-epidemiology specialty students and how competencies will be synthesized to comply with 2016 CEPH criteria guidelines.

<b>Template D8-1: Dr.PH Integrative Learning Experience for the Epidemiology Concentration</b>	
<b>Integrative learning experience (list all options)</b>	<b>How competencies are synthesized</b>
Competence Based Comprehensive Exam	Achieve a score of at least 70% at <u>each</u> competency in the Comprehensive Exam
Doctoral Dissertation (9 credits)	Checklist rubric for the achievement of foundational and specialty competencies

The 2016-2017 and 2015-2016 cohort's students culminating experiences (CE) followed 2011 CEPH criteria guidelines. The learning experiences modalities required to these two Dr.PH groups were comprehensive exam with an average pass/fail score of more than 70% in specialties competencies and the dissertation (18 credits). Students qualify for comprehensive exams and dissertation after completing all course work (42 credits). Comprehensive exams examples for academic year 2017-2018 and 2018-2019 (future) will be available in the resource file for your revision and recommendations.

**D8-2 - Briefly summarize the process, expectations and assessment for each integrative learning experience.**

From 2015-2018, the core public health competencies as well as epidemiology competencies, listed in criterion D4 have guided the Dr.PH integrative learning experiences. Current cohort have been guided by using 2016 CEPH criteria foundational competencies while past two cohorts, 2015 and 2016 have used the criteria of the Association of Schools & Programs of Public Health (ASPPH).

In the following sections, we will describe the process, expectations and assessments followed from 2015-2019. All cohorts' academic years Culminating Experience consisted of two (2) requirements: a dissertation project and a Comprehensive Exam. The comprehensive exam for the entering class of 2017 will include all foundational competencies, not only specialties as was before due to the diverse dissertation modalities that now are encouraged in this professional degree. All students have received orientation regarding venturing in community-based projects, simulations, association/foundations creation, educational programs designing and public health interventions, among others. This is the rationale for examining all foundational and specialty competencies at the exams. Then, depending upon the dissertation modality, the student advisor and committee will select which competencies will be attained though out the dissertation project.

**Process**

The Public Health Culminating/Integrative Learning Experience general process is summarized in Table D8-1, which includes general steps and specific details per option.

**Table D8-1: Steps for the Culminating/Integrative Experience by Option**

GENERAL STEPS	CULMINATING EXPERIENCE		INTEGRATIVE LEARNING EXPERIENCE (ILE)
	DISSERTATION	COMPREHENSIVE EXAM	
<ol style="list-style-type: none"> <li>1. Assignment of Faculty Advisor</li> <li>2. Complete general eligibility criteria:               <ol style="list-style-type: none"> <li>a. Good academic standing</li> <li>b. Completed most of their coursework:                   <ol style="list-style-type: none"> <li>i. 42 core credits for the CE and 52 for the ILE)</li> </ol> </li> <li>b. Completed, waived or concurrently completing Practicum</li> </ol> </li> <li>3. Register in:               <ol style="list-style-type: none"> <li>a. CE (first trimester 3<sup>rd</sup> year)                   <ol style="list-style-type: none"> <li>i. Dr.PH 8005- <i>Culminating Experience: Dissertation Research</i></li> </ol> </li> </ol> </li> <li>4. Participate in Orientation Sessions.</li> <li>5. Complete the evaluation requirements for the specific course.</li> <li>6. Meeting with the Faculty Advisor at least 3 times per trimester during Culminating/Integrative Learning Experience-related coursework.</li> </ol>	Identify a Dissertation Project based on interest and career development goals.	Devise and establish study schedule Attend orientation session	Identify educational and professional goals, in consultation with ILE Faculty Advisor. During 3 <sup>rd</sup> trimester of second Dr.PH year, approval of comprehensive exams. After approval of exams, the student is authorized to enroll in dissertation (process discussed in detail in dissertation manual provided at the electronic resource file).

**Schedule**

DOCTORAL DISSERTATION STEPS	Check the step that all that applies to advisee
<p><b>Step No.1 (1<sup>ST</sup> TRIMESTER – 3<sup>RD</sup> YEAR)</b></p> <ul style="list-style-type: none"> <li>• Doctoral advisor assignment</li> <li>• Searching for dissertation theme</li> <li>• Required workshops to attend:</li> <li>• “Overcoming Obstacles to be Successful in my Doctoral Thesis (<i>Superando obstáculos para tener éxito en mi tesis doctoral</i>) Workshop</li> <li>• Dissertation Manual Workshop</li> <li>• How to search for references at PHSU library database Workshop</li> <li>• How to write references using APA style Workshop</li> <li>• How to know <i>Endnote Software</i> Workshop</li> <li>• Plagiarism Workshop</li> <li>• IRB Workshop</li> <li>• To provide evidence of complying with CITI certifications</li> <li>• Development and approval of “<i>Prospectus</i>”_(<i>Electronic Resource File (ERF)</i>)</li> <li>• Dissertation Committee Constitution (<i>Electronic Resource File (ERF)</i>)</li> <li>• Student Responsibility Relay Agreement signature for non-approving dissertation defense (<i>ERF</i>)</li> </ul>	
<p><b>Step No.2 (2<sup>ND</sup> TRIMESTER – 3<sup>RD</sup> YEAR)</b></p> <ul style="list-style-type: none"> <li>• Dissertation proposal development               <ul style="list-style-type: none"> <li>○ Justification</li> <li>○ Literature revision</li> <li>○ Methodology</li> <li>○ Bibliography (100 or more)</li> </ul> </li> </ul>	
<p><b>Step No.3 (3<sup>RD</sup> TRIMESTER – 3<sup>RD</sup> YEAR)</b></p> <ul style="list-style-type: none"> <li>• Dissertation proposal development               <ul style="list-style-type: none"> <li>○ Justification</li> <li>○ Literature revision</li> <li>○ Methodology</li> <li>○ Bibliography (100 or more)</li> </ul> </li> </ul>	
<p><b>Step No.4 (1<sup>ST</sup> TRIMESTER – 4<sup>TH</sup> YEAR)</b></p> <ul style="list-style-type: none"> <li>• Dissertation proposal defense</li> <li>• Defense recommendations complying</li> <li>• IRB approval</li> </ul>	
<p><b>Step No. 5 (2<sup>ND</sup> TRIMESTER – 4<sup>TH</sup> YEAR)</b></p> <ul style="list-style-type: none"> <li>• Data collection</li> <li>• Data entry and database development</li> </ul>	
<p><b>Step No. 6 (3<sup>RD</sup> TRIMESTER – 4<sup>TH</sup> YEAR)</b></p> <ul style="list-style-type: none"> <li>• Data collection</li> <li>• Data entry and database development</li> </ul>	
<p><b>Step No.7 (1<sup>ST</sup> TRIMESTER – 5<sup>TH</sup> YEAR)</b></p> <ul style="list-style-type: none"> <li>• Data analysis</li> </ul>	



<ul style="list-style-type: none"> <li>• Results interpretation</li> <li>• Discussion</li> <li>• Conclusions</li> </ul>	
<b>Step No.8 (2<sup>ND</sup> TRIMESTER – 5<sup>TH</sup> YEAR)</b> <ul style="list-style-type: none"> <li>• Dissertation defense</li> </ul>	
<b>Step No.9 (3<sup>RD</sup> TRIMESTER – 5<sup>TH</sup> YEAR)</b> <ul style="list-style-type: none"> <li>• Deliver of manuscript</li> <li>• To present evidence of one paper submitted to a peer review journal</li> </ul>	

### **Expectations**

The expectations for the Culminating Experience Options and the Integrative Learning Experience are listed below:

### **Expectations for the Culminating Experience Options and Integrative Learning Experience**

<b>DISSERTATION PROJECT</b>
<ol style="list-style-type: none"> <li>1. Apply public health core and specialty competencies through Planning a public health project.</li> <li>2. Integrate public health theory, knowledge, and skills in Planning an evaluation of public health project.</li> <li>3. Explain how some public health functions; such as needs assessment, program Planning, program evaluation, policy development, or development of educational campaigns are applicable in a research project in a select area of public health practice.</li> <li>4. Plans how to apply skills and knowledge to cover in depth some aspects of a particular topic to expand the educational experiences according to the student’s area of interest.</li> <li>5. Demonstrate leadership, time management, and resourcefulness in the Planning of a public health project.</li> <li>6. Prepare a Dissertation Proposal.</li> <li>7. Execution of dissertation project.</li> <li>8. Doctoral dissertation defense approval.</li> </ol>

<b>INTEGRATIVE LEARNING EXPERIENCE</b> <b>(Starting in August 2018- May 2019)</b>
<ol style="list-style-type: none"> <li>1. Demonstrate the knowledge and acquisition of public health core competencies through a comprehensive exam.</li> <li>2. Demonstrate their mastery of competencies related to their particular area of emphasis (epidemiology specialty).</li> <li>3. Analyze and reflect on their learning and achievements related to Public Health Competencies.</li> </ol>

### **Assessment**

The Dr.PH Faculty Advisors must submit evaluation forms/rubrics. A detailed description of/instructions for deliverables and evaluation forms/rubrics are available in the Dr.PH Manual in the electronic resource file.

The Dissertation Oral Presentation is graded by the Dr.PH student’s dissertation committee members from the Public Health Program. The oral presentation evaluation is based on a scale that goes from *Not Approved* to Approved. If the student obtains a grade lower than 80% or the evaluators determined the presentation did not comply with the criteria/quality standards, the student will be referred to the institutional PHSU Promotion Committee to “decide if the student will be dismissed or will have another opportunity to achieve the doctoral degree. After the final manuscript is approved by the student’s dissertation committee, students have to submit three (3) written manuscript copies of the dissertation and one CD should be provided to PHSU library.

**D8 -3 - Provide documentation, including syllabi and/or handbooks that communicate integrative learning experience policies and procedures to students. (electronic resource file)**

Refer to the **Electronic Resource File (ERF)**.

**D8 -4 - Provide documentation, including syllabi and/or handbooks that communicate integrative learning experience policies and procedures to students. (electronic resource file)  
Provide documentation, including rubrics or guidelines that explain the methods through which faculty and/or other qualified individuals assess the integrative learning experience with regard to students' demonstration of the selected competencies. (electronic resource file)**

Refer to the **Electronic Resource File (ERF)**.

**D8 -5 - Include completed, graded samples of deliverables associated with each integrative learning experience option from different concentrations, if applicable. The school or program must provide at least 10% of the number produced in the last three years or five examples, whichever is greater. (electronic resource file)**

Refer to the **Electronic Resource File (ERF)**.

**B8 -6 - If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)**

**Strengths**

The Integrative Learning Experience will premiere with the entering class of 2017. Faculty and students are kept informed about the logistics and process in a systematic manner, which helps the process to run smoothly.

- The MPH Culminating/Integrative Learning Experience Coordinator has been almost the same since 2012, which offers continuity to/knowledge of/experience in the process. This will be helpful in building a strong base to develop the upcoming Integrative Learning Experience. The only two things changed are competencies more related to a Dr.PH and an exam that will include all core competencies to ensure that the student will excel at the moment of executing their dissertations.
- More rubrics are provided in the revised version of the Dr.PH Students Manual for smoothing ILE process for students but also for faculty members.

**Weaknesses**

No weaknesses had been or are expected since faculty members and students had been oriented frequently to avoid confusion and increase graduation rates as we had been achieving during the last two years.

**D9. Public Health Bachelor's Degree General Curriculum (SPH and PHP, if applicable)**

This criterion does not apply to us. We don't have a bachelor's degree program.

**D10. Public Health Bachelor's Degree Foundational Domains**

This criterion does not apply to us. We don't have a bachelor's degree program.

**D.11 Public Health Bachelor's Degree Foundational Competences**

This criterion does not apply to us. We don't have a bachelor's degree program

**D.12 Public Health Bachelor's Degree Cumulative and Experimental Activities**

This criterion does not apply to us. We don't have a bachelor's degree program

**D.13 Public Health Bachelor's Degree Cross- Cutting Concepts and Experience**

This criterion does not apply to us. We don't have a bachelor's degree program

#### **D14. MPH Program Length**

An MPH degree requires at least 42 semester-credits, 56 quarter-credits or the equivalent for completion.

**14 -1 - Provide information about the minimum credit-hour requirements for all MPH degree options. If the university uses a unit of academic credit or an academic term different from the standard semester or quarter, explain the difference and present an equivalency in table or narrative form.**

MPH three specialties, general, epidemiology and environmental health require 55 credits/trimester distributed in two years to obtain the MPH degree.

**14-2 - Define a credit with regard to classroom/contact hours.**

Credits at PHSU-PHP and PR-CES are defined by the following contact hours:

- 1 credit – 15 contact hours distributed in a trimester (1.25 contact hours weekly – if 12 weeks by trimester)
- 2 credits – 30 contact hours distributed in a trimester (2.5 contact hours weekly - if 12 weeks by trimester)
- 3 credits – 45 contact hours distributed in a trimester (3.75 contact hours weekly - if 12 weeks by trimester)

#### **D15. Dr.PH Program Length**

**15 – 1 - Provide information about the minimum credit-hour requirements for all MPH degree options. If the university uses a unit of academic credit or an academic term different from the standard semester or quarter, explain the difference and present an equivalency in table or narrative form.**

PHSU-PHP Dr.PH – epidemiology specialty degree is 63 credits/trimester distributed in five years to obtain the degree.

**15 -2 - Define a credit with regard to classroom/contact hours.**

Credits at PHSU-PHP and PR-CES are defined by the following contact hours:

- 1 credit – 15 contact hours distributed in a trimester (1.25 contact hours weekly – if 12 weeks by trimester)
- 2 credits – 30 contact hours distributed in a trimester (2.5 contact hours weekly - if 12 weeks by trimester)
- 3 credits – 45 contact hours distributed in a trimester (3.75 contact hours weekly - if 12 weeks by trimester)

#### **D16. Bachelor’s degree program length**

This criterion does not apply to us. We don’t have a bachelor’s degree program.

#### **D17. Academic public health master’s degrees**

This criterion does not apply to us. We don’t have an academic public health master’s degree.

#### **D18. Academic public health doctoral degrees**

This criterion does not apply to us. We don’t have an academic public health doctoral degree.

**D19. All remaining degrees**

This criterion does not apply to us. We don't have any other degree at our program.

**D20. Distance education**

This criterion does not apply to us. We don't have a distance education learning degree or program.

**E1. Faculty Alignment with Degrees Offered**

**E1-1- Provide a table showing the school or program’s primary instructional faculty in the format of Template E1-1. The template presents data effective at the beginning of the academic year in which the final self-study is submitted to CEPH and must be updated at the beginning of the site visit if any changes have occurred since final self-study submission. The identification of instructional areas must correspond to the data presented in Template C2-1.**

See Table Below

**Table E1-1**

<b>Primary Instructional Faculty Alignment with Degrees Offered</b>						
<b>Name*</b>	<b>Title/ Academic Rank</b>	<b>Tenure Status or Classification^</b>	<b>Graduate Degrees Earned</b>	<b>Institution(s) from which degree(s) were earned</b>	<b>Discipline in which degrees were earned</b>	<b>Current instructional area(s)<sup>+</sup></b>
Bosque, Adalberto	Professor	Tenure track	MBA, PhD	Turabo University	Business Administration, Environmental Sciences	Environmental Track- MPH
Bredy, Rafael	Associate Professor	Academic and Research Faculty	MD, MBE, MScCR	Universidad Central de Venezuela, Instituto Tecnológico de Santo Domingo, UPR Medical Sienes	Medicine, Bioethics, Clinical Research	General Public Health Track
Fraticelli, Frank	Assistant Professor	Tenure Track	MPHE, PhD	UPR Medical Sciences, Pontifical Catholic University of Puerto Rico	Health Education, Industrial Psychology	General Public Health Track
Green, Vivian	Professor	Academic and Research Faculty	MS, PhD	UPR, Universidad de Las Palmas de Gran Canaria, Spain	Nutrition and Health Administration	General Public Health Track
Iriarte, Ivan	Professor	Academic and Research Faculty	MS, MD	UPR Medical Sciences, Iowa University	Preventive Medicine, Medicine	Epidemiology- MPH, Dr.PH
Irizarry, Jessica	Assistant Professor	Tenure Track	MS, PhD	UPR, Walden University	Epidemiology	Epidemiology- MPH, Dr.PH
Isaza, Clara	Assistant Professor	Tenure Track	PhD	Ohio State University	Biophysics	General Public Health Track
Martinez, Iris	Assistant Professor	Tenure Track	MPH, Dr.PH	PHSU	Epidemiology	Epidemiology- MPH, Dr.PH
Marzan, Melissa	Assistant Professor	Tenure Track	MPH, Dr.PH	UPR, Medical Sciences, PHSU	Epidemiology	Epidemiology- MPH, Dr.PH



Morales, Luisa	Assistant Professor	Tenure Track	Dr.PH	PHSU	Epidemiology	Epidemiology- MPH, Dr.PH
Orengo, Juan C.	Professor	Academic and Research Faculty	MD, MPH, PhD	University of Navarra, UPR Medical Sciences Campus, Universidad de Las Palmas de Gran Canaria	Medicine, Epidemiology, Research Methods	Epidemiology- MPH, Dr.PH
Roubert, Mayra	Professor	Academic and Research Faculty	MS, Dr.PH	UPR Medical Sciences Campus	Environmental Health	Environmental Track- MPH
Sanchez, Yashira	Assistant Professor	Tenure Track	MS, PhD	Turabo University	Environmental Analysis, Environmental Sciences	Environmental Track- MPH
Serrano, Ruby	Assistant Professor	Tenure Track	MS, Dr.PH	UPR Medical Sciences	Epidemiology, Environmental Health	Epidemiology- MPH, Dr.PH
Soto, Brenda	Associate Professor	Academic and Research Faculty	MPHE, PhD	UPR Medical Sciences, University of Missouri - Columbia	Health Education, Ph.D in Health Exercise Sciences	General Public Health Track
Soto, Jose	Assistant Professor	Tenure Track	MEd, PhD	Pontifical Catholic University of Puerto Rico	Education and Counseling, Industrial Psychology	General Public Health Track
Zavala, Diego	Professor	Academic and Research Faculty	MS, PhD	Tropical and Hygiene Medicine School, London, Tulane University	Demography and Epidemiology	Epidemiology- MPH, Dr.PH

**E1 -2 - Provide summary data on the qualifications of any other faculty with significant involvement in the school or program’s public health instruction in the format of Template E1-2. Schools and programs define “significant” in their own contexts but, at a minimum, include any individuals who regularly provide instruction or supervision for required courses and other experiences listed in the criterion on Curriculum. Reporting on individuals who supervise individual students’ practice experience (preceptors, etc.) is not required. The identification of instructional areas must correspond to the data presented in Template C2-1. (self-study document)**

**Table E1-2 shows the Non-Primary Instructional Faculty Regularly Involved in Instruction, and**

**Table E1-2b the Non-Primary Instructional Faculty Regularly Involved in Instruction used to Support Epidemiology Dr.PH Mentoring.**

**TABLE E1-2: Non-Primary Instructional Faculty Regularly Involved in Instruction**

<b>Non-Primary Instructional Faculty Regularly Involved in Instruction</b>							
<b>Name*</b>	<b>Academic Rank^</b>	<b>Title and Current Employment</b>	<b>FTE or % Time Allocated</b>	<b>Graduate Degrees Earned</b>	<b>Institution(s) from which degree(s) were earned</b>	<b>Discipline in which degrees were earned</b>	<b>Current instructional area(s)+</b>
Alvarez, Carolina	Academic faculty	Visiting Professor, Food and Drug Administration	10%	MD, Dr.PH	Universidad Central de Venezuela, Texas University	Medicine and Epidemiology	Epidemiology-MPH, Dr.PH
Amador, Pedro	Academic faculty	Assistant Professor, PHSU	10%	MD, MPH	PHSU, Georgetown University	Medicine, Preventive Medicine	General Public Health Track-MPH
Arroyo, Axel	Academic faculty	Chief Medical Information Officer (CMIO) at Mennonite Healthcare System	5%	MD, MPH	UCC, PHSU	Medicine, Public Health	General Public Health Track-MPH
Aybar, Victor	Academic faculty	Visiting Professor, PR Health Department	10%	MD	UNIBE	Medicine	General Public Health Track-MPH
Bayona, Manuel	Academic faculty	Visiting Professor, Food and Drug Administration	10%	MS, MD, PhD	UNAM, Johns Hopkins	Biostatistics, Medicine, Epidemiology	Epidemiology-MPH, Dr.PH
Cabrera, Mauricio	Academic Faculty and Research	Visiting Professor, UPR Mayaguez	10%	MS, PhD	Ohio State University	Industrial and System Engineering	General Public Health Track-MPH
Guillioty, Yadira	Academic Faculty	Visiting Professor, PHSU	10%	MPH, DrPH	PHSU	Epidemiology	Epidemiology-MPH, Dr.PH
Hernandez, Elsie J.	Academic faculty	Visiting Professor/Pharmaceutical Senior Consultant	10%	PhD, MSc	Turabo University	Biology	Environmental track

Iturregui, Santiago	Academic faculty	Visiting Professor/ Attorney at law, Private Practice	10%	MHSA, MBA, JD	Catholic University of Puerto Rico, University of Puerto Rico, Medical Sciences Campus	Law and Health Policy	General Public Health Track
Lopez, Sonia	Academic faculty	Visiting Professor/ Environmental consultant	10%	PE, MBA, PhD	Turabo University	Environmental management	Environmental track
Martinez, Jorge	Academic faculty	US EPA	10%	BS, MPH	UPR, Rio Piedras	Civil engineer, Public health	Environmental track
Norman, Lisa	Research Faculty Member	Associate Professor, PHSU	14%	MA, PhD	Wright State University, Emory University	Behavioral Sciences, Sociology	General Public Health Track
Padilla, Ever	Academic faculty	Executive Director, Civil Rights Commission of Puerto Rico	10%	JD	Pontifical Catholic University of Puerto Rico	Law	General Public Health Track
Paniagua, Carlos	Academic faculty	Visiting Professor, PR Natural Resources Department	10%	MS	UPR Rio Piedras	Master's in urban and Regional Plannsing	General Public Health Track
Pereles, Gladys	Academic faculty	Dean of Health Sciences, PHSU	10%	EdD	Oklahoma State University	Curriculum and Instruction	General Public Health Track
Rivera, Elizabeth	Academic faculty	Associate Dean of Curriculum and Faculty Development, PHSU	10%	ME, EdD	Pontifical Catholic University of Puerto Rico	Curriculum and Teaching	General Public Health Track
Rodríguez, Angeles	Academic faculty	Visiting Professor	10%	MPH, MD	UPR Medical Sciences Campus, Central del Este University	Epidemiology, Infectious Diseases	Epidemiology-MPH, Dr.PH

Rullán, Johnny	Academic faculty	Visiting Professor	10%	MD, MPH, FACPM, EIS	UPR, Johns Hopkins American College of Preventive Medicine, CDC	Epidemiology, Infectious Diseases	Epidemiology-MPH, Dr.PH
Santiago, Ivonne	Academic faculty	Visiting Professor, State Insurance Fund	20%	MD, MHSSA, MBA, CIME, MHSA	San Juan Bautista School of Medicine, UPR Metropolitana, UPR Medical Sciences Campus	Medicine, Master's in health science on Substance Abuse, Master in Business Administration, Master in Health Service Administration	General Public Health Track
Santiago, Pedro	Academic faculty	Associate Professor, PHSU	10%	PhD	UPR Rio Piedras	Molecular Biology	General Public Health Track
Santiago-Cornier, Juan A	Academic faculty	Associate Professor, PHSU	14%	MD, PhD	Central del Este University, PHSU	Pediatrics and clinical genetics, Biomedical Sciences	General Public Health Track
Torres, Jose	Academic faculty	Vice President of Academic Affairs, PHSU	10%	PhD	Washington State University	Biochemistry	General Public Health Track
Vélez, Esdras	Academic faculty	Only Office Hours	10%	J.D, MPH, MHL		Law and Health Health Policy	General Public Health Track

**TABLE E1-2b: Secondary Faculty Used to Support Epidemiology Dr.PH Mentoring**

<b>Name</b>	<b>Title/Rank</b>	<b>Employer</b>	<b>FTE or % Time</b>	<b>Degrees</b>	<b>Discipline</b>	<b>Teaching Areas</b>
Alvarado, Luisa	Professor	PHSU	10%	MD	Pediatric infectious diseases Enhanced Surveillance of Febrile Pathogens	Research
Becerra, Jose	Visiting Professor	Emory University	10%	MD, MPH, EIS	Epidemiology and preventive medicine	Dissertation Research
Caraballo, Ralph	Visiting Professor	CDC, Atlanta	10%	PhD, EIS	Epidemiology	Dissertation Research
Castellanos, Raul	Academic Faculty	Visiting Professor/ PAHO WHO coordination PR	10%	MD, MPH	Family physician, Public Health	Research
Castillo Salgado, Carlos	Visiting Professor	John Hopkins	10%	MD, MPH, MBA, JD	Epidemiology and Public Health	Academic
Castro, Kenneth	Visiting Professor	CDC, Atlanta	10%	MD, MPH, EIS	Medicine and Epidemiology	Academic
Colón, Emily	Visiting Professor	UPR SMC	10%	PhD	Microbiology	Research
Conde, José	Visiting Professor	UPR SMC	10%	MD, MPH	Family physician, Public Health	Academic
Cordero, José F.	Visiting Professor	College of Public health, University of Georgia	10%	MD, MPH	maternal and child health, developmental disabilities, preterm births, vector Borne diseases	Academic
Cruz Correa, Marcia	Visiting Professor	PR Cancer Registry	10%	MD, PhD	Medicine, Clinical Research	Dissertation Research
Del Rio, Iraida	Visiting Professor	Private Office	10%	MD, MPH	Public Health and Medicine	Research
Flores, Idhaliz	Professor	PHSU	10%	MS, PhD	Genetics and microbiology, Endometriosis	Dissertation Research

Matta, Jaime	Professor	PHSU	10%	MS, DSc, PhD	Toxicology, Clinical Cancer Research	Dissertation Research
Mejia Rivera, Luis Carlos	Visiting Professor	Merck, PR	10%	MD, PhD	Medicine, Neuropharmacology	Dissertation Research
Miranda, Edgar I	Visiting Professor	Merck, PR	10%	MS, PhD	Biochemistry	Dissertation Research
Missmer, Stacey	Visiting Professor	Brigham And Women's Hospital, Harvard University	10%	ScD	Endometriosis	Dissertation Research
Monsanto, Homero	Visiting Professor	Merck, PR	10%	PharmD, PhD	Pharmaco-economy	Dissertation Research
Montealegre, Federico	Visiting Professor	Baxalta	10%	MS, DVM, MSc, PhD	Immunology, Oncology Clinical Research	Dissertation Research
Moyá, Sandra	Visiting Professor	UPR Ponce	10%	MS, PhD	Biology	Research
Orengo, J. Javier	Visiting Professor	Castilla La Mancha U	10%	PhD	Mathematics	Research
Perez, Cynthia	Visiting Professor	UPR	10%	PhD	Biostatistics, Epidemiology	Dissertation Research
Ramos, Felix	Visiting Professor	Catholic U PR	10%	PhD , MA	Sociology	Dissertation Research
Rivera Santos, Angel	Visiting Professor	Medical Director Atlantis Medical Center	10%	UPR Mayaguez	Nephrology	Dissertation Research
Rivera, Vanessa	Associate Professor	PHSU	10%	PhD	Basic Sciences	Research
Rodriguez Orengo, Jose F.	Visiting Professor	Fundacion De Diego/ UPR	10%	PhD	Biochemistry and Clinical Research	Dissertation Research
Rosario, Ernesto	Professor	PHSU	10%	PsyD, PhD	Industrial & Organizational Psychology	Dissertation Research
Santiago, Alma	Visiting Professor	Catholic U PR	10%	PhD	Biomedical Sciences	Dissertation Research
Segarra, Alejandro	Visiting Professor	UPR Mayaguez	10%	PhD	Entomology	Research
Serrano, Adelfa	Visiting Professor	UPR-Medical Science Campus	10%	PhD	Microbiology	Research
Suarez, Edu	Visiting Professor	UPR Ponce/ PHSU	10%	PhD	Cell Biology	Dissertation Research
Varas, Nelson	Visiting Professor	UPR Ponce/ PHSU	10%	PhD	Social Work	Dissertation Research
Varcancel, Lilian	Visiting Professor	Social Work	10%	MSW, ASCW, MHSc	Sociology	Dissertation Research

**E 1-3 - Include CVs for all individuals listed in the templates above. (electronic resource file)**

Refer to **Electronic Resources File (ERF)**



**E1 -4 - If applicable, provide a narrative explanation that supplements reviewers' understanding of data in the templates. (self-study document)**

The primary faculty of the Public Health Program is formed by faculty whose principal responsibility is teaching, research, coordination of courses, and participation in program and institutional committees. The entire primary faculty has practical experience and advanced degrees in public health. Table E1.1 shows the qualifications, teaching areas, and research interests of the primary faculty.

The primary faculty of the public health program is composed of seventeen faculty members, all with preparation and experience in the public health field and their respective concentrations. Fifty-nine percent (10 of 17) of the primary faculty are female. One hundred-percent of the faculty has a doctoral degree (PhD, Dr.PH or MD), and 88% (15 of 17) also has a master's in public health or related field (MPH, MS, MEd, MBA or MBE). The Public Health Program also has the only person in Puerto Rico who is certified in International Health by the Pan American Health Organization / World Health Organization; and three of our faculty are certified as tutor of online courses by the Pan American Health Organization / World Health Organization.

In the narrative below, we briefly highlight the faculty members track specific qualifications.

**General Track Faculty**

**Dr. Vivian S Green** has a PhD in Health Services Administration (Medicine Program) from the University of Las Palmas de Gran Canaria, Spain and she is a registered dietitian with MSc from the University of Puerto Rico, School of Public Health. She has completed two fellowships, one in Social Marketing from the National Training Collaborative for Social Marketing (which includes University of South Florida, CDC and Association of American Medical Colleges); and another fellowship in Nutritional Intervention in neonates on ICU ventilation, from the University of Puerto Rico. Dr. Green is also FEMA certified by the Independent Study Program Office, Emergency Management Institute, National Emergency Training Center. She has conducted independent courses in the areas of legal and forensic epidemiology. Dr. Green is a former Nutrition Advisor of the Health Secretary of Puerto Rico. Doctor Green created, developed, and implemented the healthy nutrition Program and obesity prevention program of the Health Department in Puerto Rico, called "Salud Te Recomienda" (The Department of Health Recommends"), which received the Human Health Region II award (2004). After 9/11 she had the responsibility of designing and implementing the food security program of the Office of Biosafety of the Department of Health of Puerto Rico, as a preparedness response to potential bio- terrorist acts. Dr. Green has been the liaison of the Department of Health in Puerto Rico with federal agencies such as USDA and FDA. She has collaborated closely with the coordination office of the Pan American Health Organization (PAHO) in Puerto Rico and has been invited by PAHO as an expert in the Lung, Heart and Chronic Diseases Meeting in Washington. At the University of Las Palmas in Gran Canaria she was professor of Nutrition and Public Health of the Master's program in Didacticas Especiales en Salud ("Special Teaching in Health"); she also co-designed and was co-director of the Master's program in Nutrition and Public Health at the same university. When Dr. Green joined the PHSU Public Health Program in 2004, she was co-leader in the creation and implementation of the General, Epidemiology, and Environmental Health MPH and the Dr.PH in Epidemiology. At PHP she was also involved in the creation and implementation of the Public Health labs, and the Health Intervention Teams (Epi Aid Teams), which have had an impact in community intervention during the dengue (2007), influenza (2009), and zika (2016) epidemics. She is at present the Associate Dean of the Public Health Program of PHSU, maintains a research area of interest in vector-transmitted diseases, specifically schistosomiasis (bilharzia), and is a member of Dr.PH thesis committees, and contributes as faculty to the General master's program.

**Dr. Rafael Bredy** is a medical doctor from Venezuela with additional postdoctoral training in Clinical Research Sciences, a MScCRS, from the University of Puerto Rico. He also has a Master's Degree in Bioethics from the Pan-American Health Organization, Pontifical University Complutense of Madrid-Technological Institute of Santo Domingo consortium. Dr. Bredy is the Medical Vice-Director of the Hospital Damas in Ponce (Puerto Rico) and he oversees the Bioethics Department at the same Hospital. He also participates as Bioethics advisor of LifeLink, Organ Procurement Office for Puerto Rico and Virgin Islands. Dr. Bredy has been teaching Bioethics and Ethics in Research and Public Health Practice, cultural competence and the role of diversity in Public Health Programs in Puerto Rico (both at PHSU and UPR). Dr. Bredy has also been teaching research methodology and has worked for more than 10

years as an advisor in the design of research projects in ACGME accredited post graduate programs in southern Puerto Rico. At present Dr. Bredy is an Associate Professor and the Coordinator of the Practicum Experience.

**Dr. Brenda Soto** holds a Ph.D in Health and Exercise Sciences (Specialization Health Education and Promotion, Support areas: Health Management and Adult Education), a Master's of Science in Health Law, and a Master's in Public Health Education (Specialization: Community Services Health Education, Support area: School Health). As a health educator, she developed, implemented and evaluated education programs and activities for impoverished migrant/seasonal farm workers, their families, and underserved community members. In addition to her clinical setting experience, Dr. Soto Torres has 22 years of teaching experience at the undergraduate, graduate and professional doctors' levels (community health, public health and pharmacy). She is currently an Associate Professor at the Public Health Program of PHSU and a Researcher for the Outreach Core of the U54 PHSU Moffit Cancer Center Partnership. Dr. Soto-Torres early research has been focused on women's health, developing educational programs and interventions and is transitioning to cancer related research. Dr. Soto-Torres has presented her research at local, national and international settings on topics including gender- based violence; disordered eating behaviors, physical-nutrition and health disparities.

**Dr. Clara Isaza** got her Ph.D. in 2005 from the Biophysics Program at The Ohio State University under the mentoring of Professor Michael K. Chan. Her Doctorate research was on protein crystallography and enzymatic characterization working with bacterial oxygen sensors and M32 carboxypeptidases. From 2006 to 2008 she was an assistant professor at the Biological Sciences Program from Universidad Autónoma de Nuevo León, México. It was in México that Dr. Isaza began to work in cancer studying the effect of a natural product in the activation of apoptotic peptidases. In 2006 Dr. Isaza started to collaborate with Professor Mauricio Cabrera-Ríos from Industrial Engineering (University of Puerto Rico), developing biological data analysis tools that allow extracting additional information from publicly available databases and giving biological meaning to the results. From that collaboration Dr. Isaza became the co-leader of the Applied Optimization Group co-mentoring more than 35 undergraduate and graduate students from different academic institutions, departments, and countries. Dr. Isaza has co-advised in several Master of Sciences theses, advised undergraduate theses, and has been a member of the committee of Dr.PH dissertations. In 2015 Dr. Isaza started collaborating with the Public Health Program from Ponce Health Sciences University and in 2016 she joined the program as an Assistant Professor. As of May 2017, Dr. Isaza is a co-author in 16 papers published in refereed journals, 15 refereed congress proceedings, and 25 non-refereed conference proceedings. Research interests in Alzheimer and infectious diseases.

**Dr. Frank Fraticelli** has a Master's in Health Education from the University of Puerto Rico (1993), and a PhD in Industrial and Organizational Psychology from Pontifical Catholic University in Ponce, Puerto Rico. He has been a health professor in the Department of Education in Puerto Rico, and for more than 10 years has been a professor in health education at the University of Puerto Rico in Ponce and the Pontifical Catholic University in Ponce. At Merck & Co pharmaceutical, he was health training manager for Puerto Rico, the Caribbean, and Central America, which helped him acquire the cultural competencies for health education to diverse cultural groups. He also had the opportunity to share scientific information with the scientific speakers and key opinion leaders in the medical field, in the following areas: cardiovascular diseases, glaucoma, osteoporosis and schizophrenia/bipolar disorder. He has been Assistant Professor since January 2017 at the Public Health Program, teaching Psychosocial Aspects of Public Health. He also directs and is a member of doctoral dissertation committees of the Dr.PH in Epidemiology.

**Dr. Jose Franceschini** has a Master's in Education, Orientation, and Counseling from the Pontifical Catholic University of Puerto Rico (PCUPR) in Ponce, and a PhD in Organizational Industrial Psychology from the same university. He has been professional counselor in schools and at the PCUPR in Ponce. He was also professor in the Department of Psychology of the program GEAR UP, and supervisor of AmeriCorps \*VISTA. He offers formative workshops in different areas, for example, ethics for LGBT patients, sexting, and cyber-bullying, decision making, supervision and leadership, and conflict resolution. He has been an active member since 1985 of the Puerto Rican Association of Professional Counseling (APCP for its Spanish name), and since 2011 of the Psychological Association of Puerto Rico (APPR). In 2007 he started working as professional counselor at Ponce Health Sciences University and starting in 2016 he has been Assistant Professor in the Public Health Program, offering the Survey Questionnaire Design in Public Health: Epidemiological Perspective; Mental Health Epidemiology; Behavioral Aspects of Health Disorders courses. He is also a thesis director for Dr.PH candidates.

## Epidemiology Track Faculty

**Dr. R. Iván Iriarte** has worked in academia, teaching Epidemiology to public health and medical students and residents for more than 25 years. He is a medical doctor with formal training in General Preventive Medicine and Family Medicine. He received strong research and epidemiology training during his Robert Wood Johnson Foundation Family Medicine Research Fellowship, as well as while he was working on his Master of Science Degree in Preventive Medicine at the University of Iowa. He became Board Certified in General Preventive Medicine in 1993, which requires proficiency in both epidemiology and biostatistics and their applications to public health disease prevention and research. He was the epidemiology track coordinator for many years. He has accumulated substantial experience as a clinician, administrator, mentor, and as a clinical researcher. His association as a faculty member at Ponce Health Sciences University (formerly Ponce School of Medicine and Health Sciences) has so far lasted 30 years. During his time in the institution he has held numerous administrative positions including Assistant Dean for Admissions in the MD Program, Associate Dean for Student Affairs, Director of the Research Unit at the Department of Family Medicine, and Coordinator of the Public Health Program. His experience also includes serving in multiple advisory groups in academic as well as research and research training areas. As a regular Clinical Faculty at the institution, his academic responsibilities have included teaching courses in Family Medicine, Bioethics, Epidemiology, Biostatistics, and Complementary Medicine. Currently, he holds the academic rank of Full Professor in both the Public Health Program and the Department of Family Medicine. His research interests fall in the general fields of Preventive and Complementary Medicine. Through many years he has supervised the research ventures of trainees in residency programs at several hospitals affiliated to PHSU.

**Dr. Juan C. Orengo** has an MD from the Universidad de Navarra (Spain), an MPH from The Public Health School of the University of Puerto Rico, and a PhD in Methodology of Research from the Universidad de Las Palmas de Gran Canaria (Spain). He also holds a fellowship in Social marketing and Public Health from the USF/CDC/AAMC and a fellowship in International Health from the Pan American Health Organization/World Health Organization (PAHO/WHO). In the Health Department of Puerto Rico, he has held several positions: field epidemiologist, Director of Epidemiology, (including the system of Epidemiological Surveillance, HIV/ AIDS Surveillance, Cancer Registry, Behavior Risk Factor Surveillance System, among others), co-creator and Director of Intelligence of the Bio-Safety Program. He has been supervisor of the Officers for the Epidemiological Intelligence Service (EIS) and of the Preventive Health Public Service (PHPS) of the Centers for Disease Control in Atlanta (CDC). At the Health Service of the Canary Islands (Spain), he was the co-creator and chief of the research support unit of the Complejo Hospitalario Materno Insular de Gran Canaria. At the Universidad de Las Palmas de Gran Canaria he held the position of co-Director of the Master's Program in Public Health, and Associate Professor of Epidemiology and Biostatistics of the Medical Faculty, and at the PHSU he held the position of Director of the PHP, creating, in collaboration with Dr. Green, the MPH in Epidemiology, the MPH in Environmental Health, the Dr.PH in Epidemiology, and the Epi Aid Teams (currently denominated Public Health Intervention Teams). He has been invited professor of the Diplomate of Research Methodology of the Gorgas Institute of Panama. Dr. Orengo has held the positions of Associate Director of Clinical Research and Medical and Scientific Director of Oncology in Puerto Rico at Merck/MSD. At present he is Full Professor at PHP in PHSU, and he directs the research area concerned with Vector Borne Diseases.

**Dr. Diego E Zavala** has a PhD in Epidemiology from the University of Texas Public Health, an MSc degree in Epidemiology from Tulane University and a MSc degree in Medical Demography from the London School of Hygiene and Tropical Medicine. Dr. Zavala worked, researched and published in cancer etiological studies, surveillance systems for cancer and injury and asthma research. His current research is focused on the epidemiology of violence and he has completed an analysis of homicide deaths in Puerto Rico in collaboration with Puerto Rico's Forensic Institute. He oversaw and managed the Cancer Registry, Behavioral Risk Factor Surveillance System (BRFSS) and Telarche Registry of the Puerto Rico Health Department. He was the author of the cancer report in Vieques and reviewed reports submitted by ATSDR on environmental hazards in Vieques. He was an invited editor to a CDC's special publication on injury prevention. Dr. Zavala has directed international projects related to the violence surveillance in Africa and advised the Department of Health in Tajira (Bolivia). Dr. Zavala has vast experience working in emergency situations caused by natural events (hurricanes, floods). As member of the Human Right Organization, International Amnesty, Dr. Zavala has represented Puerto Rico in national and international meetings. At present he is the Director of the Puerto Rico Cancer Registry and Professor of epidemiology at PHSU. At PHSU he offers advanced biostatistics, data analysis, prevention of violence, and disaster management classes. He is also thesis director of several Dr.PH candidates.

**Dr. Luisa Morales** - Dr. Morales obtained her Dr.PH in Epidemiology in 2015 and since then has been working as an Assistant Professor at the Public Health Program. She has more than 8 years of experience working on cancer research and now is initiating research on Epidemiology of Autism in Puerto Rico. At the Program, she is the MPH first year coordinator, also is the Lab Coordinator of the Public Health Laboratories and oversees the development of the research component of the Program. She has coauthored and published various articles, especially in the cancer field. She offers the Advanced Epidemiology and Cancer Epidemiology courses at MPH and Dr.PH level.

**Dr. Melissa Marzan** holds an MPH from the University of Puerto Rico, and a Dr.PH in Epidemiology from PHSU. She is also certified in Public Health by the National Board of Health Examiners. She is an active member since 2011 of the American Public Health Association and of the International AIDS Society. She has been Assistant Researcher and conducted research in the areas of HIV/AIDS, STD, stigma, and health in teens at the University of Puerto Rico. At UPR she was Principal Investigator of the MECA: Evaluando Actitudes Estigmatizantes (Evaluating Stigmatizing Attitudes) Project. She has experience as field epidemiologist, having been Field Director in the AIDS PACT Surveillance project of the Health Department of Puerto Rico, and epidemiologist at Caduceous Healthcare, Inc at the Quarantine Station in San Juan (Puerto Rico). She has worked as ethnographer at the Health Department in Puerto Rico. She joined PHSU in 2013 as Assistant Professor in the Psychology Program, and in 2017 joined PHP. She has offered the following courses at PHP: Introduction to Biostatistics, Statistical Methods for Epidemiologists, Epidemiology of Infectious Diseases, and Survey Questionnaire Design in Public Health-Epidemiological Perspective. She directs and is a member of several thesis committees of Dr.PH candidates and is the coordinator of the MPH Epidemiology track.

**Dr. Ruby Serrano** has a Dr.PH in Public Health (Environmental Health) and an MSc degree in Epidemiology, both from the University of Puerto Rico. Dr. Serrano has worked, researched and published on the topic of chronic conditions in Puerto Rico, using the Puerto Rico Behavioral Risk Factor Surveillance System (BRFSS) which she directs. Dr. Serrano has been coordinator of Surveillance at the Renal Council of Puerto Rico. Dr. Serrano is an active member of the American Public Health Association and the Council of State and Territories Epidemiologists. She was professor at the Metropolitan University teaching and designing courses in environmental health. At PHSU, she teaches doctoral level biostatistics courses and mentors Dr.PH dissertation students.

**Dr. Jessica Irizarry** began working as Assistant Professor in the Public Health Program of the PHSU in 2015, where she has given courses on Biostatistics for Epidemiologists at the doctoral level and the courses on Communication in Health and Methodology of Research at master's level. She is also the Coordinator of MPH's General Track. He has a bachelor's degree in Sciences with a specialization in Biology from the University of PR, Mayagüez Campus, a Master of Sciences with specialization in Epidemiology from the University of PR, Medical Sciences Campus, and a PhD in Public Health specializing in Epidemiology from Walden's University. Her main research interests include the epidemiology and surveillance of chronic diseases, and the social determinants of health and health disparities. Starting in 2009, she has been working with the Puerto Rico Department of Health as an epidemiologist and evaluator on different projects and programs. She currently serves as director of the Division of Prevention and Control of Chronic Diseases of the Department of Health. He has lectured at local, national and international conferences. It is affiliated with the Alliance for the Control of Chronic Diseases in Puerto Rico, the American Public Health Association, the Council of State and Territorial Epidemiologists, the Network of the Americas for Chronic Disease Surveillance and the National Education Program on Diabetes.

**Dr. Iris Martinez** holds a doctorate in Public Health with a specialization in Epidemiology and a master's in public health from Ponce Health Sciences University. She has experience working in various public and private areas in health promotion and prevention programs aimed at high-risk populations such as: the penitentiary population, the indigent medical population regarding the health insurance Plans of the government of Puerto Rico, and university populations regarding prevention of sexually transmitted diseases. In the year 2017 she joined the Public Health Program where she offers courses in prevention and health education and is developing a research area in hydroponic agriculture.

## Environmental Health Faculty

**Dr. Mayra Roubert** has a MS and a Dr.PH in Environmental Health from the School of Public Health at the University of Puerto Rico, Medical Sciences Campus. During her academic training she obtained expertise primarily in water quality and non-hazardous waste management. She has experience as a bio-molecular and environmental laboratory technician. Beginning in 1995 she has taught environmental sciences at the Pontifical Catholic University of Puerto Rico at the bachelor and graduate degree levels. At PHSU PHP she teaches courses such as: Environmental Problems, Water Quality, Solid Wastes, Microbiology, Environmental Health, Environmental Laboratory Practices, and Industrial Hygiene, among others. Since 2002, she has been mentoring MPH and Dr.PH students interested in the field of environmental health research. In 2007, as an Associate Professor, she was appointed environmental health track coordinator.

**Dr. Adalberto Bosque** received his PhD in Environmental Science and an MBA from the Turabo University, Puerto Rico and, a BS in Chemical Engineering from the University of Puerto Rico at Mayagüez. He has 27 years of experience in the environmental field, working with the US Environmental Protection Agency (EPA). He has ample experience in all areas of project and program management including: Planning, budgeting, scheduling, personnel administration, reporting, economic evaluations, contract administration, interagency relations, team work and, community involvement activities. Dr. Bosque is a Registered Environmental Manager (REM), a Certified Environmental Auditor (CEA) and, a Certified Environmental and Safety Compliance Officer (CESCO) from the National Registry of Environmental Professionals. He brings this extensive practical environmental health experience to his classroom teaching and mentoring of Dr.PH students interested in environmental health epidemiology.

**Dr. Yashira Marie Sánchez Colón** earned her bachelor's Degree in Chemistry from the University of Puerto Rico at Cayey in 2006, and she earned both a Master's Degree in Environmental Analysis and a Ph.D. in Environmental Sciences from Universidad del Turabo, Puerto Rico, in 2012 and 2015, respectively. Starting in 2016, Dr. Sánchez-Colón has been an Assistant Professor in the Public Health Program and offers the courses of Water Quality Measurements, Environmental Toxicology and Environmental Laboratory. Prior to this position, she was Chemistry Instructor at Universidad del Turabo, University of Puerto Rico at Cayey and Interamerican University of Puerto Rico. She is member of the Puerto Rico College of Chemists and the American Chemical Society. Dr. Sánchez-Colón's interests include the monitoring of aquatic ecosystems, especially nutrient concentrations and eutrophication in freshwater wetlands and issues related to both the Clean Water Act and Drinking Water Act. The prevention and assessment of health effects from environmental exposures are focal areas of Dr. Sánchez' ongoing research interests

The Non-Primary Instructional Faculty Regularly Involved in Instruction is formed by 55 faculty members; 23 (42%) involved with teaching, and 32 (58%) involved as mentors and members of committees related to the Epidemiology Dr.PH. Of the 55 faculty members, 12 (22%) come from other departments or areas within PHSU, specifically 23% (5 of 23) of the secondary faculty related to teaching and 22% (7 of 32) of the mentors and members of committees related to the Dr.PH. Seventy-eight percent (42 of 55) of the faculty come from other institutions, for example, the Food and Drug Administration, University of Puerto Rico, Environmental Protection Agency, Emory University, CDC, Johns Hopkins University, and pharmaceutical companies, representing a variety in the field of public health.

Ninety-five percent (52 of 55) of the secondary faculty hold a doctoral degree (PhD, EdD, MD or JD), and the three without a doctorate have a masters ((one a MSW, MHSc, one an MPH, one an MS). The areas of expertise of the secondary faculty include environmental health, epidemiology, health systems administration, health policies, and biostatistics. This variety of formation and experiences exposes the students of the PHP to the critical thinking that comes from the diverse practice of public health.

**E1 -5 - If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)**

**Strengths**

- All primary faculty has non-academic previous experience having worked in different areas of public health, from research at pharmaceutical companies, to directing public health programs at the state level, and working in federal public health programs.
- All primary faculty hold a doctoral degree in various disciplines within the health profession.
- The Non-Primary Instructional Faculty regularly involved in instruction have the qualifications and experience necessary in the field of public health.
- The PHP faculty is in continuous professional development, participating in specialized trainings, conferences and congresses.

**Weaknesses**

- To hire and retain more faculty with the qualifications, experience, and skills necessary in public health, and for those to have developed in both academic and non-academic environments, remains a challenge.

**Plans**

- As a way of attracting senior faculty, RCMI funds are being assigned to recruiting efforts.
- A roster that includes key professionals is being created. The goal is to develop a public health talent bank of professionals who fulfill our recruitment needs.

## E2. Integration of Faculty with Practice Experience

**E 2- 1 - Describe the manner in which the public health faculty complement integrates perspectives from the field of practice, including information on appointment tracks for practitioners, if applicable. Faculty with significant practice experience outside of that which is typically associated with an academic career should also be identified. (self-study document)**

The primary and secondary faculty of the Public Health program have vast experience in the field of public health. One-hundred percent of the faculty, before their focus on academia, has worked in different areas of public health, such as health departments, federal and state agencies, private corporations, research, and nongovernmental officials (NGOs). The same applies to the secondary faculty. (See tables E1.2 y E1.2b).

We are including several examples of the activities that faculty at PHP have been involved in:

**Dr Vivian Green** teaches the "Food Safety" class (MPH 7064), in this class Dr Green educates students with examples from the real world, with her experience of almost thirty years as nutritionist and dietitian, as well as adviser to the Secretary of Health of Puerto Rico on nutrition issues and responsible for the Food Safety program after the attacks of September 11, 2001. The examples used in relation of the theme of critical points are obtained from the revisions made by Dr Green in real cases of outbreak of gastroenteritis to determine the cause, students should evaluate real-world cases related to these issues, in turn should make a poster and a presentation of a topic related to food safety. Dr Green created and implemented a program at the Puerto Rican level to educate the population about nutrition and food safety, which integrated the ecological model, Dr Green explains this model to the students so that they understand the barriers and opportunities of this type of programs. Dr Green, in turn, mainly contributes to the students the importance of food safety in hospitalized populations with real cases of their hospital experience with pediatric patients diagnosed with AIDS and patients admitted to the pediatric ICU. Dr Green has developed with Dr. Orengo the course "International Health and Emerging and Reemerging Diseases" and the Journal Club "Vector Borne Diseases" from the line of research that Dr Green has about bilharzia (scistosomiasis), students will have the opportunity to interact with the world of vectors directly (mosquitoes, sandfly, snails and ticks). Dr Green has contributed to the PHP thanks to her experience, among other things, with new forms of evaluation and control of the issues, such as root cause evaluation, Corrective and Preventive Actions (CAPA), and other quality management initiatives

**Dr. Adalberto Bosque** has experience with the US Environmental Protection Agency (USEPA) working as a Projects Manager as well as an On-Scene Coordinator in the Superfund Program for 33 years. He has been involved with the RCRA, Air, Water and CERCLA programs and regulations, Brownfield, Environmental Justice and Science Consortium. Students of the MPH 7444: Air & Hazardous Pollutants Exposure Assessment as well as the MPH7434: Risk Assessment Courses are benefits from Dr. Bosque's knowledges in these topics. Real cases as well as USEPA, OSHA, ATSDR, DOT, and PR Environmental Quality Board policies and regulations are discussing with the students. MPH students as well as DrPH students of Dr. Bosque has conducted researches in the air, water and solid waste field. Dr. Bosque experiences and knowledges in the Health and Safety field are share with its students. Students of the MPH 7701 Industrial Hygiene course are benefits with Dr. Bosque's knowledges and certifications. Dr. Bosque successfully offered and facilitated the FA/CPR/AED as well as the OSHA 30 hrs. Occupational and Safety Standard courses in the General and Construction Industries for its Environmental Hygiene Course students.

**Dr Frank Fraticelli** offers the courses MPH 5101 ("Fundamentals of Public Health") and MPH 5201. The practical experience gained as an educator in both the Department of Education and the pharmaceutical industry (here also as a sales representative) has served to enrich the program and the curriculum. In general and similar to how it is done in the area of sales of pharmaceutical products, the public health professional should know what to ask to meet the client's needs, in the same way, the technique of the question should be implanted in the curriculum for in this way to be able to explore what the student knows and verify their level of understanding in the subject to be discussed. It is necessary to look for the way in which the student analyzes the problems from a healthy and holistic perspective, technique that is used in the training in the sales area, to maximize the visit to the client. Dr. Fraticelli also applies in their classes qualitative knowledge gained from health professionals who have worked as an employee of the pharmaceutical

industry, which is part of what students will experience when they graduate and begin their working lives. You should always share with your colleagues what is called "sharing the best practices", this helps at program to explore what has worked for others and have been successful

**Dr Ivan Iriarte** works considerable time with medical residents in an academic hospital, involved in the design, data collection and analysis of clinical and epidemiological research projects. Data and results from these studies are used as examples for discussion in class, to demonstrate principles of interpretation of data. (MPH-5103 Introduction to Epidemiology; MPH-6202 Inferential Biostatistics).

**Dr Jessica Irizarry** works as consultant of chronic disease epidemiology at the Puerto Rico Department of Health, providing support to the programs under the Chronic Disease Prevention and Control Division. She has served as certified trainer in different PAHO and CDC trainings. As part of her responsibilities, she also manages federal grants and programs. She integrates in the classes of "Sampling" and "Research Methods" her experience in the Department of Health by providing to the student's case studies, tools and resources, examples of situations they could face in the future, among other learning experiences. In addition, Dr. Irizarry facilitates the MPH students' practical experience at the Chronic Disease Division and other programs under the Health Promotion Secretariat. Dr. Irizarry has provided to the Public Health Program the opportunity to work in collaboration with different partners and stakeholders in the coordination of training activities for the faculty, students, health professionals, and community members.

**Dr. Clara Isaza** teaches the course "Scientific Basis for Health Interventions" (MPH 5300) as well as the "Scientific Writing" (MPH 6202) class for the MPH program. Her experience as a current interdisciplinary basic science researcher allows for discussion of public health topics from diverse angles and motivates students to keep a critical open mind. For both classes, students are required to keep up to date in health topics of their interest, read critically scientific reports, and express educated opinions based on scientific facts. Her experience writing (to date Dr. Isaza is a coauthor in 18 papers published in Refereed Journals, 15 Refereed Congress Proceedings, and 25 Non-Refereed Conference Proceedings) allows Dr Isaza to teach the real life to their students. These classes promote discussion of ideas and promote their report through oral and writing presentations.

**Dra. Iris Martínez** has experience in vulnerable high-risk populations, having worked in correctional and rehabilitation centers as a health educator in the Department of Correction and Rehabilitation of Puerto Rico, in turn, managed the databases and constructed the necessary statistics information for their function as a health educator, presenting the information in the relevant forums. She uses her experience of databases and examples of her prison work experience in her biostatistics course (MPH 5102). Dr. Martinez has also worked as a health educator in the medical services company Humana and in the course of health promotion and disease prevention (MPH 660) uses her academic training as a health educator and her work experience in both Department of Correction as in Humana Health Plans to develop and implement educational interventions with the students in real scenarios with vulnerable populations, providing them with community-based educational experiences.

**Dr Melissa Marzan-Rodriguez** as a post-doctoral research fellow in implementation science focus in HIV prevention interventions, she applied the knowledge acquired in workshops and trainings of new biostatistical methods in the course MPH 5212 (Biostatistics for Epidemiologist). For example, the perform of statistical analysis in community clinical trials to measure viral load suppression at the community level. All the HIV networks at the national and international level (e.g., ATN, NHBS, IAS) is incorporated in the MPH 7753 (Epidemiology of Infectious Diseases) as an information sources of new methodologies for HIV prevention (such as: Treatment as Prevention Approach). This is a novel approach who is now translate it to the epidemiology of infectious diseases field in the following areas: HPV, HCV, TB, among others infectious diseases. Also, during She was the epidemiologist for the CDC San Juan Quarantine Station, the students of MPH 7753 develop and/or reviewed the standard operational procedures manuals (SOP) for quarantinable diseases (at the federal, state and local levels). This practical exercise is now a core part of the MPH 7753 course.

**Dr. Luisa Morales** has experience in research activities especially within breast cancer area where she has various publications and conference presentations among them: Estrogen Receptor Expression Is Associated with DNA Repair Capacity in Breast Cancer, Cytotoxicity and Genotoxicity Assessment of Sandalwood Essential Oil in Human Breast Cell Lines MCF-7 and MCF-10A and Factors associated with Breast Cancer in Puerto Rican women among others. Within the past 3 years she is switching her research line to other areas such as autism. She has been



collaborating in other research lines involving Bioinformatics with a recent publication in the area Identification of potential biomarkers from microarray experiments using multiple criteria optimization. She participates and collaborates offering conferences about Research in Public Health. Has served as mentor of PH students and UPR volunteer and interns. She actively uses her research experience in the classroom using examples and showing the students real life results in their classes. She provides workshops to students on references organization using redcap and actively participates in activities involving students such as the Public Health Association. Also serves as contact with an autism intervention center CEPA, in Ponce PR, where PH students make their practices and participates in research.

**Dr Juan C. Orengo** teaches the courses "Research Methods" (DPH 6010) and with Dr Morales coordinates the course "Research Methods Applied" (DPH 6011). In the course DPH 6010 Dr. Orengo presents to their students examples of the real-world research studies using publications in which he is an author, for example for the topic of design case-control uses the article "Relationship between rheumatoid arthritis and Mycoplasma pneumoniae : a case-control study. Rheumatology (Oxford). 2005 Jul; 44 (7): 912-4. Epub 2005 Apr 6 ". Dr Orengo has experience in evaluating research projects in order to find possible errors and limitations of the studies, therefore their students assess published articles with some recognized error and ask them to look for the error and justify it. Due to Dr Orengo's experience of almost thirty years of designing epidemiological and research studies, students can know all the angles of the research methodology, thus asking students to design and present a study based on a health problem. public of the real world. In the course DPH 6011 Dr. Orengo teaches his students the techniques of research in the study of vectors and gives them examples and real situations so that the student before the hypothetical situations that Dr. Orengo puts them is developing their creative capacity, each The student finishes the course with a small project which is presented at the annual conference of the PHSU, so Dr. Orengo teaches them how to communicate the results of an investigation. Together with Dr Green he has designed the course "International Health and Emerging and Reemerging Diseases" and the Journal Club "Vector Borne Diseases". The course and the Journal are practical for students to learn the techniques that Dr Orengo and Dr Green use in their research.

**Dr Mayra L. Roubert Rivera** had been an environmental health professional for more than 27 years in the environmental field including microbiology, asbestos and wet chemistry laboratory activities, Non-PRASA and wastewater treatment systems federal regulation, food safety, occupational health and Environmental Impact Assessment (EIA's) compliance and supervision. This practical experience, along with certifications, proposals development and attendance to workshops or public health conferences at EPA, APHA, NIH, among others, maintain her update in this field that it is continuously changing and developing new state of the art technologies for compliance with state and federal acts. Also, she had been for more than 17 years applying my practical experience and professional development activities to help underrepresented communities in Puerto Rico in identifying and understand environmental health problems at their neighborhoods to prevent and control diseases. These community based environmental epidemiology research activities had been the backbone of some of the courses She teaches. She engages their students in the whole process including the research study and instruments designing, data recollection and health interventions. The students, community members and faculty colleagues working together as a team is an attribute we are fully engage and encourage, but also had been in the past the base for some important environmental justice project in Puerto Rico

**Dra. Yashira Sánchez** offers the courses of MPH 7454: Water Quality Measurements, MPH 7024: Environmental Toxicology and MPH7484: Environmental Laboratory. The practical experience obtained as an educator in the Department of Education has helped her to use different teaching methods to transmit information to students and use assessment methods to know how effective the teaching-learning process has been. In addition, this experience has helped her to start programming a series of workshops on teaching techniques for professors of the Public Health Program, which will be offered by Elizabeth Rivera, the coordinator of the teaching and curriculum development of the PHSU. Dr. Sánchez has also worked on the General Chemistry and Fundamentals of Environmental Sciences course in other universities in Puerto Rico (University of Puerto Rico-Cayey, Universidad del Turabo and Universidad Interamericana de Puerto Rico), this experience has helped her to integrate and explain concepts in the classes offered in PHP, related to chemicals in the environment, global warming and its effects on natural resources and human health. Dr. Sanchez also applies during Environmental Laboratory, the same practices that are carried out in a chemical laboratory, in the sense that some protocols have to be fulfilled from the moment the sample is taken until it is analyzed

**Dr. Juan A. Santiago-Cornier** is a clinical and molecular geneticist who has been involved in both clinical and basic sciences research for the past 22 years. His research focus now is on genetic epidemiology in the Puerto Rican population and his clinical setting becomes a source to identify genetic epidemiology topics, research and practice to our students. He has participated as thesis mentor for the Public Health doctoral program and currently participate as lecturer and researcher. Dr. Santiago Cornier has also participate in the curricular design of the courses her has been assigned including Genetic Epidemiology, Grant Writing and Scientific Writing, applying his knowledges and skills as the associate editor of the [Medicine and Health] journal. Public Health program student also rotate with him both at the clinical genetics practice and the Clinical Research Center he directs at San Jorge Children's Hospital.

**Dr. Serrano-Rodriguez** is the PI of the grant and the Director of Puerto Rico-BRFSS for the past thirteen years. Chronic Epidemiology, Biostatistics for Epidemiologists and Data Analysis were some of the courses she teaches in the last years. In those courses, which she shares and integrate her experiences about Chronic Diseases epidemiology, surveillance and data analysis which comes for her current line of work and previous experiences in Epidemiology. Recently, she wrote in collaboration with Dr. Jessica Irizarry a grant project for Puerto Rico Department of Health. The proposed project related with Child Asthma in Puerto Rico was accepted and it start in September 2018. In addition, she shares her experience in Environmental epidemiology due her other area of interest and expertise. For example, she wrote in May 2018 a grant for a Project to develop a Post-Disaster Carbon Monoxide Surveillance System in Puerto Rico. This grant was accepted and the Project, which she is going to be the director, starts in September 2018.

**Dr. Brenda Soto-Torres'** practical experience includes being a health educator at a Migrant Health Center and over 23 years in academia. Her current courses are Planning and Evaluation in Public Health and Introduction to Health Education. Thus, she uses examples from her experience in a clinical setting during her courses. These examples include health care setting interactions, rural health issues, individual and group patient education, development of patient education materials, and educational strategies for different types of audiences, among others. Dr. Soto-Torres' networking in community activities has led to opportunities for community interventions for her students. In addition, Dr. Soto-Torres provides students with opportunities to participate in her research activities in both volunteer and paid-positions, where students can apply their research methodology skills.

**Dr Diego Zavala** is the professor o had been the professor of the following courses MPH 7043 Injury Epidemiology, his experience in developing surveillance systems for injuries is integrated into this class by working with students in developing electronic surveillance questionnaires using EpiInfo; MPH 5104 Disaster Epidemiology, Dr Zavala practical experience as a volunteer of the American Red Cross in the humanitarian response to disasters is integrated into this class by introducing students to the ARC and a field trip where they have the opportunity to learn about the ARC activities and the possibility to join as a volunteer. In addition, students in this class have a guest presentation from CDC's disaster experts. Students also prepare a disaster preparedness report for a selected county in Puerto Rico; DPH 7002 Advanced Statistics and DPH 7047 Epi Data Analysis, his experience as director of the Puerto Rico Central Cancer Registry provides him with an opportunity to integrate into these courses practical applications of data analysis. Students are assigned into groups to analyze data sets from PRCCR and provide reports in scientific format.

**E2 -2 - If applicable, assess strengths and weaknesses related to this criterion and plan for improvement in this area. (self-study document)**

**Strengths**

- The faculty of PHP, both primary and secondary, have the skills and knowledge in public health necessary to participate in the formation of outstanding public health students in PHSU PHP.
- Now the faculty of the PHP fulfills functions related to different areas of public health, contributing to the state of the art of public health teaching and practice.

**Weaknesses**

- It is a constant challenge to find new academics that maintain the same level of excellence in public health teaching as the present faculty of the Program.

**Plans**

- The creation of a “talent bank” in public health, including both Puerto Rico and off-island candidates, will help the PHP maintain excellence in its teaching faculty.

### **E3. Faculty Instructional Effectiveness**

**E3.1 - Describe the means through which the program ensures that faculty are informed and maintain currency in their areas of instructional responsibility. The description must address both primary instructional and non-primary instructional faculty and should provide examples as relevant.**

The Public Health Program adheres to the collected rules and regulations promulgated by the Ponce Health Sciences University (PHSU). Policies governing recruitment, retention and promotion of university are outlined in detail in the PHSU Faculty Handbook (Resource File). All Public Health Program faculty members must follow the rules and regulations set forth by this document. Each new faculty member is given this handbook and different policies when they are hired. These policies are contingency Plans, internet user policy, and employee agreement policy; wireless network policy, security manual, discrimination policy and domestic violence. The protocol must be read and signed by incoming faculty.

When the new faculty member is hired, the Associate Dean specifies which courses the faculty member will teach and when. The job description details the responsibilities and functions of the faculty member within the Public Health Program, and their academic load. This document is signed by the faculty member and the Associate Dean, and one copy is kept in the faculty member's file in the Human Resources office.

Before the beginning of every academic year, the curriculum committee prepares a "navigator" of all the courses that will be offered within the MPH and Dr.PH that year. Each course is assigned to the faculty member. The faculty is informed of the courses they will be teaching that year during a staff meeting and using email as a backup. If there should be a change for any reason the faculty is informed.

Primary and non-primary faculty participates in conferences and courses related to their area of expertise. Some examples are:

- a) Dr. Clara Isaza: Dr. Isaza is responsible for the "Health Disparities" course, and in order to stay up to date, took the Health Disparities: A translational Research Approach course, and the 2018 Health Disparities Research Institute (HDRI – NIMHD). In terms of her research area, Dr. Isaza has participated in the Bioinformatics conferences that Puerto Rico Science, Technology, and Research Trust has offered, and participated in the NSF BIO 2017 I-Corps Bio-Entrepreneurship Workshop in San Diego.
- b) Dr Adalberto Bosque: Dr. Bosque is the coordinator of the Environmental Health specialty at PHP, and participated in the Occupational Safety and Health Administration (OSHA) course in order to get certified as an instructor in occupational health in the workplace. He is the person responsible for the certification of Environmental Health MPH in occupational workplace safety specialists.
- c) Dr Juan C. Orengo: Dr. Orengo is the DrPH responsible for the "Research Methods" (DPH 6010) and the Research Methods Apply (DPH 6011) courses For this reason he was a student in the "Advanced Methods in Patient Centered Comparative Effectiveness" course offered by the Research. Institute for Clinical Research Education at the University of Pittsburgh. Dr. Orengo was a student of the Edmundo Granda Ugalde Leaders in International Health Program (Panamerican Health Organization / World Health Organization), to be fully prepared in his role as the MPH professor responsible for the "International Health and Emerging and Reemerging Diseases course.
- d) Dr Rafael Bredy: Dr. Bredy stays up to date in Bioethics by participating in the Ethics course offered by Colegio de Médicos de Puerto Rico (Puerto Rico College of Physicians). He is also a member of the American Society of Bioethics and Humanism (ASBH) and of the Federación Latinoamericana de Bioética (Latin American Bioethics Federation-FELAIBE).

- e) Dr Juan A. Santiago-Cornier: At present Dr Santiago-Cornier offers the “Scientific Writing” course, and supervises doctoral students in the Practicum and Dissertation. Dr. Santiago-Cornier is the Associate Editor of the Puerto Rican Journal of Medicine and Public Health (Medicina y Salud Publica), in this way maintaining his expertise in writing. He is also co-author of several scientific articles. Dr. Santiago-Cornier stays active in clinical research. As an example, he is the PI of the “Morquio A Registry (MARS). Natural History of Disease registry. Biomarin.(10 year study).”

**E3-2 - Describe the program's procedures for evaluating faculty instructional effectiveness. Include a description of the processes used for student course evaluations and peer evaluations, if applicable.**

In Table B5.2 we present the objectives and indicators to measure the quality and improvements of the faculty during the last three years. Some objectives and indicators that were established previously have been modified and other new ones have been created to adjust to the PHP and PHSU as they develop.

The research component is evaluated through various objectives and indicators, for example, an increase in the number of obtained grants, the number of published articles, or the amount of independent research. These indicators help to measure the impact the faculty and the PHP program have within and outside PHSU. The number of projects submitted as grant proposals has increased during the last three years, encompassing fields of study in public health that were not previously considered: environmental health, relationship between infectious and neurodegenerative diseases, autism and environmental factors (including genetic factors), vector-transmitted diseases, surveillance and health determinants. The number of submitted journal articles has increased and held steady during 2015-2017. Research development plans will help reach a satisfactory increase in the established indicators and objectives.

To measure academic excellence, we use reaching competencies and skills that the student develops during the MPH or Dr.PH, and which will be crucial for their job success. We can evaluate the acquired competencies in Dr.PH students before the doctoral dissertation using the Comprehensive Exam, and for the MPH and until 2016-2017 we evaluated with the Capstone. Starting with academic year 2017-2018 the MPH students are evaluated using their comprehensive exam. The inclusion of students in research projects, and the availability of mentors so the students can begin a research project early on, strengthens the competencies acquired by the students. The students evaluate the courses once they have finished taking them. This is an independent and immediate measure of the quality of the professor; it is done through Moodle and it is anonymous. The Associate Dean evaluates the results with the purpose of gauging any need for improvement. The PHP can in this way individually evaluate the quality of faculty as educators, and their effectiveness in fulfilling the objectives of the course they offer. There is another way to measure the faculty and program's quality in a general way, and it is using the exit interview. This is a questionnaire filled in by the student when they are a candidate for graduation. In this way PHSU and PHP can find out the perceptions and concerns of the student as related to facilities, administrative component, faculty, research, acquired knowledge, services to students, institutional policies, problems encountered, and the own personal experiences of the student. The questionnaire is analyzed in the office of Student Affairs.

A new peer evaluation process has been under assessment and will be discussed with PHP faculty. The plan is to begin developing and implementing it in the 2018-19 academic year.

The results for these evaluations have been very positive during these years. The faculty that obtained a value of less than 3 out of 5 in their course evaluation received training on educational techniques and how to put them in practice, and one hundred percent of them showed improvement. For academic year 2016-2017 the entire PHP faculty received the same training to go "back to the basics". Faculty have been evaluated annually by the Associate Dean beginning in academic year 2015-2016 based on the teaching, research, and service components (Resource file). Each faculty member decided which weight to give of the components, with a minimum weight of 10%. The other components don't have a minimum value, so a faculty member can be only researcher, only teach, or a combination of both.

The faculty of the PHP has been incorporating new teaching technologies in the courses they offer. Full time faculty use Moodle and have added flipped class and clickers, which allow them to test with the Exam Soft application. They have also been recording their classes, so the student has them available whenever they need to study or review any time they need them. There were two courses offered through distance education in academic year 2016-2017, using WebEx on real time, because two of our secondary faculty live in Baltimore (they are full time employees of the FDA). The students evaluated the courses in a very positive light. At present PHSU does not count with the infrastructure necessary to offer complete courses online and there are not policies in place that we can follow.

**E3-3- Describe available university and programmatic support for continuous improvement in faculty's instructional roles. Provide three to five examples of school or program involvement in or use of these resources. The description must address both primary instructional faculty and non-primary instructional faculty.**

PHP and PHSU support the development and improvement of the faculty in teaching, research, and service. This is true both for primary and non-instructional secondary faculty. The assessment for needs for development and improvement are obtained through: 1) annual work Plans, in which the faculty specify their objectives and the development needs they have identified in any of the instructional components, 2) direct dialogue with the Associate Dean, letting her know of the needs, which can be specific for a certain situation (laboratory techniques, technology education), 3) identifying the deficiencies, skills and/or knowledge the faculty member may have and which are revealed to the curriculum committee, in the trimester evaluation, or exit interview, and which need to be addressed

The PHP and PHSU evaluate which is the best strategy and activities for improvement and development according to the needs of the faculty. The primary and non-primary instructional faculty are invited to the faculty development activities.

The support programs related to teaching or the use of innovative technologies are offered or coordinated by Dr. Elizabeth Rivera, the Dean of Curriculum. The courses offered by her office are essential so that all faculty are aligned with the implementation of new educational technologies which are or will be implemented at PHSU. The activities that have been offered in the last three years include:

- Use of the RedCap program. This program's objective is that questionnaires or data banks created by students or faculty in the research component should be created and managed by this system. This will allow better quality of the information, increase the security of the information, and its accessibility to researchers.
- Using recent technologies such as clickers and Exam Soft. Clickers allow the asking of questions to the students anonymously, which increases participation by students, and allows the faculty to know, in a systematic and constant way, if the students understand the material covered. The use of clickers allows adjusting the class emphasis as it is given, and for the addition of reviews or refreshers of material already covered. Exam Soft not only allows for the making of an exam with direct ties with the objectives and competencies of the course, but also lets us know once the exam is over, which students are at risk and which objectives and competencies are not met. Faculty members can also find out the discrimination capacity of each question asked, so they can improve the way to express a question. This tool gives immediate results.
- Creation of objectives and indicator of courses. The creation of SMART objectives requires that the faculty member has the skills and knowledge necessary to produce them. Objectives are tied into the activities to fulfill program's competencies. Dr. Elizabeth Rivera has overseen faculty development in these areas. She has a doctorate in Education in Curriculum and Teaching and is part of non-primary instructional faculty.
- Grantsmanship is important in the research arena. This need has been covered in several ways, including traditional and online courses. Dr. Roubert and Dr. Soto participated in a course in Colorado in 2016; and when they came back they shared what they learned with the rest of the faculty. Using online technologies, the Puerto Rico Clinical Translational Research Consortium (PRCTRC), organizes a course yearly, with the duration of one trimester, with the goal that the students attending finish the course with a written proposal. The course is offered to the PHP faculty, both primary and non-primary instructional faculty. Interested faculty applies for registration or the Associate Dean may invite any faculty member to attend. Participants in this course include Dr. Clara Isaza, Dr. Frank Fraticelli, and Dr. Yashira Sanchez.

- New research methods are always being developed, and to maintain PHP and the institution at state of the art levels, the faculty were offered the opportunity to participate in the distance programs offered by the Institute for Clinical Research of the University of Pittsburgh. Duration of the programs is approximately three months. Dr. Brenda Soto and Dr. Juan C. Orengo participated in the Fundamentals of Patient Centered Comparative Effectiveness Research (PC-CER) program, as well as Advanced PC-CER.
- The development of knowledge in the different public health areas is extremely important, and this includes international and global health. The Pan American Health Organization/World Health Organization (PAHO/WHO) annually organizes the Edmundo Granda Ugalde Program of International Health Leaders, a competitive program in which only one of every 5 or 6 applicants is admitted. Dr. Juan C Orengo applied for admission in the year 2016 and he was selected. The course had a duration of one year and ended with the presentation of a project of national and international interest. In his case it was the presentation of an “Entomological and molecular surveillance system based in the entomologist citizen”. After this course, exam, and presentation, Dr Juan C. Orengo became the only public health professional to be certified in International Health in Puerto Rico.
- Other research or teaching needs are covered by the workforce development program that is coordinated Dr. Rafael Bredy. This program is open to PHP, PHSU, and other institutions.



**E3 -4 - Describe the role of evaluations of instructional effectiveness in decisions about faculty advancement.**

Individual evaluations done by the students every trimester is discussed between the Associate Dean and the faculty. If the evaluation shows any deficiency on the part of the faculty, a Plans is designed so that the faculty member can acquire the skills or knowledge necessary. The annual evaluations that the Associate Dean performs, the instructional capacity of the faculty is evaluated in terms of the information submitted, for example, innovative technology the faculty use, creation of books or CDs for teaching, new syllabi they have developed, etc. All will be weighted in the final evaluation of the faculty and will also be used in any evaluation for promotion purposes.

**E3 -5 - Select at least three indicators, with one from each of the listed categories that are meaningful to the program and relate to instructional quality. Describe the program’s approach and progress over the last three years for each of the chosen indicators. In addition to at least three from the lists that follow, the program may add indicators that are significant to its own mission and context.**

During the last three years 100% of the faculty who needed to be re-certified (medical doctors, chemists, nutritionists, CPH, environmental) has done so. In terms of student satisfaction, 90% is satisfied. In 2016-2017 a “back to basics” training was offered to the faculty in its entirety. There has been a substantial increase in the courses that include a community-based project, in parallel with the number of projects that are taking place in the communities.

In the Public Health Program, community-based integration projects in master and doctoral courses as a tool to integration of concepts are growing. A target of 20% was established to measure this effort. This was a conservative target number at the time it was established. However, the past three years of experience presented a different scenario. This scenario makes us to reconsider the establishment of a new target or baseline for academic year 2019-2020.

**Table E3-1**

<b>Outcome Measures for Faculty Research and Scholarly Activities</b>				
<b>Outcome Measure</b>	<b>Target</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>
Faculty maintenance of relevant professional credentials or certifications that require continuing education	100%	100%	100%	100%
Student satisfaction with instructional quality	100% between 3-5	95%	87% <sup>00</sup>	90%
Courses that integrate community-based projects	20%	50%	80%	75%

**E3 – 6 - If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.**

**Strengths**

- The PHSU has a Faculty Handbook that incorporates the policies, procedures, and operational guidelines related to the faculty.
- The Public Health Program conforms to the policies and procedures defined in this institutional manual.
- PHSU has established, through our Curriculum Dean, Dr Elizabeth Rivera, a faculty development program directed at improving faculty skills in the areas of teaching, curriculum, educational technology and research.
- Faculty members are evaluated using well-defined criteria related to expected competencies. The evaluation process uses information obtained from different sources of data, including student questionnaires, research output, and participation in several other activities. The results of faculty evaluations are used for the process of faculty promotion.
- The main opportunities for faculty development have been internal training in course and syllabi design, use of the Moodle platform, distance learning techniques, use of clickers and the Exam Soft application.

**Weaknesses**

- The PHSU already has upgraded the technology infrastructure, internet capacity and technological equipment available; however there has been too little training for the faculty to be fully availing themselves of the innovative technologies. There has been too little investment in faculty development, especially for attendance at external meetings that involve travel support.
- Funds are very limited for faculty expenses, such as membership fees for national or international organizations and attendance to scientific forums related to the public health field.

**Plans**

- The PHP will be actively looking for conferences in which we could connect using WebEx, so we can participate live.
- The PHP intends to expand our faculty development opportunities by greater use of on-line training in areas of distance learning and teaching skills.
- Continue to develop the strategies innovative faculty evaluation components by working together with the Institutional Assessment Committee.
- PHP faculty who attend trainings, workshops or national meetings will share the skills learned with other faculty during faculty meetings. This has been a verbalized intent but not actualized activity.
- The PHP will identify sources of funding that would enable faculty members to attend national and international public health congresses.
- The PHP will develop and implement a “Faculty Navigator Evaluation Form” during the 2018-19 academic year. This form will be used to ensure the faculty successfully achieved the course educational and learning objectives and document how the faculty assessed the students and achieved those objectives.
- The PHP faculty will develop and implement a peer evaluation process by the 2018-19 academic year.
- The PHP will meet in the next two trimesters of Academic Year 2018-2019 to discuss and establish a new target or baseline for courses that integrate community-based projects. This new a new target or baseline will be implemented for academic year 2019-2020.

#### **E4. Faculty Scholarship**

<b>E 4 -1 - Describe the school or program’s definition of and expectations regarding faculty research and scholarly activity.</b>
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Research at the Public Health program and at PHSU follows national (Code of Federal Regulations, Title 45 – Public Welfare, Department of Health and Human Services, Part 46, Protection of Human Subjects) and international (Belmont Report) regulations and policies, and procedures established by (PHSU Policy on Ethical Standards and Misconduct in Research) (see Resource file).

The faculty and students of the Public Health program are required to take the Collaborative Institutional Training Initiative (CITI Program courses. This program “is dedicated to promoting the public’s trust in the research enterprise by providing high quality, peer-reviewed, web-based educational courses in research, ethics, regulatory oversight, responsible conduct of research, research administration, and other topics pertinent to the interests of member organizations and individual learners.” There is a MPH and Dr.PH level Bioethics course offered by Dr. Rafael Bredy, plus it is a requisite for students to take the CITI courses that apply to their research needs. Whenever a researcher is Planning on a study, they should submit the study to the Institutional Review Board (IRB) of the PHSU for review. Dr. Rafael Bredy and Dr. Juan C. Orengo, faculty members at PHP, form part of this committee.

Research on public health is diverse and encompasses many fields. The Public Health Program years ago adopted the Community Based research definition that proposes the Center for Community Based Research, and still searches consistently to create a research environment that stimulates the development of an evidence-based research program and follows our mission “to provide the highest quality education, research & population-based services”.

PHP expects and encourages that their primary faculty work in different areas of research, including collaborations in and outside the PHP, which will give them additional tools to share with the students. PHP endorses and considers it important that the faculty continue strengthening their research efforts and scholarly activities. PHP expects faculty to work in Ponce Health Sciences University institutional projects and grants. For example at present Dr Brenda Soto is part of the U54 (NIH grant between PHSU and Moffit Cancer Center in Tampa); Dr Clara Isaza, and Dr Luisa Morales are junior researchers of the Research Center for Minority Institutions (RCMI) belongs PHSU, as well as Dr Juan C. Orengo is a member of the Puerto Rico Clinical Translational and Research Consortium (PRCTRC is Consortium between the University of Puerto Rico – Medical Sciences Campus, Universidad Central del Caribe and PHSU).

**E 4-2 - Describe available university and school or program support for research and scholarly activities.**

PHSU has an established structure that supports the Institutional and PHP research component; this structure is aligned with the Ponce Research Institute (PRI), whose mission is “to make a difference by solving health disparities through groundbreaking, innovative and relevant research that has a global impact in health care”. Our research model is based on clinical sciences, behavioral sciences, and public health.

There is an Office of Research and Development (ORD) at PHSU, which provides the necessary infrastructure. The ORD helps in the search for research funds, in proposal preparation to submit to the NIH, CDC, Department of defense, etc. If the proposal is approved the ORD collaborates and monitors that the funds are used in an appropriate manner and that there is regulatory compliance. The ORD has a Publication Office with a full time English writing editor to assist faculty and students with their manuscripts, posters, and grants.

The PHSU has several partnerships that provide funds, training, and interdisciplinary collaboration. Some of these follows:

- Moffitt Cancer Center, through which research, cancer education, community outreach, infrastructure development, and a biobank are promoted. Dr. Brenda Soto, faculty of the PHP, forms part of this association.
- Research Centers in Minority Institutions (RCMI) Translational Research Network (RTRN), which promotes collaboration among the participating institutions’ researchers against health disparities. In addition, this partnership allows access to data technology coordinating centers, working groups and education/training platforms. PHP investigators, such as Dr. Luisa Morales, Dr. Clara Isaza, and Dr. Juan C. Orengo, form part of the RCMI. Since April 2017, Drs. Morales and Isaza have been part of the TRCL Professional Development Research Support meeting for junior investigators. Dr. Morales has been working under the mentorship of Dr. James Porter in the development of a research project titled “Establishment of an in vitro model to study genes related to autism” and a cell line is being established. The RCMI program of PHSU annually announces a competitive call for research proposals directed to junior researchers, or to those researchers who have changed their investigation areas (representing three \$50,000 grants). Dr. Clara Isaza (PHP) was granted one of the research awards from the last call for proposals.
- Puerto Rico Clinical and Translational Research Consortium (PRCTRC), translating knowledge and impacting health disparities. The PRCTRC Pilot Project Program offers integration of existing infrastructure, training and mentoring researchers in priority health disparities in PR (cancer; HIV/AIDS; neuroscience; cardiovascular/metabolic diseases). Training in grantsmanship (from which several professors in the PHP have benefited, including Dr. Frank Fraticelli, Dr. Yashira Sanchez, and Dr. Clara Isaza), biostatistics, publication and disparities is offered. These are offered to researchers, faculty and students at PHSU. One of the PRCTRC’s core areas is Research Design and Biostatistics, whose leader at PHSU is Dr. Juan C. Orengo, active faculty member of PHP. PRCTRC holds an annual call for proposals to give funds to pilot projects, with funding of up to \$50,000, and one for small projects, with fund of up to \$5,000. Dr. Orengo is a reviewer for this activity.

PHSU also has a diagnostic immunology laboratory that is certified by the World Health Organization (WHO) and is recognized internationally for providing low-cost efficient HIV testing.

Since 2015, the Public Health Program has been working towards the increase of research opportunities for our students, especially those in the DrPH. A request for space was necessary to increase the capability of the teaching laboratory and to increase the laboratory space to include research laboratories. In August 2017, the reconstruction and addition of research laboratories began.

The Public Health Laboratories have two main responsibilities: teaching and research. Regarding research, at present we have three components: (1) Environmental Laboratory; (2) Molecular and Genetic Laboratory; and (3) Vector Borne Diseases Laboratory.

- Teaching laboratory:** The Public Health teaching laboratory is essential to provide the students with hands on experience especially the environmental and general tracks. The Public Health Program has invested in providing the teaching laboratory with all the tools necessary to cover the necessities of the courses and at the same time providing an environment of teaching where students can have access to an area where they can develop skills necessary for a public health professional. Currently the students take the practice of several courses such as Environmental Health course (water, air, soil, toxicology, food safety). The teaching laboratory facilities consist of a 741.5 sq. ft. lab that is in the same building as that of the program's offices. The laboratory has the equipment to perform testing in the four basics areas: microbiology, wet chemistry and analysis of organic compounds and inorganic compounds. Is equipped with some basic components such as incubators, refrigerator, water bath, laboratory glassware and a chemical fume hood acquired with a base for acid storage. Additionally, a bench top autoclave, refrigerator a corrosive cabinet, eyewash station and safety kit were acquired for the laboratory.
- Environmental Research Laboratory** (approx. 120 sq. ft.)- This research area consists in an area adjacent to the teaching laboratory and is a separate space in which the analytical balance (semi-micro), an incubator, weather station, and an air sampler are located. This area is designated for work with water and air samples. The environmental health research laboratory is required to perform a series of activities including the following: water quality, air ambient particulate matter (PM10 & PM2.5) sampling and analysis, weather data collection and interpretation and Geographical Information Systems (GIS) analysis to relate this data with health outcomes (respiratory diseases, cardiovascular diseases, cancer), toxicology, soil, microbiology, food safety, and noise analysis.
- Vector Borne Diseases Laboratory:** The vector borne laboratory (approx. 150 sq. ft.) contains equipment, a Leica microscope EX4W, mosquito cages and mosquito traps, a freezer -20, a chill table and a VWR incubator. This laboratory is used for research in vector-transmitted diseases such as arbovirus, leishmanial and schistosomiasis. Researchers and doctorate students study vectors, in this case mosquitoes, classify and identify following the molecular techniques to identify arbovirus infection among them. All this will be the basis for different models of disease spread and control. This offers the opportunity of breeding *Aedes aegypti* colonies with several objectives: a) to study "insecticides resistance"; b) to study animal models for potential new ways of arbovirus transmission; c) to study new vector of arbovirus; d) to study the biology of vectors that transmit diseases; e) to study mutations; f) to study epigenetic of vectors. The Vector Borne Diseases Laboratory will be a center of research and training serving to all students of the PHSU especially Dr.PH students.
- Molecular and Genetic Epidemiology Laboratory (approx. 150 sq. ft.):** This laboratory area contains a SterilGuard biosafety cabinet, a refrigerated micro centrifuge, and a PCR machine and bench working space. This area is designated for the processing and handling of biological materials. Currently the main objectives of the research lines are molecular epidemiology and genetics. Several projects related to Autism, Parkinson's, Arbovirus, and genetic epidemiology are ongoing within the Program with the wet laboratory as their main component. This laboratory is open to students from the program. Program faculty is active looking for research funds to increase the variety of experiments performed in this laboratory. In addition, courses like Research Methods II laboratory rotation use this facility.
- Public Health Dry Laboratory:** The computer lab (dry lab) provides the students with space and the means to do computer-based research, to perform literature searches, databases analysis, and writing. The dry laboratory consists in an area adjacent to the teaching laboratory and is equipped with two computers (100 sq. ft.). These computers have the following programs, R, STATA, Minitab, Epi Info, Berkley Madonna, ArcInfo and Epidat and office packages installed. An extra computer acquired through the Seed Money Program for the Hydroponics project and a da Vinci Jr. 2.0 Mix Wireless 3D Printer will be in this area. This facility provides new training opportunities for students from the PHP involved in research and PHP faculty projects.

The PHP has an established Seed Money Program and annually a total of \$25,000 is destined to provide public health faculty with resources to obtain preliminary data that will help them increase the chances of obtaining grants and develop their research areas. The Seed money constitutes a key component in the efforts to assist predominantly junior and mid-career investigators to develop research initiatives that focus on diseases that affect minority populations. The Seed Money Program was restructured in the year 2015. As part of this restructuration, four members of the PHP faculty were selected to constitute the new research committee; Dr. Juan C Oregon (chair), Dr. Luisa Morales, Dr. Santiago Cornier and Dr. Clara Isaza. The whole process was structured to provide faculty the opportunity to apply for research money through a grant submission and subsequent review process. This whole process will train faculty in grant writing skills necessary to obtain grant funding.

The Seed Money Programs works as follows: The call for submission is sent. Researchers interested in applying to the Seed Money must submit a letter of intent. This way the committee will have an idea of the number of applications that will be submitted and prepares for a review process. A guideline for the application is sent with the call for projects. Once the applications are received, the committee initiates a review process using a form. Each project is funded for a maximum of one year, with possibilities of resubmitting. These pilot projects also serve as working and research opportunities for PHP students. Each project is required to provide a minimum of one work-study opportunity.

The PHP encourages their students and faculty to continue to develop their research skills. One example is the creation of new courses such as DPH 6011, which allows first year Dr.PH students to join the program faculty in their ongoing research projects.



**E 4 -3 Describe and provide three to five examples of faculty research activities and how faculty integrate research and scholarly activities and experience into their instruction of students.**

The Public Health Program encourages faculty to immerse in public health research opportunities. The PHP is aware research and scholarly activities enrich all aspects of teaching. The integration of ongoing research in scholarly activities is fundamental to provide students with real life hands-on experiences in the public health field. Faculty integrate research in their instructional activities by using their experiences, data and techniques into classroom activities. Students participate either as volunteers or within the work-study program in the research projects that the PHP faculty develops. Some examples of faculty projects are:

- Dr. Luisa Morales: her research area is autism, which has an incidence in Puerto Rico of 1 in 62 (in the US, it is 1 in 59). Dr. Morales has as its main research objectives: 1) to establish a register in the Ponce Center for Autism (Centro Ponceño de Autismo (CEPA)); 2) to estimate the prevalence of autism in Puerto Rico using the registry systems and capture-recapture method; 3) to evaluate risk factors (genetic, environmental) related to autism. There are around eight students at present time collaborating with Dr. Morales in this project. Some of these students belong to the work-study program of the Seed Money Program, and some to the Dr.PH Applied Research Methods (DPH 6011) course. Additionally, other students can volunteer their time and collaborate in the research projects, especially during the summer months. Currently there are at least three students working during summer time in research activities. The students in the Dr.PH course directly work in the project, and learn both the theory associated with the course, but also real research applications. Dr. Morales has a Dr.PH student whose research project is in autism and is part of her research team. In the Advanced Epidemiology MPH course that she teaches, Dr. Morales uses examples directly related to autism using real life data and analyzes them as examples. She combines her research experience in the classroom by having students develop study designs and hypotheses and use critical thinking in the interpretation of results. Students can learn to code and analyze questionnaire data using different software and analyze data based on the study design chosen. The final work of the students consists in analyzing a cancer data set where they have to identify the study design, develop and test hypothesis, create and abstract, and develop an oral presentation. Dr. Morales has ample experience in cancer research, and she teaches the Dr.PH Cancer Epidemiology course. In this course, she uses her personal experience in this field to provide examples of real life epidemiological research.
- Dr. Juan C. Orengo: his research area is Vector Borne Diseases, centering on the vector. Arboviral diseases (dengue, zika, chikungunya) that are endemic in Puerto Rico, and though malaria has been eradicated, at present has not been certified as *Bilharzia* (*Schistosomiasis*) free. The potential for the emergence of *Leishmaniasis* is unknown. The principal objectives of his research area are: 1) to find out the type and distribution of mosquitoes in Puerto Rico; 2) to establish an entomological-molecular surveillance system, 3) to evaluate the rate of mosquitoes infected with arbovirus and their distribution; 4) to develop new mosquito traps together with Dr. Mauricio Cabrera of UPR- Mayagüez (non-primary professor in PHP); 5) to create mathematical models to evaluate the risks and benefits of vector control; 6) To assess the ecology, evolution and biodiversity of the transmission of the Vector Borne Diseases. At present there is a Dr.PH student doing his doctoral thesis in this vector field, one student finished his doctoral thesis the last May, four doctoral students, three MPH students and three nursing students. The students are receiving direct knowledge while at the same time finding how evidence-based research works in the field. Volunteer students from the UPR Ponce campus work in the vector lab and have benefitted from direct information from the main investigators. Graduate students from other institutions, such as Interamerican University and UPR-Medical Sciences Campus (both in San Juan) have also taken advantage of this research experience. Dr. Orengo also teaches a Dr.PH Research Methods course in which the students are exposed to the research process, including his main topic of interest, vectors of disease. Dr. Yadira Guilloty and Dr. Yashira Sanchez invite Dr. Orengo to talk to their students in their Infectious Epidemiology and Environmental Laboratory courses about vector-transmitted diseases and his lab techniques. Dr. Orengo also organizes a Journal Club on the topic of vector-transmitted diseases, and this is open to the PHSU community.

- Dr. Mayra Roubert: her main area of research is air and water pollution and its effect on health. The main objectives of her research are: 1) to determine the PM 2.5 levels in the south of the island; 2) to estimate the prevalence of respiratory diseases in the communities in the south of the island; 3) to evaluate the relationship of air contamination with cardiovascular and respiratory diseases; 4) to evaluate the risk that environmental factors may play in the development of gastrointestinal diseases. Dr. Roubert has been thesis director or member of Dr.PH thesis committees of four students whose dissertation topic was related to air or water contamination, and at present there is one student whose topic is water quality in non-PRASA systems. There are also four work-study students who have collaborated in her research projects. Dr. Roubert offers the Introduction to Environmental Health course which includes an introduction to her research project and the equipment used in her research. It is a requisite of the Introduction to Environmental Health course to visit and to work on an environmental study in community, translating the learned material into the real world.
- Dr. Clara Isaza: She conducts research related to Parkinson's and Alzheimer's disease. She has expertise in basic sciences and she is applying her expertise in studying these conditions that affects our increasing elderly populations. She also performs big data analyzes using bioinformatics tools. Her pilot project in Parkinson's (Looking for possible relations between Dengue virus Infection and Parkinson's disease) was awarded with the RCMI pilot project program (2018) from the PHSU. She currently has students MPH and DrPH working in her projects as volunteers or as part of the work-study of Seed Money Program. She teaches the Scientific Basis of Health Interventions where she integrates the scientific method and basic sciences techniques into public health measures such as early diagnosis and detection, prevention and screening of diseases. During her course students has to conduct literature reviews of papers and discuss every day public health issues affecting Puerto Rico. She also teaches the Scientific writing course where students learned how to write a peer review article, preparing each section of a manuscript and as final project they have to complete a scientific paper.
- Dr. Yashira Sánchez applies her expertise in the prevention and assessment of health effects from environmental exposures, mainly with issues related to both the Clean Water Act and Drinking Water Act. In the courses MPH 7454: Water Quality Measurements and MPH 7484: Environmental Laboratory, Professor Sánchez creates opportunities for student to develop the practical skills of drinking water and aquatic ecosystems monitoring. Students have the experience of analyzing different water bodies in Puerto Rico and then must interpret their results. The students have the opportunity of participates on the pilot project of professor Sánchez, Monitoring of water quality in surface waters in the municipalities of south Puerto Rico, and they are monitoring physical-chemical parameters in reservoirs of Toa Vaca and Cerrillos. During one (annual) seasonal cycle with the goal of understand the functional role of tributaries and improve the quality of water resources in the watershed and reservoirs.

**E4 -4 - Describe and provide three to five examples of student opportunities for involvement in faculty research and scholarly activities.**

Students have opportunities to join the faculty's research studies, and academic activities in different projects. Students participate in project as paid assistants or volunteers. Many opportunities have emerged in the PHP for participation of the students in different research. Specific examples are:

**The Real-Life Effectiveness and Care Patterns of Diabetes Management Study in Puerto Rico (RECAP-PR Study) and the project Real life assessment of insomnia medication level of satisfaction in Puerto Rico (RAIN Study- PR).** Studies granted by the pharmaceutical Merck in which at least one DrPH student participates in each project. Students are involved in the logistics and implementation of the projects, and work in direct contact with specialists in diabetes and participating in data management and collection.

**Using MC1R genotype to impact skin cancer risk behaviors in Hispanics/Latinos.** This project funded through the U54 PHSU/MCC partnership provides opportunity to at least one MPH student. The student coordinates interviews work data management and quality control and is actively involved in research Planning and implementation.

**Sentinel Enhanced Dengue Surveillance System to Evaluate Dengue Epidemiology, Outcomes and Prevention (SEDSS- EDEOP).** A model of enhanced epidemiologic surveillance and a strong research platform for studying dengue and the impact of primary and secondary dengue prevention strategies. Currently makes active surveillance of acute fever infections including Zika, Chikungunya among other arbovirus diseases. Since 2012, enhanced surveillance has been implemented at Saint Luke's Episcopal Hospital (SLEH) in Ponce and Guayama, through a cooperative agreement with the Centers of Disease Control and Prevention (CDC) and in collaboration with Ponce School of Medicine (PSM) and the Public Health Program (PHP) of the Ponce Health Sciences University. Starting in 2012, more than 20 MPH and DrPH students have participated in this Surveillance System. Currently we have 8 MPH and DrPH active students participating in this Program. This number includes current employees graduated from our PHP.

**Community Outreach Program of the U54 PHSU / MCC Partnership project.** Community outreach educational activities for Hispanics in Florida (FL) and Puerto Rico (PR). This is a foundation of community-focused educational activities through tailored education and community/researcher forum El Puente (The Bridge), as well as the design and promotion of cancer prevention education. There is participation of MPH and DrPH students and PHP faculty in projects related to this Program.

**The Seed Money Program has provided the opportunity to 14 students;** the students involved in these research activities received economic benefits. The Seed Money Program provides a work-study opportunity and opportunities for of receiving training and having an active participation in the research developed at the PH for a minimum of one student per project.

**Table E4-1 shows projects of the Seed Money Program in which students have joined faculty**

<b>Table E4-1 Project of the Seed Money Program with work-study</b>	
Title and researcher	# of students
Monitoring of water quality in surface waters in the municipalities of south Puerto Rico- Dr. Yashira Sánchez (2017)	1
Development of hydroponic farming for different environmental conditions (Desarrollo de cultivo de hidropónicos para diferentes condiciones ambientales)- Dr. Iris Martinez (2017)	1
Transmission potential of leishmaniasis in Puerto Rico (Potencial de transmisión de leishmaniasis en Puerto Rico)- Dr. Juan C Orengo (2017)	2
Schistosomiasis en Puerto Rico (Schistosomiasis en Puerto Rico)- Dr. Vivian Green (2017)	2
Validation of genetic signatures obtain from microarray data using MCO for autism- Dr. Luisa Morales (2017)	1
Establishing an in vitro model for Parkinson’s gene expression changes using the SH-SY5Y cell line- Dr. Clara Isaza (2017)	1
Relationship between Particulate Matter in Air, Asthma & Mode of Delivery Among Pediatric Population in Ponce and Juana Diaz, Puerto Rico- Dr. Mayra Roubert (2017) (continuation)	2
Common gene expression changes between Alzheimer’s and Parkinson’s Diseases: selecting validation gene group for Puerto Rican patients - Dr. Clara Isaza (2016)	5
Entomo-molecular sentinel surveillance system (pilot study)- Dr. Juan C Orengo (2016)	1
Gender violence in Puerto Rico: A exploratory study- Dr. Brenda Soto (2016)	1
Relationship between particulate matter in air, asthma, and mode of delivery among pediatric population in Ponce and Juana Díaz, Puerto Rico- Dr. Mayra Roubert (2016)	1
Epidemiology of autism in Puerto Rico (continuation) – Dr. Luisa Morales (2016)	2
Geospatial Analysis of Socio-Economic poverty index (SEPI) and thyroid, lung, prostate, and breast cancer in Puerto Rico by census tract 2000-2013 – Dr. Diego Zavala (2016)	3

Participating students in the Seed Money Program are encouraged to participate of academic activities such as the PHSU congress. Some examples of student presentations follow:

- C Torres, NJ Ortiz, M Cabrera-Ríos, CE Isaza, Gene Expression Changes between Alzheimer’s and Parkinson’s Diseases and their relation to Gender: A Meta-analysis, 13<sup>th</sup> Annual Scientific Conference of Ponce Health Sciences University & Ponce Research Institute, Ponce PR, May 2017
- M Osorio, NJ Ortiz, M Cabrera-Ríos, CE Isaza, Common Gene Expression Changes Between Alzheimer’s Disease, Parkinson’s Disease, and Influenza: Selecting a Group of Genes for Validation in Puerto Rican Patients III, 13<sup>th</sup> Annual Scientific Conference of Ponce Health Sciences University & Ponce Research Institute, Ponce PR, May 2017
- C Quirindongo, YE Cruz-Rivera, M Cabrera-Ríos, CE Isaza, Alzheimer’s Disease and Chronic Conditions: A Systematic Review, 13<sup>th</sup> Annual Scientific Conference of Ponce Health Sciences University & Ponce Research Institute, Ponce PR, May 2017
- E Cruz-Rivera, NJ Ortiz, M Cabrera-Ríos, CE Isaza, Common Gene Expression Changes Between Alzheimer’s Disease, Parkinson’s Disease, and Influenza: Selecting a Group of Genes for Validation in Puerto Rican Patients II, 13<sup>th</sup> Annual Scientific Conference of Ponce Health Sciences University & Ponce Research Institute, Ponce PR, May 2017
- MC Correa, NJ Ortiz, M Cabrera-Ríos, CE Isaza, Common Gene Expression Changes Between Alzheimer’s Disease, Parkinson’s Disease, and Influenza: Selecting a Group of Genes for Validation in Puerto Rican Patients, 13<sup>th</sup> Annual Scientific Conference of Ponce Health Sciences University & Ponce Research Institute, Ponce PR, May 2017.

- Robert Rodríguez, Grisel Morales, Fernando Rosado, Natalie Ayala, Luisa Morales, Clara Isaza, Vivian Green, Mauricio Cabrera, Mayra Roubert, Yashira Sanchez, Javier Orengo, Juan C. Orengo. Meteorological Variables and its impact in Mosquitoes as Arthropod Vector. 13<sup>th</sup> Annual Scientific Conference, Ponce Health Sciences University & Ponce Research Institute, Ponce (Puerto Rico) May 2017.
- Rodríguez R, Orengo JC et al. Integrating meteorological data in a new model of entomological-molecular sentinel surveillance system in Puerto Rico. 66<sup>th</sup> Congress of the “American Association of Tropical Medicine and Hygiene”. Baltimore, November 5-7, 2017.

There is an Educational Development program, through which Ponce Research Institute (PRI) assigns \$25,000 to PHP. This money is destined for Dr.PH students, so they can do work on their doctoral dissertation projects. This money can be used for purchase of materials, travel to congresses, to pay for consulting fees, etc. Students must fulfill several requirements: 1) they must have defended their thesis proposal; 2) their GPA must be no less than 3.0; and 3) they must not have failed any trimester of their doctoral dissertation.

The faculty at PHP with extramural grants can request that work-study students come into their labs to collaborate in their projects, and faculty with no external funds can also request student participation on a volunteer basis. Dr. Vivian S. Green is the PI in two projects (Diabetes and Insomnia) with extramural (Merck & Co, Inc.) funds, in which there is one student working in each of the projects.

Collaborations with University of Puerto Rico (UPR) Ponce took place at the beginning of August 2016. This collaboration included the participation of UPR students in projects such as undergraduate research and UPR first work experience (UPR interns). A total of 20 students from UPR have participated to date. As result of this collaboration students from the undergraduate research program had the opportunity to participate in the Ponce Health Sciences University Scientific conference presenting the works developed during the period they were involved in the Program. From the first cohort of students in collaboration with PHP students we obtain the following presentations at Ponce Health Sciences University Scientific conference:

- Vicmarie Rivera, Fabiola Colon, Reinaldo Rivera, Juan de Jesus, Andrea Feliciano, Sofia Frau, Jesús Vargas; José López de Victoria, Robert Rodríguez, Luisa Morales. Epidemiological Assessment of Autism Educational Facilities in Ponce District of Puerto Rico. 14<sup>th</sup> Annual Scientific Conference, Ponce Health Sciences University & Ponce Research Institute, Ponce (Puerto Rico) May 2018.
- Ninoska Peguero, Paola Luciano, Vanessa Rodriguez, Wendel Estrada, Bryan Rodriguez, Gabriel Baez, Sandra Moyá, Luisa Morales, Clara Isaza, Vivian Green, Mauricio Cabrera, Mayra Roubert, Yashira Sanchez, Javier Orengo, Juan C. Orengo. Commercial insecticides in supermarkets and mosquito resistance. 13<sup>th</sup> Annual Scientific Conference, Ponce Health Sciences University & Ponce Research Institute, Ponce (Puerto Rico) May 2017.
- Paola Colón, Orlando Geli, Jania Garcia, Christopher Ruiz, Carla Reyes, Sandra Moyá, Luisa Morales, Clara Isaza, Vivian Green, Mauricio Cabrera, Mayra Roubert, Yashira Sanchez, Javier Orengo, Juan C. Orengo. Mathematical model of arboviral risk in *Aedes aegypti* mosquitoes’ vector by male: female ratio. 13<sup>th</sup> Annual Scientific Conference, Ponce Health Sciences University & Ponce Research Institute, Ponce (Puerto Rico) May 2017.
- Fernando Rosado, Robert Rodriguez, Natalie Ayala, Luisa Morales, Clara Isaza, Vivian Green, Mauricio Cabrera, Mayra Roubert, Yashira Sanchez, Javier Orengo, Juan C. Orengo. Spatial Analysis of Mosquito Distribution and Risk of Vector Diseases in Puerto Rico. 13<sup>th</sup> Annual Scientific Conference, Ponce Health Sciences University & Ponce Research Institute, Ponce (Puerto Rico) May 2017.

UPR interns as part of the course (INTD 4995 from UPR Ponce) have had an active participation at the Public Health Research Laboratories. The main role of the UPR Interns is to help maintain a research environmental and to obtain

job skills related to laboratory settings under the supervision of PHP faculty and collaborating with students from the PHP.

Up until the 2017-2018 academic year, as a requisite for the MPH, students were required to initiate their own project, directed by one or more of the faculty; to comply with the Capstone requirement. Once these projects were finished they were presented in the conference organized by PHP annually, and some of them submitted their presentation to the Annual Scientific Conference at PHSU. (Refer to the Electronic Resources File (ERF))

The PHP encourages students to directly approach professors and ask about their research projects and to ask to be included in them if they are interested. This has benefits in several areas: it has increased research opportunities for students, it has provided an expansion in research areas and physical space dedicated to research; and it has resulted in an increase of students working as interns or as volunteers.

**E4 -5 - Describe the role of research and scholarly activity in decisions about faculty advancement.**

Faculty is evaluated annually by the Associate Dean of Public Health. Two of the evaluation components are research and academic activities. The faculty member also must include the outcomes they wish to reach in regarding research and academics, and the indicators by which they were to be measured. The PHSU Promotion Committee evaluates candidates using the Bases for Promotion set forth in Section 2.6.2, of the Faculty Handbook.

**E 4 -6 - Select at least three of the following measures that are meaningful to the program and demonstrate its success in research and scholarly activities. Provide a target for each measure and data from the last three years in the format of Template E4-1. In addition to at least three from the list that follows, the program may add measures that are significant to its own mission and context.**

The number of presentations has been increasing per academic year. During the year 2016-2017 posters and communications were presented in a wider variety of congresses such the Annual Biomedical Research Conference for Minority Students (ABRCMS), SWE Annual Meeting, INFORMS Annual Meeting, Emerging Researchers National (ERN) Conference in STEM, AAAS Annual Meeting, American Society of Tropical Medicine and Hygiene (ASTMH), American Society of Clinical Oncology (ASCO). The number of articles has been increasing since 2015-2016. We should add that Dr. Juan C. Orengo and Dr. Vivian S. Green are Founding Editor and Editor, respectively, of the Journal Medicina y Salud Pública (Medicine and Public Health), a quarterly publication that is now in its 12<sup>th</sup> year. The number of submitted grants has also increased, and they are not only submitted to the NIH, but also to the CDC, PRCTRC, private foundations, Department of Defense, EPA, and US Fish and Wildlife.

**Table E4-3**

<b>Outcome Measures for Faculty Research and Scholarly Activities</b>				
<b>Outcome Measure</b>	<b>Target</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>
Presentations at professional meetings	20	27	29	36
Number of articles published in peer-reviewed journals each year	50% of faculty has one publication submitted in an indexed peer review per year as author or coauthor.	21%	78%	44%
Number of grant submissions	50% of faculty has 1 submitted external grant proposal as PI or Co-PI per year	No data	29%	53%



**E4 -7 - If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.**

**Strengths**

- A Seed Money Program has been established, which allows the students to join ongoing projects of the PHP faculty and provides financial resources to faculty to obtain preliminary data that will be used in future grant submissions.
- Creation of new courses that allows the student to join PHP investigator's research areas or will allow students to begin their own research projects.
- PHSU's research resources are very diverse, and the PHP faculty benefits from them in various ways such as receiving training, using specialized lab areas, or participating in mentorship programs.
- New lab spaces allow us to perform projects that were difficult to do previously.
- The addition of students from other institutions promote diversity of thought and collaboration in research as well as in the academic component.
- Funding of the Educational Development program, through the Ponce Research Institute (PRI), that provides funds for students for reagents and materials to work on their thesis projects and allows covering expenses to students presenting in Conferences.
- The university has resources available to support scholarly activity such as the Office of Research Development (ORD) that provides support in grants preparation and post- award operations, manuscripts editing and submission.

**Weaknesses**

- Researchers at PHP have changed their research interests or are junior investigators, which limit the amount of extramural funds.

**Plans**

- To protect research time for the faculty, so that publications and the number of extramural grants submitted can increase.
- To diversify the agencies from which extramural funds are requested so that it is no longer only the NIH, but also CDC, EPA, USDA, or the Department of Defense.
- To increase the number of agreements with other institutions with similar research interests that are of established excellence in and outside of Puerto Rico a.
- To establish that all research projects and academic activity should have MPH and Dr.PH students included in an active role.
- The PHP research committee will provide more guidance and new resources to continue strengthening the research efforts and scholarly activities of the PHP faculty.

## **E5. Faculty Extramural Service**

**E5 -1 - Describe the school or program's definition and expectations regarding faculty extramural service activity. Explain how these relate/compare to university definitions and expectations.**

The mission of the Public Health Program is to offer the highest quality health service to the community. We encourage our faculty and students to offer their services to community organizations and communities in general. In section 2.11.2 (community service) of the Faculty Manual we can read that the faculty members are perfectly qualified to contribute in a useful way to the community. Community service allows the PHP faculty to be in direct contact with people and families who form part of the community and to directly find out what the needs of the community are.

From its inception the PHP has systematically and consistently participated in community projects initiated by the communities themselves or conceived from a dialogue between the PHP and communities. In the period between 2014 and 2017, the PHP has participated in educational campaigns directed to the communities and related to important health events such as the zika epidemic. In one of the activities organized together with the Department of Health and the Office of Emergency Management of the Municipality of Ponce, we were able to directly impact close to 2,500 elementary, middle and high school students. In other activities directed toward the strengthening of the emotional and self-care component of cancer patients close to 600 people were benefited, including patients and their family members. The Public Health Program has participated, together with other member of the PHSU community, such as the School of Medicine, School of Psychology, and the basic research component, in workshops to solve current health problems that affect the community, for example, zika (2016-2017). In the field of public health, we have worked on several environmental projects in communities in the municipalities of Ponce, Juana Diaz, and Peñuelas, among others. One example is the study on the prevalence of gastroenteritis during flooding events in the Ponce Playa community, which benefited around 12,000 people. Also, following hurricane Maria, more than 2,800 people were impacted in the communities in the south, center, and west of Puerto Rico.

**E 5- 2 - Describe available university and program support for extramural service activities.**

The PHP, together with PHSU, supports and encourages extramural service activities. The Program and PHSU collaborate with faculty and students in the organization and Planning of these activities, making available to those interested the different support services of the Institution. The PHSU health plans covers any need that should rise during these activities. The buildings and physical facilities can also be used by the faculty and students for the planning of conferences, workshops, health fairs, and other service activities that can benefit the community. For example, the Ponce Playa community have a space reserved in the Public Health Laboratories where they keep equipment (incubator, UV light...) to evaluate water quality of the rivers in the community area. This equipment was on loan from the Environmental Protection Agency (EPA) to the Playa community, through the DISUR Program (Southern Integral Development or Desarrollo Integral del Sur), a non-profit organization where PHSU participates. The PHP has representation in DISUR. The Ponce Medical School Foundation and its resources support the faculty and students in humanitarian relief efforts where basic necessities needed to be delivered to affected people after disasters such as Maria, where faculty and students mobilized throughout the island to reach affected communities. The PHP dedicates part of its budget to cover any expense that these activities originate, such as Water Monitoring Day. The research community at PHSU, which includes the U54 Outreach Core of the PHSU-Moffitt Center in its Capacity Building component, has among its objectives to help in the science education of community leaders, and through the Bridge Project to connect faculty of the different programs and departments of PHSU with community leaders to improve communication and participation in community service activities. This Institutional support was crucial in initiating the vector (mosquito) surveillance project in the Peñuelas communities.

**E 5 -3 - Describe and provide three to five examples of faculty extramural service activities and how faculty integrate service experiences into their instruction of students.**

Some examples of service activities where the PHP faculty has participated with their students, making it part of their learning process follow:

- Dr. Adalberto Bosque: Activity – Amor que Sana -2014 – 2015– Around 25 students of the PHP participated as volunteers in a service activity geared towards homeless people of the Amor que Sana Project. The objective was that the students acquire the experience of evaluating the needs of and providing some health education to this vulnerable population.
- Dr. Diego Zavala: American Red Cross (2009-present) – The skills and knowledge that is acquired in the prevention, recovery, relief, and surveillance in disaster situations is applied to the Epidemiology of Disasters MPH course that he offers, applying state of the art technology and methods.
- Dr. Vivian S. Green: Cancer survivors and caregivers support group (2014-present) – Cancer survivors, as well as their caretakers, are a vulnerable group, and this also involves the nutritional aspect. Knowing their necessities, talking directly with them to address any questions, worries, and how to design healthful nutrition as recommended by their oncologists and dieticians will benefit the students of the MPH course Nutritional Epidemiology. These students are acquiring skills and knowledge as future public health professionals to be able to work with the appropriate tools to help this population in the future.
- Dr. Juan C. Orengo, Dr. Vivian S. Green, Dr. Luisa Morales, Dr. Yashira Sanchez, Dr. Mayra Roubert: Epi-Aid Team (2016-2017) – Thirty-five students of the PHP participated in an educational campaign for the prevention of zika, dengue, and chikungunya, directed to elementary, middle, and high school students. The public health students learned to develop strategies applying social marketing methods.

**E 5 -4 - Describe and provide three to five examples of student opportunities for involvement in faculty extramural service.**

The community service of the faculty of the PHP would not be possible without the collaboration of the students of the Program, both from the MPH and the Dr.PH programs. Students can participate as volunteers in any project of interest to them, (for example, working in any NGO or internship in or out of Puerto Rico), or they can be part of the community service activities that faculty or other students organize, or they can design, organize, and implement their own service activities, with the faculty serving as advisors during those activities. The PHP has a commitment to the population and encourages its students to participate in service activities directed towards the general community or vulnerable communities; this service can be in the form of projects that are done in conjunction with state or federal organizations, community-based organizations, or other types of programs.

Some examples of opportunities that the students have to get involved in faculty service are listed: Refer to **Electronic Resource File (ERF)**

- Dr. Yashira Sanchez: Water Monitoring Day, San Juan Bay Estuary Program (2016-2017). The San Juan Bay Estuary Program is a non-profit organization that works to maintain this ecosystem (where fresh water and ocean waters mix and species in danger of extinction exist, such as the tinglar or leatherback sea turtle and the manatee, and activities which are crucial for the economic development and food security in Puerto Rico), in the eight metropolitan municipalities that compose it: Bayamón, Carolina, Cataño, Guaynabo, Loíza, San Juan, Toa Baja and Trujillo Alto.” In the year 2017, thirty-seven students of the PHP (General, Environmental, and Epidemiological) acquired their practical experience of taking water samples, process them, read, and interpret the results.
- Dr. Luisa Morales: Centro Ponceño de Autismo (CEPA) (Ponce Center for Autism) is located in Ponce, and it is a center where diagnosis, prevention, and treatment of patients within the autism spectrum. It offers services to the south, center, and west of Puerto Rico. It is estimated that the prevalence of the autism spectrum in Puerto Rico is 1 in 62 newborns, and in the United States it is 1 in 68. The diagnosis is usually made after age 3. The students are involved in different ways to this extramural service, for example, 1) helping and collaborating with CEPA in the development and implementation of the data base, 2) applying their Dr.PH thesis objectives to any of the needs of autism in Puerto Rico, and 3) organizing activities to raise awareness of autism, for example, “Embeleco Day” or “un sombrero por el autismo” (a hat for autism)
- Dr. Adalberto Bosque: Santa Ana Institute, Adjuntas - “The Instituto Santa Ana, Inc. is a non-profit organization that helps girls and teens that for various reasons have no stable home and or safe environment. The girls that receive these services are aged 5 to 14, and while they are in this institution, they are provided with clothing and shoes, food, medical and dental services, education, academic tutoring, fine arts programs, social work, psychological services, recreation, providing them with tools to develop into useful members of Puertorrican society”. Volunteer students from the PHP collect clothing, food, and necessities from a donation program that they developed, then they visit the Institute and have a celebratory dinner with the girls and staff.

**E 5 -5 - Select at least three of the following indicators that are meaningful to the school or program and relate to service. Describe the school or program’s approach and progress over the last three years for each of the chosen indicators. In addition to at least three from the list that follows, the program may add indicators that are significant to its own mission and context.**

In Table E5.2 we can see the evolution of the indicators of service related to the faculty and students of the PHP. Related to the percentage of primary faculty that participates in extramural activities, there has been a 21 percent point increase from 2014 to 2017. The number of collaborations between the faculty and students has increased from 3 to 13, indicating a 330% increase, and the number of projects based on the community increased from 10 to 15, staying constant for the past two years. This increase in the number of faculty, students, and projects based in the community has been due to a number of factors, including integrating as essential part of the Program community service activities, listening to the needs of community leaders, and offering the space of the PHP and the PHSU so that the communities can use it for education, for performing lab tests (such as water quality ) together with faculty and students, o to conduct statistical analysis of information collected from the community (and making use of the Dry Lab, for example). The PHP encourages and is committed with the activities of the Public Health Student Association, and the mentor of this association is one of our professors.

<b>Table E5.2: Indicators of service (primary instructional faculty)</b>				
Indicators	Target	2014-2015	2015-2016	2016-2017
Percent of faculty (primary instructional) participating in extramural service activities	Not established	67% (8/12)	80% (12/15)	88% (15/17)
Number of faculty-student service collaborations	Not established	3	11	13
Number of community-based service projects	At least 2 community service/per year	10	15	15

**E 5 -6 -Describe the role of service in decisions about faculty advancement Describe the role of service in decisions about faculty advancement.**

Community service activities are part of the job description and contract of the faculty of the PHP. In the Faculty Handbook, section 2.5, related to the Evaluation and Promotion of the faculty, it is specified that involvement in the community service activities is considered an important criterion in the evaluation and promotion, as well as peer recognition and awards or recognitions received from community service organizations. In the annual faculty evaluation, community service forms part of the evaluation core, together with academics and research, and 10% of time dedicated to community service is required and must be explicitly stated in the work plans of each faculty member.

**E 5 -7 - If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.**

Through community service the faculty is up to date in what the community needs are, and how we can contribute to alleviate these needs by improving and promoting community public health, while at the same time the students improve by acquiring more public health competencies.

**Strengths**

- PHSU is explicit in its rules and regulations that community service is a requirement by all faculty, is part of their annual evaluation, and of the promotion criteria.
- A large number of faculty and students is involved in community service activities in both rural and urban areas in Puerto Rico, primarily in vulnerable communities.
- Students also create, develop, and implement their own community service activities with the support of the PHP and the PHSU.
- The community knows about the service that the PHP provides and comes to us to ask for collaboration or advice in their community projects.

**Weaknesses**

- Part of the faculty does not document all of their community service activities, sometimes because they wish to remain anonymous, and sometimes because they just forget to do it.
- The activities that students organize without the direct participation of PHP are most of the time not documented properly.

**Plans**

- To form a Community Service Committee, where we can present a Public Health Program plans with the objective of finding out about all the activities that take place, and the needs that are discovered. Community leaders would be represented in this committee.
- To implement a community service documentation component for the activities initiated by students by involving the MPH and Dr.PH class presidents.

## **F1. Community Involvement in Program Evaluation and Assessment**

**F1 -1 - Describe any formal structures for constituent input (eg. Community advisory board, alumni association, etc.) List members and/or officers as applicable, with their credentials and professional affiliations.**

The PHP established a formal External Advisory Committee (PHP-EAC) to assist the Associate Dean, Research Committee, Assessment Committee and the Curriculum Committee to evaluate and assess its program's performance. Areas to be evaluated include program and students' outcomes, curriculum effectiveness, research areas, service activities and the overall planning and development of the PHP strategic Plans. The PHP contacted the members of the external committee to discuss topics such as the content of the public health curriculum, requirements of the students' doctoral dissertations, lines of research. The PHP-EAC will provide an external forum for the review and revision of the PHP strategic Plans and new initiatives that might impact the performance of the program. The first formal meeting of PHP-EAC took place during the summer of 2018, at the Public Health faculty annual retreat.

The PHP-EAC consists of eleven members of different areas who have been selected by the Track Coordinators or by the recommendations of other faculty members. The PHP Associate Dean formally appointed the members. The established term of these members is two years. The formal committee is expected to be fully operational in 2018.

When this committee was conceived, we tried to identify members with experience in different principal areas of public health: environmental health, epidemiology, general public health, research and industry. The members of the committee are:

### **Description Environmental Health**

**Jorge Martínez MPH**, a Civil Engineer with 42 years of experience, has a bachelor's degree in Civil Engineering, and a Master of Public Health, both from the University of Puerto Rico- Mayaguez and School of Medicine campuses respectively. Engineer Martínez worked as the Director of the Drinking Water Program at the Puerto Rico Department of Health (PRDOH) from May 1978 to November 1984. In 1984, he began working as the Drinking Water Specialist for the EPA Caribbean Environmental Protection Division. From 1984 to 1987 he was primarily responsible for the supervision of the Public Water Supply Supervision (PWSS) program of the U.S. Virgin Islands, and since 1987 he became primarily responsible to oversee the PWSS program in the Puerto Rico Department of Health. Since 1995, he has been an EPA international facilitator, and as such had the responsibility to travel frequently to Caribbean and Central American countries to present seminars on drinking water issues, on how to conduct environmental compliance inspections, and on environmental law enforcement. From 1999 to 2001, he was responsible for a training program on drinking water issues in Honduras, Central America, as part of the federal government's assistance to this country in the aftermath of Hurricane Mitch.

**Evelyn Rivera**, with 20 years of experience in the US Environmental Protection Agency, has a LLM in Environmental Law from the Vermont Law School, Juris Doctor from the University of Puerto Rico - School of Law, and a Chemical Engineering degree from the University of South Florida. In 1998, she began working as an Environmental Engineer at the EPA Caribbean Environmental Protection Division. From 1998 to 2013 she served as an Environmental Engineer and as an enforcement officer of the Clean Water Act - National Pollutant Discharge Elimination System (NPDES) Program for the Caribbean Environmental Protection Division. In 2013 Evelyn became a Legal Counsel at the legal Division of the EPA Caribbean Environmental Protection Division. Since 2013 Evelyn Rivera has been an active member of the Interamerican Sanitary and Environmental Engineering Association-Puerto Rico Chapter. In 2017 she became the President of the organization. From 2003 through 2017 she was a member of the Board of Engineers and Surveyors of Puerto Rico and a member of the Professional Women's Commission from 2012 to 2014. Since 2013 she is a member of the Environmental, Energy and Resources Section at the American Bar Association. She has offered conferences in Latin American countries.



## **Global Health Area**

**Raul Castellano Brama.** He graduated as Physician of the School of Medicine of the Complutense University of Madrid. He has a Master of Public Health of Graduate School of Public Health, Medical Sciences Campus, University of Puerto Rico and a Fellowship of the American Academy of Family Physicians in San Francisco, California. He also obtained the Professional Certificate in Bioethics from the Bioethics Institute Eugenio Maria de Hostos, Medical Sciences Campus of the University of Puerto Rico. Dr. Castellanos brought the Office of Pan American Health Organization (PAHO) / World Health Organization (WHO), agency of which he has been Director since 2011, to Puerto Rico. In the public service Dr. Castellanos has been advisor to the Secretary of Health of Puerto Rico (2008); Director of the Division of Preventive Medicine of the Department of Health of Puerto Rico (2000); Associate Secretary of the Office of Preventive Medicine and Family Health of the Department of Health of Puerto Rico (1992); Medical Director / Executive Director of the Health Services Corporation on the Mount, Naranjito, Puerto Rico (1984). In the academic field Dr. Castellanos has been Associate Director of the Migrant Farmers Health Project, School of Public Health, Medical Sciences Campus, University of Puerto Rico (1980); Assistant Professor of the School of Medicine, Universidad Central del Caribe, Bayamon, Puerto Rico; Instructor, School of Medicine, Medical Sciences Campus, University of Puerto Rico.; and Assistant Professor, School of Medicine, University of Zaragoza, Spain.

**Ever Padilla, JD.** Attorney Ever Padilla Ruiz earned his Bachelor of Social Sciences with a major in Political Science at the Mayagüez Campus of the University of Puerto Rico (Cum Laude). He obtained a Juris Doctor at the Pontifical Catholic University of Puerto Rico. He took courses in International Law and Private International Adoptions emphasizing in the Ortega y Gasset Foundation in Toledo, Spain. In 2005 he completed a certification in Collective Bargaining in the School of Law at Harvard University. He chaired the Committee on Revision of Policies and Protocols for the Prevention of Child Abuse and Adoptions of the Department of the Family. He has collaborated with the Interdisciplinary Council in Support of the Homeless, a body established by law to meet the needs of homeless people in Puerto Rico and to study their vulnerability in our social context. From 2002 to 2014 he taught at the University of Puerto Rico in Bayamón. Since 2002 he has been an Associate Professor in the School of Management and Entrepreneurship at the Polytechnic University of Puerto Rico. Since July 2013 he serves as Executive Director of the Civil Rights Commission of Puerto Rico.

## **Research**

**Vanessa Rivera Amill, Ph.D.** Professor/ Associate Dean of Biomedical Sciences and Research, Ponce Health Sciences University. She has published nine peer reviewed manuscripts (five as first and corresponding author) focusing on the relationships between viral evolution and disease progression as well as compartmentalization or other phylogenetic analysis in SIV evolution (specifically the *env* gene) in the rhesus macaque model of drug addiction and AIDS. She was primarily responsible for evolutionary studies linking the evolution of the SIV envelope gene to rapid progression to AIDS in the monkey model. Throughout these studies, she expanded her scientific background to accommodate the demands of interpreting the relationship between sequence and disease for a large, complex gene product like the SIV envelope. Furthermore, she has experience with comparison of the virus in different compartments to understand how compartmentalization and loss of compartmentalization may be related to pathogenesis.

## **Epidemiology area:**

**José Conde, MPH, MD.** Dr. Conde received his degree in Medicine from the University of Puerto Rico Medical Sciences Campus in 1980. In 1983 he completed his master's in Public Health with specialization in Epidemiology from the Public Health School at University of Puerto Rico. He completed his residency in Preventative Medicine in 1985 from the Johns Hopkins Public Health School. At present, Dr. Conde is Professor at the Division of Graduate Studies in the University of Puerto Rico School of Medicine, Director of the Center for Information Technologies and Telecommunications (CentIT2) of the University of Puerto Rico Medical Sciences Campus, and Director of the RCMI Program (Center for Collaborative Research in Health Disparities). Dr. Conde is Reviewer of the following journals: Telemedicine and e- health, BMC Biomedical Informatics and Decision Making, Artificial Intelligence in Medicine, Journal of Medical Internet Research, British Medical Journal (BMJ), Journal of the American Medical Information Association and Journal of Medical Internet Research (Mental Health).

**Carlos Castillos – Salgado, MD; LL. D; MPH; DrPH, CPH.** Doctor Castillo obtained his law degree from the University of Guadalajara in 1972. In 1978 he obtained his medical degree from the Universidad Autónoma de México. In el 1981 he obtained a master's in Public Health with specialty in Epidemiology from Johns Hopkins University, School of Hygiene and Public Health, Department of Epidemiology. In 1987 he completed his Public Health Doctorate from the School of Hygiene and Public Health at Johns Hopkins University. He has served as Director of the Doctor of Public Health/Epidemiology Program (DrPH) at the Department of Epidemiology, Bloomberg School of Public Health (BSPH) since 2011. In 2013 he was named Director of the Global Public Health Observatory, Department of Epidemiology and Urban Health Institute at BSPH.

**Jose F. Cordero, MD; MPH.** Dr. Cordero is Epidemiology & Biostatistics Department Head and received the Patel Distinguished Professor of Public Health award at the college of Public Health at the University of Georgia. In 1973 he earned his medical degree at the University of Puerto Rico School of Medicine, then completed his internship in 1974 and his residency in 1975 at the Boston City Hospital in Boston. In 1977, he completed a fellowship in medical genetics at the Massachusetts General Hospital. In 1979 he obtained a master's degree from the Harvard School of Public Health. Dr. Cordero is a pediatrician, epidemiologist, teratologist and Former Dean of the Graduate School of Public Health at the University of Puerto Rico. Dr. Cordero was an Assistant Surgeon General of the United States Public Health Service and the founding director of the National Center on Birth Defects and Developmental Disabilities (NCBDDD) at the Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia. In conjunction with the CDC, Cordero initiated a multi-state collaborative study to identify factors that may put children at risk for autism spectrum disorders (ASDs) and other developmental disabilities. In 1994, Dr. Cordero was appointed deputy director of the National Immunization Program, where he made important and long-lasting contributions to one of the nation's most successful public health programs. In 2017, Cordero was awarded the Sedgwick Memorial Medal from the American Public Health Association. The Sedgwick Memorial Medal is the APHA's highest honor awarded for distinguished service and advancement

**Eduardo Cordero, PE:** Mr. Cordero earned a master's in business administration and a BS in Mechanical Engineering. He is the director EHSS in Baxter International Inc. He is experienced in professional in Supply Chain Management, Manufacturing, Operations, Distribution, and Global Logistics. Proven success includes transforming poor performing operations into high efficiency organizations with outstanding operational, customer service, and financial results. His specialties are process improvement, supply chain design and optimization, demand forecasting and inventory planning, warehousing, and global logistics, outsourcing, and vendor management. Mr. Cordero strengths are strong analytical and problem-solving skills; ability to identify and deal with multiple variables and deliver results with minimum supervision. He is a self-starter and highly motivated individual.

**José Gregorio Quijada MD; MSc:** Dr. Quijada's area of expertise is Internal Medicine (General Medicine), Oncology/ Hematology. He is the regional Medical Director for Latin America at Merck. He is a fellow of the American College of Physicians in Internal Medicine / Hematology at American College of Physicians. He holds a MSc in Hematology from the Royal Postgraduate Medical School at the University of London. He also has a fellowship in Transfusion Medicine at North London Blood Transfusion Centre, is a Specialist in Internal Medicine from Hospital Universitario de Caracas at Universidad Central de Venezuela, and his Doctor of Medicine (MD) degree is from in Pablo Acosta Ortiz Medical School at Universidad Centro Occidental 'Lisandro Alvarado'.

### **Community:**

**Roberto Ortiz:** Mr. Ortiz is a merchant and Pastor of the First Baptist Church in the community of La Playa in Ponce. Since the year 2000 he has done community work, mostly focused on problems related to environmental health. Belongs to the long-term recovery group (GRALP) sponsored by FEMA. From 2017 to the present he is part of the Community Researchers Project sponsored by Ponce Health Sciences University. Since 2017, Mr. Ortiz is a collaborator of the Public Health Program for the community-based area. (Refer to ERF F1-1 for complete description)

**F1-2 - Describe how the program engages external constituents in regular assessment of the content and currency of public health curricular and their relevance to current practice and future directions.**

The PHP-EAC will meet at least once a year or as needed to assess issues brought to their attention, review the strategic Plans of the academic year, and evaluate the result of the Plans. Other meetings could be coordinated through conference calls or Skype sessions. The Associate Dean of PHP, Track Coordinators, and Career and Program Promotion Services Coordinator will provide the committee with any relevant documents for their consideration.

The first meeting of this advisory committee took place during the PHP retreat in the summer. This is the time where we present the report on what was accomplished during the year, discuss any curriculum changes, and the committee will participate in the development of the PHP strategic Plans. PHP-EAC members were able to present and discuss their recommendations.

Topics discussed in the summer meeting included:

- Self-Study
- MPH and DrPH Curricula
- New courses being considered for the MPH and DrPH:
  - Big Data
  - Clinical Epidemiology
  - Mental Epidemiology for MPH Epidemiology
  - Analysis of large data bases
- Curricula vs job offers
- Discussion regarding changing some course titles

Please refer to **the Electronic Resource File (ERF)**

**F1 -3 - Describe how the program external partners contribute to the ongoing operations of the program. At minimum, this discussion should include community engagement in the following:**

To provide a high-quality education, research, and community services, the PHP-EAC will have as its main responsibility to ensure that the PHP fulfills all its established plan and accreditation requirements, as well as compliance with curriculum, objectives, mission and vision of the program. To ensure that, this committee is formed by professionals and community leaders who represent, at the highest level, the three program areas of PHP.

**a) Development of the mission, vision, values, goal, and objectives.**

Taking as our starting point the mission and vision of the Public Health Program of Ponce Health Sciences University, the PHP-EAC developed its mission and vision:

**PHSU Mission**

The mission of the public health program is to provide the highest quality education, research, and population-based services. This will be accomplished through an innovative, dynamic, and responsive public health curriculum while preparing ethical and competent professional public health practitioners and researchers that are able to excel in promoting and protecting health in the community and in a diverse, globalized society.

**PHSU Vision**

The PHSU public health program commits and aspires to be a leader in preparing public health professionals, by providing excellence in academia and by building and expanding public health knowledge and competency, to improve the health of communities and populations locally and across the world.

**PHP-EAC Mission**

The PHP-EAC will provide advice to the PHP, taking as its starting point the outcomes in the areas of curriculum evaluation, service, and research, with the purpose of guaranteeing as a final result graduates that are competent and ethical public health professionals, whose practices and research support the promotion and protection of health in diverse and globalized communities.

**PHP-EAC Vision**

The PHP-EAC is committed to promoting excellence in public health professionals, and in the Ponce Health Sciences University public health students. We will be vigilant and promote the compliance of competencies in public health with the goal of improving the health of local and world-wide communities and populations.

Some of the functions of the External Advisory Committee relate to the mission, vision, values, goal, and objectives include:

- Advise the Associate Dean and its Track Coordinators in the development of activities, strategies and priorities to achieve the established PHP goals, mission and vision.
- Advise the Associate Dean of any proposed changes to the PHP mission, vision and goals.
- Review reports, strategic plan documents, publications and any other document as requested by the Associate Dean. Make recommendations to ensure alignment with PHSU goals and strategic Plans.

The activities related to the functions of the PHP-EAC were discussed during the PHP Faculty Retreat. The Associate Dean and Track Coordinators, Curriculum, Assessment and Research Committees presented their strategic plan, curriculum, areas of research, service, community service activities, employment data, and future academic offerings, so that they can be verified under the committee's perspective. One of the main responsibilities of the PHP-EAC is to ensure that everything presented is aligned with the mission, vision, values, and objectives of the Public Health Program. Each of the members of the PHP-EAC discussed the documents presented based on their expertise and skills. One of the members of the Advisory Committee Pastor Roberto Ortiz, is an active and respected community leader in his community, "La Playa" one of the most disadvantaged areas in Ponce. His inclusion and knowledge bring to the program the realities the communities face and helps adapt the theory learned inside the classroom, so it can be applied in a practical way by working directly with the community.

**b) Development of the self – study document.**

Another function of the external committee is to advise the Associate Dean during the CEPH self – study process.

A draft of the present self-study was shared with PHP-EAC members and they provided recommendations for improvement.

**c) Assessment of changing practice and research needs.**

The Research Committee, Curriculum Committee, Applied Practical Experience (APE) Committee, and the Associate Dean, had a meeting with Dr. Vanessa Rivera, designated as the research area advisor for the Public Health program in the month of July 2017. The following topics were discussed in that meeting:

- The faculty-defined areas of research
- Early exposure of the doctoral students to the faculty research areas, so they can identify future dissertation topics.
- Directing the doctoral dissertation into the faculty’s research areas
- Focusing the work-study available under the Seed Money of the PHP to doctoral students, to stimulate the doctoral students to join the research areas of the faculty.

Dr. Rivera’s recommendations were discussed by the Research Committee. The Research Committee defined and refined the areas for research (refer to section E). Another recommendation was that the faculty who opted for the PHP Seed Money should include a student as part of the work study program. Dr. Rivera’s recommendations were analyzed by the Curriculum Committee and a curriculum revision of the masters and doctoral programs were conducted using as the guide the new criteria developed in 2016 (Refer to section D). Following this curricular revision, two new courses were added to the doctoral curriculum: Research Methods (parts I and II). Part one presents the theory of research methodologies, and part II consists of the students’ rotations with the entire faculty, so they can get familiarized with their research areas.

The functions of the Research Committee include:

- Advise the Associate Dean and Track Coordinators on new tendencies and research needs in Public Health in the private and public sectors and recommend any revision to the program curriculum to address those changes.
- Advise the sub- committees of each track to outline their work plans so they can fulfill the expectations of curricular compliance, community service, professional development, and research.
- Advise Associate Dean on potential practicum sites to support our student practicum program

**d) Assessment of graduates’ competencies in the employment setting.**

Among the data collected from the annual reports required by CEPH there is a variable related to “employment setting” to find out if the alumni are continuing graduate studies or are still looking for a job. This data will be presented in the next PHP-EAC meeting. This meeting is composed of the coordinators of the different tracks, members of the PHP-EAC, Career and Program Promotion Services Coordinator, and the Associate Dean of PHP. The Career and Program Promotion Services Coordinator will present her program Plans to obtain comments and recommendations. This program Plans will be discussed taking as the starting point the data obtained from the annual report submitted to CEPH.

The functions of this committee include:

- Sharing their perspectives in tendencies, problems, and concerns in public health in Puerto Rico and other countries.
- Support the Associate Dean or its designee to assess the program graduates to in terms of competencies in an employment setting.
- Support the Associate Dean in the identification of organizations with potential for partnership with PHP that will promote the program
- Support program initiatives including workshops, job fairs, community intervention and others.

- Participate in community education and engagement initiatives.
- Advise the Associate Dean with any potential initiative that will promote the program.

**F 1- 4 - Provide documentation of external contribution in at least two of the areas notes in documentation request**

See **Electronic Resources File (ERF)**

**F1 -5- If applicable, assess strengths and weakness related to this criterion and Plans for improvement in this area.**

**Strengths**

- The PHP-EAC is composed of representative from the state and federal government and as well as industry, organizations, and community groups. This composition allows the PHP-EAC to have a broad understanding of public health issues and needs that will benefit the PHP.
- The Associate Dean and the Track Coordinators will be able to receive recommendations from the advisory committee that will help the program to achieve the mission, vision and the established goals and values.
- Most of the members of the committee are familiar with the history and evolution of the program since its inception.
- All the members of the committee have vast experience in their area of expertise.

**Weakness**

- It is a new committee and it still needs to develop its work Plans for 2018 -19.

**Plans**

- Support the PHP-EAC so they can continue with their plan to assist in the continuous development of the PHP.
- Submit the PHP self-study draft to the PHP-EAC and collect its comments and recommendations.
- Ensure that the newly created committee is aware of program activities and needs.
- The Associate Dean will meet with the entire committee to brief them on program status and promote their involvement.
- Inform and present to the PHP faculty and PHSU managements of the creation of the PHP-EAC.



## F2. Student Involvement in Community and Professional Service

**F2 -1 - Describe how students are introduced to service, community engagement and professional development activities and how they are encouraged to participate.**

The PHP is committed to promoting the participation of MPH and Dr.PH students in community service and in their professional development. Within the States and Territories of the United States, Puerto Rico is the geographical area with the highest Gini Index, the lowest per capita income, and the oldest population, turning Puerto Rico, from a general viewpoint, into a vulnerable population. All MPH and Dr.PH students must register in the online “Health disparities” course, which presents the realities of the health inequities we find in Puerto Rico. Taking the above into consideration, the students are offered the opportunity to study the material learned in the classroom with the real world found in the communities that need to be served, by: 1) adding community service as an integral part of classes; 2) actively participating in the faculty’s community projects; 3) guiding their own community service development by joining Public Health Student Society (*Sociedad Estudiantil de Salud Pública*). The Public Health Student Society is a student organization composed of the university community who is associated with the PHP of PHSU. This society has as its purpose developing future leaders in public health sciences who can combine academic excellence with extracurricular educational activities that can help them reach their maximum potential around public health. Its mission is to promote the joining together of the student population, the development of competencies, and the search for social, physical, and mental well-being of the community. To fulfill this mission, activities are centered on the promotion of health and prevention of diseases, health education, research and service to benefit the community. The vision is the commitment to develop and promote the well-being of the university community and the community at large, by expanding the knowledge regarding public health by promoting activities that encourage public health, so it can transform and inspire local communities and populations. The Public Health Student Society has as a goal to serve as base and support for the learning and development of competencies and skills in the field of public health. It also seeks to encourage and qualify students in all areas such as academic excellence, research, and service in the field of public health. The objective is to obtain efforts with a focus on public health through health education and promotion, disease prevention, and interdisciplinary work from the various aspects of health. All the above is aligned and fulfilled through interventions, empowerment, community-based work, and research. Through the practicum that students must carry out as part of the academic component of the MPH and Dr.PH, students develop professional services functions in organizations related to public health, increasing their competencies in the real world, and learning which areas of public health they would like to specialize in.

**F2 -2 - Provide examples of professional and community service opportunities in which public health students have participated in the last three years.**

Below we provide some examples of community and professional service opportunities in which public health students have participated:

- In the course MPH 6601- “Promotion of Health and Prevention of Diseases”- (“Promoción de la salud y prevención de enfermedades”) offered by Dr. Iris Martínez, group education interventions are performed. These are interventions in the community where she trains the public health students in aspects of health based on what community members and professionals have identified as needs. During this course, the interventions are aligned to the course objectives and competencies. She also offers the public health students opportunities to develop coordination skills on health services, communication in health, and education techniques directed to the community and focused on health at all level (primary to tertiary). Table F2.2a shows the group educational interventions that were conducted on February 2018:

**Table F2.2a: Group Educational Interventions**

Date	Place	Town	Impacted Population	Total of persons impacted	Type Educational Intervention	Educational Topic
February 15 th 2018	Hogar Paz de Cristo	Ponce	Senior	38	Group Intervention	Sexuality in the elderly and taboos
February 19 th 2018	Dialysis Unit First floor Saint 's Lucas	Ponce	Adult and Senior Hospitalized	7	Group Intervention	Nutrition in Renal Patient
February 20 th 2018	Hemeterio Colon School	Ponce	Adolescents	31	Group Intervention	Suicide Prevention
February 21 th 2018	Luis Biaggi Center	Ponce	Senior	43	Group Intervention	Mental Health: strategy to fight depression
February 21 th 2018	Hogar Crea Ponce Pueblo	Ponce	Former Inmates in Diversion Program	16	Group Intervention	Self-esteem and self-concept
February 22th 2018	Hogar Paz de Cristo	Ponce	Senior	38	Group Intervention	Sexually transmitted infections prevention
February 22th 2018	Ponce Health sciences University	Ponce	Public Health Students	11	Group Intervention	Love my life (Self-esteem and self-concept)
February 23th 2018	Colegio Metodista Julia Torres Fernández	Ponce	Third through seventh grade students and teachers	65	Group Intervention	Healthy snacks and physical activity

- Dr. Mayra Roubert offers MPH 5105 “Introduction to Environmental Health” course, where students are required to perform community service as public health professionals. Dr. Roubert and the students developed a community project initiated by the community as requested by a community leader, so it becomes an opportunity to perform community service with a professional component in the real world. Among the activities are: meeting with community leaders and the communities to listen to their needs and understand them, to develop together with the community a project that answers their questions and issues, to implement the project, present the results, and collaborate with the community in following up the established post-project Plans. Table F2.2b presents some examples of the projects that have been conducted during the last three years.

**Table F2.2b: Community projects of the last three years**

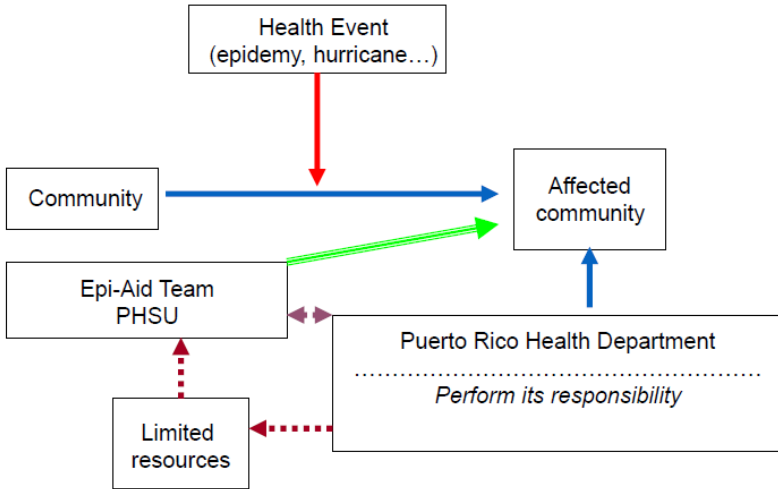
Student	Project
Judith Torres and MPH course 2017-2018	Health Profile and Gastrointestinal Prevalence in the Community of La Playa in Ponce (2017).
David Velez and MPH course 2015-2016	Evaluating Health Related to Quality of Life in an Exposed Community to Air Pollution from Stone, Sand & Gravel Industry in Juana Diaz, Puerto Rico (2016)
Angel Perez and MPH course 2015-2016	Sociodemographic and Environmental Characterization in Communities of the Rio Cañas Down Town in the Municipality of Juana Díaz, Puerto Rico (2016)
Getzabeth Bosques and MPH course 2015-2016	Environmental Risk Factors among the Residents of the Guayabal Community in the Municipality of Juana Díaz, Puerto (2016)
Jania Garcia and MPH course 2015-2016	The Effect of Noise on Health in Communities Exposed to the Activities of the Quarries in Juana Díaz, Puerto Rico (2016)

- Epi Aid Teams. *Epi Aid Teams* form part of the volunteer program created in 2007 by Dr. Juan C. Orengo, Dr. Vivian S. Green and Dr. Mayra Roubert with the purpose of being ready to intervene in emergency situations due to epidemics, natural disasters, or man-made disasters. The teams are formed by MPH and Dr.PH students, faculty of the program, and volunteers. Epi Aid Teams are supervised by PHP faculty, and its activities are mostly done in coordination with the municipalities where the service will be taking place, NGOs, faith-based organizations, and state and federal entities such as the Department of Health. Epi Aid Team activities help students to develop real-world public health competencies. Table F2.2c shows some of the interventions that were conducted during the last three years.

Table F2.2c Epi Aid Teams Interventions	
Health Event	Activities and Impact
Hurricane Maria (2017)	<p>The intervention consisted in providing information related to general preventative measures in Public Health such as water management and disinfection, personal hygiene, handwashing, proper handling of food and vector control in their homes and surrounding areas. People was oriented about the handling and use of a filtration system for the purification of water. In some of the visited communities, water samples were taken. Also, in some of the communities, an assessment of possible mosquito breeding sites was performed. Larvicides and Ovitrap (mosquito traps) were used for the control and reduction of mosquito activity. Traps were monitored in a weekly basis by the students. Collaborations with the Wellness Center and the Psychology Program completed a PHSU multidisciplinary approach.</p> <ul style="list-style-type: none"> <li>For three months, 2,871 persons with a total of 20 communities, 19 schools and 10 shelters were impacted.</li> </ul>
Zika Epidemy (2016)	<p>An education campaign on disease prevention and control of the mosquito that transmits Zika, dengue and chikungunya was implemented in the schools of the Department of Education in the municipality of Ponce in collaboration with the Office of Municipal Emergency Management and San Lucas Hospital.</p> <ul style="list-style-type: none"> <li>More than 2,500 elementary, middle, and high school students and more than 50 teachers in the Ponce Municipality were impacted.</li> </ul>

The figure below presents a flow of the activation of the Epi Aid Teams:

Figure F2.2 Epi Aid Teams



**F2-3 - If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.**

Students are involved in professional and community service through different activities and have opportunities to hone their public health skills in real world situations.

**Strengths**

- The Public Health Program has diverse ways in which the students can be integrated into community service and professional activities.
- One hundred-percent of the faculty of the PHP has previous experience in the organization and implementation of community service and professional activities.
- Appreciation from the community in terms of the impact these PHP activities have help keep the students interested and help on the development of other projects.
- The Public Health Student Association is active and committed to making a positive impact in the communities.

**Challenges**

- Some students have full time jobs, and this makes it difficult to join some of the activities that take place during their working hours.
- In emergency situations it can become difficult to schedule activities within the academic time frame.

**Plans**

- To establish a Community Service Committee, where the PHP Plans is presented with the objective of knowing the activities that take place, the perceived needs of the communities, and the real needs the communities themselves communicate. This committee would have representation from the community leaders.
- To present to the MPH and Dr.PH students the already established community service and professional activities that they can join at the beginning of the academic year. This presents an opportunity for students to voice any limitations for participation they may have and to come up with solutions.

### **F3. Assessment of the Community's Professional Development Needs**

#### **F3- 1 - Define the program's professional community or communities of interest and the rationale for this choice.**

The following communities of interest are impacted by PHP activities:

- PHSU Scientific Community

Includes PHSU faculty, students, researchers and alumni.

#### Rationale

In 2014, PHP received a request from the Institutional Review Board (IRB) of Ponce Health Sciences University and the President of the Ponce Research Institute, Dr. Kenira Thompson, to support PHSU scientific community by providing developmental activities in order to improve research skills of faculty, researchers and students since the quality of the research proposals submitted was rated as poor in aspects related to ethics, methodological design and statistical analyses. The PHP responded to the request immediately and it has been organizing activities to impact the research community.

- PHSU Consortium Residency Programs

Includes residents and physicians.

#### Rationale

The PHP regularly trains and mentors medical students, residents and the faculty of the medical school and nearby hospitals in clinical research methodology, risk factor research and scientific writing. The PHP Plans to continue these now established workforce training opportunities in vector borne and emerging diseases, autism, Alzheimer's, Parkinson's, and environmental health. Residents must demonstrate the ability to investigate and evaluate their patient care, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and desire for life-long learning.

ACGME required that the curriculum must advance residents' knowledge of the basic principles of research, including how research is conducted, evaluated, explained to patients, and applied to patient care. It also required that Residents participate in scholarly activity. The PHSU PHP Workforce Development-offered activities were focused on clinical research methodology, bio-statistics, ethics in research and basic knowledge of IRB documents and processes to fulfill the reported needs of some of the PHSU Consortium Residency Programs.

- La Playa Community

Includes La Playa sectors, border communities (Pámpanos, Villa del Carmen) and Community Leaders.

#### Rationale

At the request of the La Playa community leaders, the PHP has been delivering workshops in research protocols, research instruments and data analysis. The objective of the PHP is to involve the community leaders in community-based participatory research.

- Non-for-profit Organizations

Includes other communities and non-for-profit organizations.

### Rationale

The PHP offers training in the use of the laboratory equipment, weighting, laboratory safety techniques and the process of obtaining samples. The objective of the PHP is to develop skills in the laboratory research area to participants of community-based non-for-profit organizations.

- Community-Based Institutions

Includes community -based institutions, Puerto Rico Emergency Management and schools.

### Rationale

The PHP offers training in Zika and Dengue education for children, parents, teachers, students and the school communities. The objective of the PHP is to develop techniques of zika and dengue prevention in the school population. After the impact of Hurricane Maria, education in preventive measures is highly requested by community-based institutions.

- Puerto Rico Department of Education

Includes teachers, administrative, school breakfast and lunch programs' personnel.

### Rationale

After Hurricane Maria, the Director of the South Region Department of Education requested the development of educational workshops for “train the trainer” in topics related to epidemic control, disease prevention, food safety and hygiene. The objective of the PHP is to develop competencies in health topics.

We were able to identify the need for continuing education in our communities of interest using surveys of needs and meetings with focal groups and community leaders.



**F3- 2 - Describe how the program periodically assesses the professional development needs of its priority community or communities and provide summary results of these assessments. Describe how often assessment occurs. Include the description and summary results in the self-study document and provide full documentation of the findings in the electronic resource file.**

In 2017 and to comply with the new 2016 CEPH criteria, PHP re-evaluated its continuing education efforts to broaden its impact spectrum. PHP proceeded to identify new groups to be impacted and evaluated their professional needs.

To periodically assess the continuing education needs of the communities, the PHP uses data collected from various sources. Among the instruments and strategies used are: the PHP graduation exit interview, the workforce assessment survey, alumni survey, community approach, need assessment of practice sites' preceptors, IRB evaluation and others. These instruments provide information of development needs to design adequate continuing education activities and strategies. A description of these instruments and others follows:

- PHP graduation exit interview. This questionnaire gives us information on areas or topics of interest that our new graduates are interested in receiving in their alumni workforce.
- Workforce Assessment Survey: Faculty are encouraged to establish and develop external relationships with community groups and organizations, public health departments, labor organizations, and other government agencies as partners where community knowledge is brought to the classroom and academic skill sets to the public health workforce and the community. The PHP now has workforce related goals and objectives in both the research and service domains. We have begun offering new workforce training opportunities; entomology seminars, sampling, Quality improving forum, nutrition and cancer research
- Alumni survey. This questionnaire gives information regarding the needs for professional improvement opportunities in public health competencies for our alumni.
- ACGME competency Practice-based Learning and Improvement and Residents' Scholarly Core Activities. These interventions are important for residency programs. The concepts acquired through the workforce are measured in the internal evaluations of clinical competencies, case reports, and in the original research activities that must be presented during the internship period.
- Community Approach. The PHP will open our PHP classes to health professionals seeking continuing education classes (not for degree seekers) in their areas of identified workforce need such as infectious disease epidemiology, disaster response or health management courses. To fulfill their workforce development responsibilities, faculty in the PHP are involved in a wide variety of workforce development activities based on their expertise, interest and community relationships.
- Needs Assessment of practice sites' preceptors who participate in the Practical Skills / Applied Practice Experiences (APE) course. Through this strategy, we identified diverse development needs among federal and public agencies and community-based organizations personnel. The selection decision for the inclusion of topics was based on those areas related to health care and health prevention. Recent activities required updating new concepts in public health area, research and analysis skills.
- Ponce Research Institute IRB Evaluation: The evaluation will be completed by December 2018 with the participation of the Ponce Research Institute and the PHP. To evaluate a series of workshop offered related to ethical aspects, methodology, risk factor research and scientific writing methodological design and statistical analysis to the scientific community IRB. PHP is interested in finding out if there has been improvement in the quality of the research protocols submitted.

**F3-3 - If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.**

**Strengths:**

- Two members of the Public Health Program Faculty belong to the IRB Committee, facilitating the identification of community that needs intervention.
- The coordination of the Practical Skills / Applied Practice Experiences course maintains contact information on the practice sites and preceptors. Topics of interest are identified faster.
- PHSU Public Health Program makes an important contribution to the continuing education and professional development of personnel engaged in public health practice to advance their knowledge and skills. The program initiatives include the development of educational activities like entomology, sampling, quality improvement, nutrition and cancer research seminars; delivering of courses by experienced public health faculty; mentoring health professionals.
- The Public Health Program has strong relationships with our colleagues in the medical school resulting in improved clinical and translational research and greater success for residents and medical students in publications.
- Medical students feel free to come to PH faculty for mentoring in research projects.

**Weakness:**

- It would be good to have stronger collaborations with practice sites to identify their continuing education needs.

**Plans**

- Present to the practice sites diverse topics related to public health to develop ongoing education activities.

#### **F4. Delivery of Professional Development Opportunities for the Workforce**

**F4 -1 - Describe the program’s process for developing and implementing professional development activities for the workforce and ensuring that these activities align with needs identified in Criterion F3. (self-study document)**

The mission of the public health program at PHSU is “to provide the highest quality education, research and population-based services”. This will be accomplished through an innovative, dynamic, and responsive public health curriculum while preparing ethical and competent professional public health practitioners and researchers that are able to excel in promoting and protecting health in the community and in a diverse, globalized society. Considering our mission, an important part of our responsibility is not just to ensure the future competence of our students but also to assist in the public health competence of those outside our academic setting. The program considers workforce development as part of community service, which is a fundamental part of our mission and values.

To assess the continuing education needs of the PHP community of interest, our program uses data from different sources periodically and the results are discussed with the external advisory committee, workforce development, coordinator, APE coordinator and with the Career coordinator.

The instruments and strategies used are based on the outcomes described in the criterion F3-2. This input provides information about workforce’s needs to design and develop continuing education activities and strategies. Some of the activities are included in the table below:

**Table F4-1: Development and Implementation of Professional Development Activities**

PHP Communities of Interest	Instruments to assesses professional development needs	Development and Implementation of professional development activities
PHSU Scientific Community PHSU Consortium Residency Programs	Ponce Research Institute IRB Evaluation PHP Graduation Exit Interview Alumni Survey	PHP Workforce Conferences
	ACGME competency Practice-based Learning and Improvement and Residents' Scholarly Core Activities	Internal evaluation of clinical competencies Case reports Presentation of original research
La Playa Community Non – for Profit Organizations Community Based Institutions	Workforce Assessment Survey Community Approach Need Assessment of Practice Sites	Needs questionnaires, focal meetings with community leaders Workshop to develop practical skills in the laboratory research area PHP Workforce Conferences
Puerto Rico Department of Education	Community Approach Need Assessment of Practice Sites	Focal meetings Meetings with regional directors

The initiatives developed by PHP to offer service to the communities of interest are based primarily on faculty experiences, skills and expertise. These aspects are considered to ensure that the resources are used to full capacity. Faculty are encouraged to establish and develop external relationships with community groups and organizations, public health departments, labor organizations, and other government agencies as partners where community knowledge is brought to the classroom and academic skill sets are brought to the public health workforce and the community. We have begun offering new workforce training opportunities; conducting a zika training last year at UPR – Mayaguez; a talk on sustainable strategies for the prevention and integrated vectors control of zika, dengue and chikungunya (offered in PUCPR-Pontifical Catholic University of Puerto Rico). To provide diversity of topics, the PHP faculty is involved in a wide variety of workforce development activities based on their expertise, interest and community relationships.

All the initiatives offered to the communities are free of cost and are adapted to the characteristics and needs of each community. This versatility allows us to:

- Provide Continuing Education (CE)
- Establish links to develop doctoral studies based on the needs of the communities of interest.
  - The Doctoral Program in Epidemiology has at present six students working on their doctoral dissertations based on the needs of the La Playa community.
- During 2017 – 2018, the Environmental Health track began offering OSHA certifications for 20 and 30 contact hours, and Cardio Pulmonary Resuscitation (CPR). We will develop a pilot study to open these offers to the alumni.

**F4- 2 - Provide two to three examples of education/training activities offered by the program in the last three years in response to community-identified needs. For each activity, include the number of external participants served (i.e., individuals who are not faculty or students at the institution that houses the program). (Self-study document)**

In the table below, we provide three educational/training activities offered during the “Public Health Program Scientific Meetings:”

**Table F4-2: Educational Activities during Public Health Program Scientific Meetings**

Meeting	Speakers
1 <sup>st</sup> PHP Scientific Meeting May 4 – 7, 2015	Dr. Raúl Castellanos: Primary Care, Public Health and Access to Health Services  Lcdo. Ever Padilla: Discrimination in Access to Health Services: A Reflection from the Perspective of the Civil Rights Commission
2 <sup>nd</sup> PHP Scientific Meeting April 25 – 27, 2016	Dr. Homero Monsanto: Addressing Public Health Needs through Real World Evidence (RWE)- A Pharmaceutical Industry Perspective.  Ing. Jorge Martínez: The Water Situation in PR
3 <sup>er</sup> PHP Scientific Meeting May 24 – 25, 2017	Dra. Mercedes Rodríguez: Cultural Women Stigma

PHP provides work force activities focused on communities. In our Outreach Core/U54 PHSU/MCC partnership there is an event called The Bridge. The Bridge is an event that brings cancer and Public Health investigators and community leaders together with the purpose of improving the understanding of cancer and other research, and community participation. One of the principal objectives of Bridge is to empower communities to take charge of the research projects that impact their communities. For this reason, PHP offers all community leaders basic laboratory skills and research workshops. The purpose of this year’s Bridge was to discuss community collaborations between the community members and the PHSU investigators from departments/Programs such as Public Health, Basic Sciences and Puerto Rico Biobank (PRBB). Four groups from the Community-Based Participatory Research workshop presented their concerns related to lung and skin cancer, and the relationship between floods and gastrointestinal diseases, to the researchers. The groups identified cases in their communities on which they based their concerns. The researchers supported the groups’ community efforts and brainstorm ideas to collaborate with the CBPR participants. Likewise, the investigators explained their research project to the community, who agreed to support their studies. Fifty-nine community members (44%) and Basic and Public Health researchers (56%) attended the event (50 RSVPs). Fifty percent of participants were between the ages of 25-54; the remaining 50% were 55+; 67% female; 62% married; 55% earned monthly incomes over \$1,001, and 55% had a bachelor’s degree or higher. Most participants were from towns of the southern of Puerto Rico: Ponce (28%); Peñuelas (22%); Yauco (17%), Santa Isabel (11%); Villalba (11%); Cabo Rojo (6%); and Coamo (6%).

PHP is working with the community of la Playa in Ponce. One of the objectives of the PHP is to actively involve the community leaders through every step of the study. Among the community leaders in our group are professionals in the fields of nursing, teaching, microbiologists, secretaries, etc. We have brought workshops in developing research protocols, instruments for data collecting and data analysis.

Among the workforce activities that PHP does jointly with the Environmental Protection Agency (EPA) and the communities are contained in a Memorandum of Understanding (MOU) where the Program becomes an Equipment Loan Center. Under the Caribbean Science Consortium MOU, property loaned, specifically the water quality monitoring equipment, will be maintained by the PHP, Inc. on behalf of the PHSU (a Consortium member), in support of the EPA Region 2 Equipment Loan Program. In accordance with this memorandum, the PHP will use the loaned equipment directly and administer any equipment loans, approved by EPA Region 2, to non-profit organizations (e.g., volunteer monitoring organizations, citizen science groups, non-government organizations, other universities, local governments, etc.). PHP will act as a “loan center” in the Caribbean to promote and facilitate the loaning of water quality monitoring equipment to non-profit organizations on behalf of the EPA. PHP will be responsible for loaning of the equipment, providing training, providing technical assistance to borrowing, non-profit organizations approved by EPA Region 2, and allowing non-profit organizations to use the equipment at the University, where applicable. PHP worked with the community at Ponce Playa, where community leaders were trained in obtaining samples, laboratory skills, and the adequate use of laboratory equipment, among others.

For the workforce development activities based on the input from the preceptors in the Practical Skills / Applied Practice Experience course, we have only received two applications to date. The first one came from Dr. Luisa Alvarado, PI of the Sentinel Enhanced Dengue Surveillance System (SEDSS) program, of the CDC office in the St. Luke’s Episcopal Hospital. The PHP equipment was moved to the SEDSS headquarters to be used in the “Professionalism in Research with Human Subjects” activity. The second application came from Mrs. Waleska Sympon, director of the Office of institutional Programs of Damas Hospital in Ponce, where a personnel development activity was offered titled “Biostatistics: Transforming Data in Information for Informed Decision Making”.

On the other hand, Dr. Kenira Thompson, director of the Ponce Research Institute, together with the members of the Institutional Research Board (IRB), asked the PHP to develop a time-line of monthly activities to be repeated annually. These would be specifically designed to serve the needs of the academic, medical and student population as indicated by the presidency of the Ponce Research Institute. They suggest the following program of academic activities; where most of them would offer three CE credits:

- Research Project Generic outline: Original Presentation and Case Report
- Observational Quantitative Research Designs.
- Pilot Projects
- Biostatistics in the components of an Original Presentation
- Introduction & Methodology
- Biostatistics in Results and Discussion of an Original Presentation
- Bioethics in research forms and evaluation processes at Ponce Research Institution IRB
- Quality Control in Data Management and Research Protocol

Three weeks before each activity, and using the PHSU Community email, an invitation is sent, which would include the handouts and support material of the activity.

These activities are coordinated to take place on the last Friday of each month, in the AB room of the Clinical Psychology building of the University. They are scheduled to last three hours, at the end of which the activity is evaluated in writing by participants.

This activity has impacted a total of 225 participants in academic periods in 2014 and 2017.

**Table F4-1.2: Number of impacted persons from 2014-2017**

<b>Year</b>	<b>Number Attending</b>
2014-2015	64
2015-2016	155
2016-2017	136

### Summary Activities: 2014-2015 / 2015-2016 / 2015-2016

Audience: Public Health practitioners, Master's and Doctoral Degree Public Health students, MD Residents, Students of Medicine, PhD Basic Sciences Students, MSM Students, Researchers, Mentors, Research Coordinators, Faculty Members.

#### Summary Activity: 2014-2015

TITLE	DATE	SPEAKER	ATTENDANCE	3 hours CME Credits
<b>Methodology for Quantitative Research. Original Presentation and Case Report</b>	November 7 <sup>th</sup> , 2014	Rafael Bredy	20	No
<b>Biostatistics in the 4 components of an original presentation.: Introduction, Methodology, Results and Discussion</b>	November 21 <sup>st</sup> , 2014	Rafael Bredy & Juan Carlos Orengo	24	No
<b>Bioethics in research. Forms and evaluation processes at Ponce Health Sciences University institutional review board</b>	December 12 <sup>th</sup> , 2014	Rafael Bredy & Simón Carlo	20	No

#### Summary Activity: 2015-2016

TITLE	DATE	SPEAKER	ATTENDANCE	3 hours CME Credits
<b>Research Project Generic Outline: Original Presentation and Case Report</b>	October 9 <sup>th</sup> , 2015	Rafael Bredy	31	Yes
<b>Observational Quantitative Research Design</b>	October 30 <sup>th</sup> , 2015	Rafael Bredy	21	Yes
<b>Pilot Projects</b>	November 20 <sup>th</sup> , 2015	Rafael Bredy	22	Yes
<b>Biostatistics in the 4 components of an original presentation.: Introduction, Methodology</b>	December 18 <sup>st</sup> , 2014	Rafael Bredy	21	Yes
<b>Biostatistics in Results and Discussion of an Original Presentation</b>	January 29 <sup>th</sup> , 2016	Rafael Bredy	17	Yes
<b>Bioethics in research. Forms and evaluation processes at Ponce Research Institution IRB</b>	February 26 <sup>th</sup> , 2016	Rafael Bredy	14	Yes
<b>Quality Control in Data Management and Research Protocol</b>	April 15 <sup>th</sup> , 2016	Juan Carlos Orengo	29	Yes



<b>Summary Activity: 2016-2017</b>				
<b>TITLE</b>	<b>DATE</b>	<b>SPEAKER</b>	<b>ATTENDANCE</b>	<b>3 hours CME Credits</b>
<b>Research Project Generic Outline: Original Presentation and Case Report</b>	August 26 <sup>th</sup> , 2016	Rafael Bredy	30	Yes
<b>Observational Research Design &amp; Pilot Studies</b>	October 28 <sup>th</sup> , 2016	Rafael Bredy	28	Yes
<b>Biostatistics in the 4 components of an original presentation: Introduction, Methodology, Results and Discussion</b>	November 21 <sup>st</sup> , 2016	Rafael Bredy	24	Yes
<b>Quality Control in Data Management and Research Protocol</b>	January 27 <sup>th</sup> , 2017	Juan Carlos Orengo	28	Yes
<b>Bioethics in Research Forms and Evaluation Processes at Ponce Research Institute IRB</b>	February 24 <sup>th</sup> , 2017	Rafael Bredy	14	Yes
<b>Mathematical Modeling in Epidemiology and Sciences</b>	March 31 <sup>st</sup> , 2017	Juan Carlos Orengo	12	Yes

Other activities may be found in the **Electronic Resource File (ERF)**.

**F3-3 - If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)**

**Strengths**

- The program has a group of diverse faculty members with different academic backgrounds that enables it to offer different topics related with Workforce Development Activities.
- PHP maintains excellent relationships with communities and their community leaders.
- PHP has about 14 years of experience working with communities and has a faculty with over 25 years of experience working with community leaders.
- Practical Skills / Applied Practice Experience course preceptors and sites inhouse elaborated indexes provide to the Program a broad and diverse margin of public health related activities to be served based on Workforce Development Activities.

**Weaknesses**

- In the past, the Program did not have a professional in charge of promoting the continuing education activities among the alumni.
- We had not developed a registry that contained up to date information on alumni.
- The exclusive use of PHSU email account could have limited the access to the information on workforce development activities.
- The location of the University may be a weakness in some respects since it is far from the metropolitan area and many professionals are unable to travel.
- There is poor participation from preceptors and sites in continuing education activities.

**Plans**

- We've begun contacts with preceptors of the sites of Practical Skills / Applied Practice Experience course and we are offering to go to their places to offer workforce development activities as an improvement Plans to increase the number of the external participants served with the programmed workforce activities.
- Workforce development activities will be posted in the Program webpage that is under construction at this moment. We expect this will increase participation from alumni, community, and other public health practitioners.
- We are evaluating the development of the webinar, recording and posting on the PHP web page continuing education activities.
- We have developed an information registry from alumni from the program. Within that registry we have up to date phone, address, email, and workplace information.

## G1. Diversity and Cultural Competence

Puerto Rico is a veritable mosaic of diversity based upon the broad ethnic representation of its population, which include a cultural and racial mix of native Indians, Spanish heritage Caucasians and Black Africans. While the original Taíno Indians, who inhabited the Island when it was colonized by Spanish, were largely decimated, those who survived sought refuge in the mountain areas of the Island. Eventually they inter-married with Spanish farmers and became known as *jibaros*. Because of industrialization and migration to the cities, few identifiable *jibaros* remain. Slaves, imported from Africa (Sudan, Congo, Senegal, Guinea, Sierra Leona, and the Gold, Ivory Coast and other African countries), were brought to work on the plantations and joined the island's racial mix. Fleeing Simón Bolívar's independence movements in South America, Spanish loyalists fled to Puerto Rico, then a fiercely conservative Spanish colony, during the early 1800s. French families also flocked here from both Louisiana and Haiti. As changing governments and violent revolutions depressed the economies of Scotland and Ireland, many farmers from those countries also journeyed to Puerto Rico in search of a better life. With the arrival of United States citizens after the Spanish American War of 1898, American influence was added to this cultural mix.

Diversity is viewed very differently in Puerto Rico when compared to other USA jurisdictions. Race and ethnicity, as defined by Health and Human Services or in census definitions, does not do a good job in describing the categories and nuances used most often in Puerto Rico. Racial distinctions are of little significance within the largely inter-racial Puerto Rican culture, with most people preferring to self-designate only by Hispanic ethnicity. This background makes interpretation of diversity in Puerto Rico different than the continental USA.

**G1-1 - List the program's self-defined priority under-represented populations; explain why these groups are of particular interest and importance to the school or program; and describe the process used to define the priority population(s). These populations must include both faculty and students and may include staff, if appropriate. Populations may differ among these groups.**

Ponce Health Sciences University (PHSU) has, as part of its institutional committees, a Diversity Committee. The Diversity Committee is composed of the Vice President of Student Affairs as the Chair, two faculty members of the institution, one of which is faculty of the public health program (PHP), and one administrative member.

The basis for establishing the Diversity Committee of PHSU was developed and established by the Medical School at PHSU. This policy was approved by the Executive Policy Committee (EPC) of the Medical Program on December 12, 2014, and revised on January 30, 2015.

The underrepresented populations selected by the Institutional Diversity Committee were as follows:

- Non- Hispanic population
- Low socio-economic status
- First generation of university graduates in the family.

The selection of underrepresented populations was done during meetings that the Interdisciplinary Committee conducted with that specific goal in mind. Selection was done using reports of Puerto Rico sociodemographic reports.

The PHSU Public Health Program (PHP) has also followed the directives of the Diversity Committee of PHSU in integrating and adopting in its structure the underrepresented population as identified by this committee.

PHSU is active in the recruitment of local and international students and faculty as well as the establishment of new alliances with other universities. Most of PHSU students (99% in 2016) are Puerto Ricans and Hispanics/Latino. Anyone who is not from Hispanic or Latino origin/ethnicity adds diversity to our academic environment. Most students (67%) are female.

Refer to the table below for the distribution of student diversity by gender during 2016:

**Table G.1.1.**

<b>Ponce Health Sciences University Students Diversity by Gender in 2016</b>		
<b>Program</b>	<b>Male</b>	<b>Female</b>
Medicine	33%	67%
Biomedical	67%	33%
Medical Sciences	40%	60%
Clinical Psychology	10%	90%
Public Health	24%	76%
Family Therapy Certificate	25%	75%

The Institution also serves minority students, low socioeconomic groups and students that are first generation college graduates. (The Diversity Policy of the School of Medicine is used as a reference for the description of diversity in the student population. It is included in the Resource File). Currently, students from University of Nicosia, Cyprus, participate as international exchange students at PHSU

The Public Health Program, using SurveyMonkey, performed a survey among students, faculty and staff in March of 2017. The purpose of this survey was to gain more in-depth knowledge of the underrepresented populations that the Diversity Committee had described. The studied variables were the following: ethnicity, country of birth, first family member attending university, socio-economic status, type of school, academic level achieved by mother, academic level achieved by father, characteristic of the population of PHP. All the variables studied are related to the underrepresented populations in terms of diversity. The outcomes are presented are in the **Electronic Resources File (ERF)**:

**G1-2 - List the school or program's specific goals for increasing the representation and supporting the persistence (if applicable) and ongoing success of the specific populations defined in documentation request 1. (self-study document).**

While the PHP does not have a stand-alone diversity plan, diversity elements are integral to the mission and vision of the program and therefore routinely part of strategic planning and program evaluation. The PHP's diversity goals were designed to capture diversity elements of the PHSU's mission, strategic plan and other institutional initiatives on diversity. The PHSU Public Health Program mission makes strong statements about ethics and competency in local and global communities. The Program is also committed to be a leader in preparing public health professionals. This is only possible if faculty and students realize the ubiquitous influence of diversity on public health and learn cultural competency to address that diversity in our public health actions.

PHSU tracks race, ethnicity, gender and other demographic variables. The diversity and objectives of the Public Health Program focus on cultural competence goals of the curriculum, the learning environment and the faculty and student body. Refer to the table below of goals and objectives regarding diversity from the PHP assessment plan:

**Table G1.2 Goals and Objectives for Diversity**

<b>Goal B.2:</b> Curriculum addresses community and public health disparity issues.
<b>B.2.1:</b> Actively involve students with communities as part of their regular course work.
<b>B.2.2:</b> Incorporate diversity & social justice into regular curriculum.
<b>E: <u>Diversity &amp; Disparities:</u></b> Maintain diverse student and faculty bodies to facilitate local and global connectedness and to assist in reducing health disparities.
<b>Goal E.1:</b> Recruit diverse student body.
<b>E.1.1:</b> Recruit ethnically and racially diverse students.
<b>E.1.2:</b> Increase the proportion of students from outside of Puerto Rico.
<b>E.1.3:</b> Reduce disparities by recruiting students from economically disadvantaged communities.
<b>Goal E.2:</b> Recruit and maintain a diverse faculty body.
<b>E.2.1:</b> Recruit & maintain diverse faculty body.
<b>Goal E.3:</b> Strengthen the learning environment elements that values diversity & seeks to reduce disparities.
<b>E.3.1:</b> PSMHS PHP incorporates diversity elements and cultural competence into PHP learning environment.

While most of our diversity indicators are new, PHSU’s institutional commitment to the principles embodied by the new indicators is not. Teaching about diversity, addressing the health needs of minority populations, understanding of ethics and social justice issues are essential to the training of ethical and competent public health practitioners, all of which are part of our mission and vision. Our commitment is reflected in our objectives to have specific courses on these topics, such as the Bioethics and Public Health course. We also require training on IRB protocols, Belmont and the APHA Public Health Code of Ethics. Regular inclusion of diversity, ethics and cultural competence is so important to the program that the PHP reports on diversity indicators within our measures of academic excellence.

In terms of the diversity components mentioned by the Diversity Committee of PHSU, the characteristics of the sociodemographic profile of Puerto Rico fit the characteristics of the sociodemographic profile of the program, as described in the survey conducted at PHP in March 2107, especially the ethnicity component.

Given the history and composition of Puerto Rico’s population, most Puerto Ricans could be classified as a part of a minority population either as Hispanics or by the low socio-economic status. Given that a high proportion of the student and faculty body are Hispanic, as confirmed by the diversity survey of the Program, PHP specifically seeks diversity by recruiting in the non–Hispanic academic community population.

PHSU has begun specifically to address the scholastic needs of local Puerto Rican populations, particularly in the islands’ southern region. Despite a new global focus, the commitment remains to meet local needs. Therefore, the PHP purposely recruits from local and economically disadvantaged communities from around Puerto Rico. Almost all students are eligible for and benefit from federal financial aid. Many also work part or full-time to support their graduate education.

The geographical location of the University is the reason we have less members of the Community from the northern/metro area, where the greatest economic resources of the island are located. The presence of the Public Health School, accredited by the CEPH, and the Public Health Program from San Juan Bautista University, not accredited by CEPH, in the north of the island, is another factor.

Our goal as a program is to increase in at least 1% the representation of the eastern and central region, and to maintain the representation we do have. This will hopefully bring an increase the representation of the most socio-economically depressed populations in the island to our program.

The PHP program does not request or track sexual orientation. With our survey we wanted to go a little further than the institutional proposals in identifying the non-heterosexual demographic. According to recent surveys, we had

identified that the non-heterosexual demographic in the US is between a 2 % and 8%. In our program and according to the March 2017 survey, close to a 7% identify themselves as gay or bisexual, and another 2.7% prefers not to respond. Considering this underreporting of the population that prefers not to respond, our goal is to increase the non-heterosexual population by 1%. Gay and lesbian students founded an organization in PHSU, the Straight and Gay Alliance (SAGA), which engages faculty and students, irrespective of sexual preference, in outreach activities on health issues to at-risk populations.

**G1 -3 - List the actions and strategies identified to advance the goals defined in documentation request 2, and describe the process used to define the actions and strategies. The process may include collection and/or analysis of school- or program-specific data; convening stakeholder discussions and documenting their results; and other appropriate tools and strategies. (self-study document).**

PHSU has developed many strategies and actions to comply with the goals established to maintain and promote a diverse environment between the academic community that includes students, faculty, and administrative personnel.

All PHSU Public Health Program plans and policies, including diversity policies, were developed during a series of retreats and faculty meetings. Faculty and students participated in extensive discussions on what indicators would best capture the diversity intent of the Mission and Vision. The PHP diversity priorities were reaffirmed as the program's values were reviewed and revised. Retreat participants unanimously agreed that diversity goals with several objectives and indicators were needed beyond the four indicators required by the CEPH; elements other than race and ethnicity were considered to bear more weight when addressing diversity within our Institution. Deciding on the diversity indicators sparked interesting and extensive debates among Faculty, giving rise to brainstorming sessions yielding an extensive list of potential indicators. These indicators were evaluated against their public health importance, impact in promoting diversity and cultural competence and, ability to easily and accurately measure progress. Consideration was also given to identifying indicators which would historically show success in promoting diversity (gender balance) as well as novel indicators that would challenge the PHP to continue to prioritize diversity (student country of birth and student social economic status).

Although not a very sensitive indicator, the PHP currently identifies economically disadvantaged students by measuring the number of students from Puerto Rico who are eligible for and benefit from federal financial aid and Puerto Rico region. One limitation is that a substantial proportion of the population in Puerto Rico has income below the federal poverty line; thus, most of our student population qualifies for and benefits from financial aid. We are also exploring other economic markers such as percentage of students from municipalities with  $\geq 60\%$  of population reported below the poverty line and, percentage of students who graduated from public and private schools; these appear to be more sensitive indicators of financial need. Currently, these are obtained from either the financial aid office (without specific student identifiers) or in a student survey designed specifically to capture this information.

### Actions and Strategies

#### 1. Climate free of harassment and discrimination:

PHSU has well-established institutional policies on non-discrimination. The Nondiscrimination Policy, Interpersonal Abuse Policy and The Faculty Regulation Manual in *The Academic Organization Policies and Procedures* support a climate for working and learning in a diverse setting that impact all aspects of university life for faculty, students and staff members. The Non-discrimination Policy states that the PHSU, as an educational institution and employer, values equal opportunity, human dignity, and racial, ethnic, and cultural diversity. Accordingly, the school prohibits and will not engage in discrimination or harassment based on race, color, religion, national origin, ancestry, sex, age, marital status, familial status, sexual orientation, political affiliation, disability, or US Veteran status. Furthermore, the school continues to take affirmative steps to support and advance its values consistent with the PHSU mission as seen in policies addressing admission, students, employment, and access to and treatment in PHSU programs and activities. This is a commitment made by the PHSU and is in accordance with federal, state and/or local laws and regulations.

The PHSU Interpersonal Abuse Policy states that inter-personal abuse will not be tolerated at PHSU. Verbal, psychological or physical abuse such as speaking insultingly, engaging in schemes to undermine an individual's self-esteem, or any other such activity is not being tolerated. The Faculty Regulation Manual, under Academic Organization, states that respect for every individual is fundamental ethical behavior expected of any health professional. In this sense, faculty have a special obligation to ensure that students, interns and residents are always treated respectfully. Upon hiring, every faculty member or staff receives a copy of the PHSU Interpersonal Abuse Policy and of the Faculty manual. Faculty,



staff and student, recruitment, admission and retention, are required to be non-discriminatory, and to encourage diversity. The Vice President of Academic, the Vice President of Students Affairs, the PHP Associate Dean, and Faculty members are all responsible for this non-discrimination policy.

The specific diversity related goals, objectives and indicators measure PHP priorities in promoting diversity and are implicit policies for the program and guide our inclusion of diversity in our teaching, research and recruitment goals for students and faculty.

2. Recruit, develop, promote and retain a diverse faculty and staff:

PHSU ensures diversity in its faculty and students by collaborative agreements with PHSU and other higher education institutions, in the United States and Latin America. At present, PHSU has collaborative agreements with University of Missouri, and New York Institute, among others in the US; and with Antonio Lariño University in Colombia, Universidad of Texila in Guyana, Universidad of Panamá in Latin America; and in Europe with Universidad Francisco de Vitoria in Madrid and School of Medicine in Cyprus. These agreements promote the exchange of students and faculty.

The program has only three staff members. Two are assistant administrative personnel and one is a Career & Program Promotion Services Coordinator. Living in an almost homogenous Hispanic population, all staff members are Hispanic and white. The PHP believes that to recruit for these positions emphasizing diversity over merit is inappropriate. The current staff shows diversity in age, socio-economic status, status as first member of the family to graduate from college, experience and training. As the need for new staff arises, the PHP will consider applicants from various race, ethnicity, gender or other diversity indicators, consistent with our institution's Non-Discriminatory Policy.

3. Evaluation of the effectiveness of the above-listed measures.

The PHP has an assessment committee, described previously, that reviews all PHP indicators. The assessment committee meets at a minimum every trimester, and additionally holds a longer session for the annual summer evaluation activities. Most evaluations of the diversity indicators fall into this annual review cycle. Annual student and faculty evaluations help PHSU Program review diversity plans and policies by assessing current research projects and courses specifically focused on or that integrate diversity. More intermittent and qualitative evaluations take place during events like student admissions, faculty searches and, strategic planning.

With respect to the previously mentioned goal of increasing representation and retention from the eastern and central regions, which are the more socio-economically depressed, our plan is to work together with the promotion and recruiting office at the university. The goal would be to focus on the goals we want to achieve and develop a work plan that emphasizes the recruitment of students from these geographic areas. Activities that can be included in these efforts include the promotion of our program in government and education centers (high school and universities), as well as participating in any municipal fairs scheduled.

With respect to the goal of increasing in 1% the non-heterosexual population, the program has contacted the lawyer Ever Padilla, Executive Director of Comisión de Derechos Civiles de Puerto Rico (Commission on Civil Rights of Puerto Rico). This organization has a repository of LGBTT issues, which we are using to help define the best strategies to impact this Community and increase their representation in the University.

Another strategy is the strengthening of the SAGA (Straight and Gay Alliance) student organization, which has two faculty counselors from the Public Health Program. This will help to design strategies to let the community at large know that this university is a LGBTT-friendly environment.

**G1 -4 - List the actions and strategies identified that create and maintain a culturally competent environment and describe the process used to develop them. The description addresses curricular requirements; assurance that students are exposed to faculty, staff, preceptors, guest lecturers and community agencies reflective of the diversity in their communities; and faculty and student scholarship and/or community engagement activities. (self-study document)**

PHSU PHP has developed many strategies and actions to comply with the established to revise and maintain a curriculum that favors an environment of diversity within the academic community which includes students, faculty, and administrative personnel.

Students in our program are exposed from a curricular standpoint as well as a diversity standpoint, to cultural competency elements. The syllabus for the Bioethics and Public Health develops the theme of cultural competency of diversity and equality. The fundamental concept developed academically (Is the ability of health professionals and institutions to deliver effective services to racially, ethnically, and culturally diverse patients' populations (Bigby, 2002)), is developed, as well as the following components:

- Explain why this is an unfair health-related world
- Explain what health equity and health inequities/ disparities are
- Analyze the presence of differences in the quality of health
- Explain why Comprehensive PHP Academic Preparation and Cultural Competency philosophy of life is an appropriated approach to reduce health disparities.

On the other hand, the richness of the cultural diversity in the country of origin of our faculty gives our students a unique exposition to cultural competency. Our faculty country of origin includes Bolivia, USA, Spain, México, Venezuela, Colombia, and Puerto Rico. Some of the preceptors for the Practical Skills/Applied Practice Experiences course come from the US.

The PHP has developed specific diversity indicators for our curriculum and for service activities. These flow directly from our commitment to local and international research and service as stated in the mission, vision and goals. The PHP recognizes the need for culturally competent public health professionals. We have indicators to measure how many of our MPH and DrPH courses address cultural competence, diversity, minority populations and social justice. PHSU developed the IHD -919 Inter- Professional Perspectives in Health Disparities course, which is required for all students admitted to the University and is prepared by professors in medicine, basic sciences, public health, and psychology, where the issue of disparities in health is discussed in different scenarios. This course is offered through the Jenzabar platform. There are also elective courses that are singularly devoted to addressing diversity such as the MPH Health Disparities course.

In addition to the mission and vision emphasis on community engagement, there is an implicit policy that the PHP should engage communities through academic coursework, practicum deployments and community service work. The best service and research opportunities in terms of impact to the community are among the neediest communities, which are often the marginalized, disenfranchised, and socially-deprived communities, and as such considered a high priority for the PHSU PHP.

The chosen PHP core and track-specific competencies also include diversity indicators including cultural competencies that must be achieved by graduation. The individual courses include many additional ASPH cultural competency indicators (*see Resource File*). The PHP's objectives and indicators include measuring how many courses address diversity perspectives or the health of minority populations.

## Actions and Strategies

### 1. Climate for working and learning in a diverse setting:

Under the institutional policies, outlined above, discrimination is not tolerated. Additionally, the PHSU's PHP strives to encourage exposure to diversity. Those most in need of public health services are often minority and underserved populations. Requiring students to develop cultural competence is essential to their future success in community interactions. The institution promotes a climate where students and faculty must practice how to learn and work with people from diverse backgrounds. While not an explicitly stated policy, a bilingual academic program at PHSU promotes cultural understanding and acceptance of diversity as the standard of practice. Most classes are conducted in Spanish with written materials and tests in English. English speaking professors are welcomed and teach in English in the PHP.

The PHP has a specific goal to increase students from outside Puerto Rico; and in this way adding to student diversity and allowing incoming students to experience Puerto Rico's Hispanic culture. The fact that PHSU is a bilingual (Spanish/English) institution is useful in promoting a bi-directional cultural movement between Latin-America students seeking US training and appealing to US students seeking a stepping stone into a public health career in Latin America. PHSU also provides an opportunity for Puerto Ricans and others to study, work, conduct research and, serve the local Puerto Rican communities outside of PHSU through internships and fellowships.

### 2. Recruit, admit, retain and graduate a diverse student body:

The PHP has a stated policy to expand recruitment from outside Puerto Rico, which automatically will add cultural diversity and likely, ethnic and racial diversity. Together with the Office of Admissions at PHSU, the PHP is revising the documents for application for admission to the program. One of the changes would be to include place of birth as a variable.

The PHP retains diversity of its student body by ensuring that all PHSU policies addressing non-discrimination are adhered to and by fostering easy access and close relationships between students and faculty. While most faculty have posted office hours, most have an "open door" policy whereby students can contact faculty even on very delicate topics and receive advice. The PHP promotes a bilingual classroom environment but also realizes that this is a challenge to students who may not be fluent in both languages, a potentially unintended discriminatory issue ensuing from one of our diversity strengths. Just as we would make accommodations for students with a disability, accommodations are made to help students succeed in the academic objectives of the course yet learn to effectively communicate in the new language. To promote learning of a new language while avoiding a potentially unintended discriminatory issue, we allow students to write in their preferred language during their coursework at PHSU.

Students are also encouraged to adopt and pursue priority public health projects. Activities directed to outreach to marginalized populations on delicate social or sexual issues, the outreach can be endorsed and supported by the program if the approach is consistent with evidence-based public health initiatives. Supporting these activities and opportunities has fostered goodwill and credibility with current and prospective students particularly regarding issues of respect and diversity in our Institution.

**G1 -5 - Provide quantitative and qualitative data that document the school or program's approaches, success and/or challenges in increasing representation and supporting persistence and ongoing success of the priority population(s).**

The best evidence of the success of the plans and policies is that PHSU does have a diverse faculty and student body who feel at home at PHSU and contribute with diverse perspectives in classroom and service opportunities. Faculty and students support projects that address health issues of disenfranchised women at risk of violence, alcoholism, and student-led STD prevention education activities within the gay community are just a handful of some of the most recent research and field activities.

#### PHP Diversity Survey

A questionnaire was developed to evaluate the perception of diversity and cultural competencies within our student population, faculty and staff. The questions identified to help evaluate those points are as follow:

Members of the program are treated equally independently of (you can choose more than one):

**Table G1-.5.1**

Answer Choices	Responses
Age	64.18% 43
Gender/Gender identity	58.21% 39
Cognitive disability	43.28% 29
Ethnic background	44.78% 30
Nationality	50.75% 34
Place of birth (Mainland, Island)	50.75% 34
Perceived socioeconomic status	44.78% 30
Physical disability	40.30% 27
Race	50.75% 34
Sexual orientation	53.73% 36
Perceived attitude	41.79% 28
I have not experienced Bias, Exclusion, or Discrimination	65.67% 44
Language: 1. Bilingual (Spanish & English) 2. Mostly Spanish 3. Mostly English	37.31% 25
Beliefs (Believer, Atheist, Agnostic)	47.76% 32
Cultural Health Beliefs	44.78% 30
Total Respondents: 67	

In the distribution of data where members of the program are asked if they are treated equally we can see that 58% refer to being treated equally with respect to age, 51% refer to being treated with equality with respect to gender identity, 43% agree that they are treated with equality with respect to cognitive disability, 45% agree that they are treated with equality with respect to a ethnicity, 51% agree that they are treated with equality with respect to nationality, 51% agree that they are treated with equality with respect to place of birth, 45% agree that they are treated with equality with respect to socio-economic status, 40% agree that they are treated with equality with respect to physical disability, 51% agree that they are treated with equality with respect to race, 64% agree that they are treated with equality with respect to sexual orientation. Forty-two percent agree that they perceive being treated with equality, 66% indicated that they had not experienced bias, exclusion or discrimination. Thirty-seven percent agree that they are treated with equality with respect to language, 47% agree that they are treated with equality with respect to their beliefs, and 45% agree that they are treated with equality with respect to their cultural health beliefs.

In terms of diversity, the general climate of the program is:

**Table G1-5.2**

Answer Choices	Responses	
▼ Inclusive	53.52%	38
▼ Neither inclusive or exclusionary	36.62%	26
▼ Exclusionary	2.82%	2
▼ Not important to me	7.04%	5
Total		71

The data distribution indicates that 64% of responders agree that it is an inclusive climate, while 36% indicated that it is neither inclusive or exclusionary; 3% indicated that it is exclusionary, and 7% indicated that this was not important to them.

In the program course, the themes of diversity and inclusion are:

**Table G1-5.3**

Answer Choices	Responses	
▼ Adequately addressed in all courses	47.14%	33
▼ Adequately addressed in some courses	48.57%	34
▼ Not adequately addressed in any courses	4.29%	3
Total		70

For the distribution of data in terms of diversity topics and inclusion in the courses, 47 % indicated that they are adequately addressed in all courses, 48% state that they are adequately addressed in some courses, and 4% indicated that they are not adequately addressed in any course.

The following areas in diversity and inclusion should be managed more in depth in the courses that the program offers (you can choose more than one)

**Table G1-5.4**

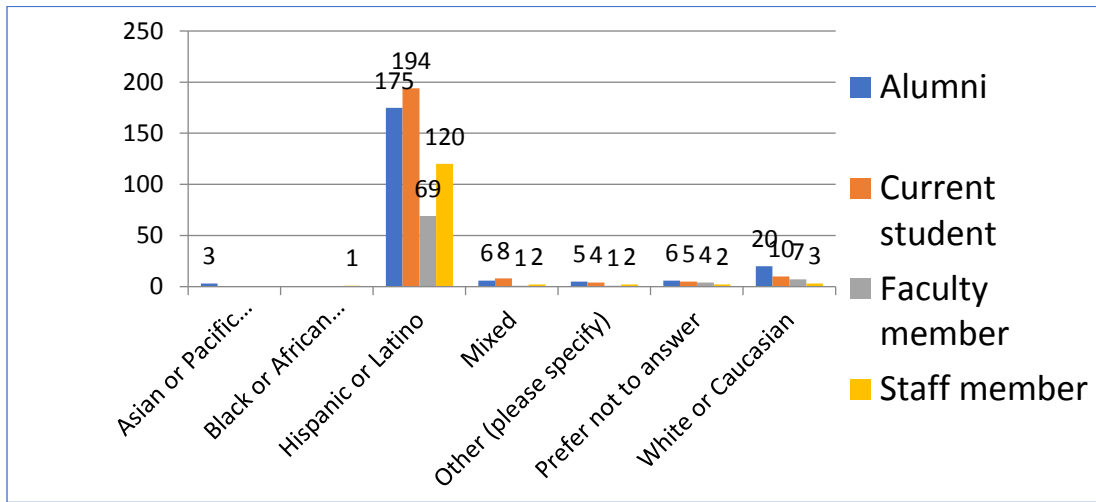
Answer Choices	Responses
Age	17.46% 11
Gender/Gender identity	31.75% 20
Cognitive disability	15.87% 10
Ethnic background	19.05% 12
Nationality	17.46% 11
Place of birth (Mainland, Island)	9.52% 6
Perceived socioeconomic status	25.40% 16
Physical disability	20.63% 13
Race	12.70% 8
Sexual orientation	34.92% 22
Perceived attitude	25.40% 16
I have not experienced Bias, Exclusion, or Discrimination	25.40% 16
Language: 1. Bilingual (Spanish & English) 2. Mostly Spanish 3. Mostly English	22.22% 14
Beliefs (Believer, Atheist, Agnostic)	28.57% 18
Cultural Health Beliefs	25.40% 16
Total Respondents: 63	

Among the areas of diversity that should be managed more in depth in the courses are: sexual orientation, with 34%; gender identity, with 32%; beliefs, with 28%; cultural health beliefs, perceived attitude and perceived socioeconomic status, all with 25%. Twenty-two percent reports that they have not experienced bias, exclusion, or discrimination.

Refer to the figures below for a graphic representation of the distribution by race, gender and age. Figure G1-5.1 presents the different beliefs of PHSU’s students.

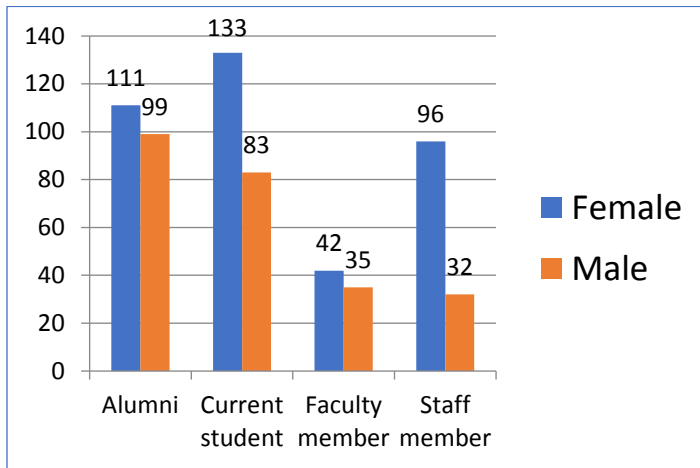


**Figure G1-5.1 Distribution by race in PHSU**



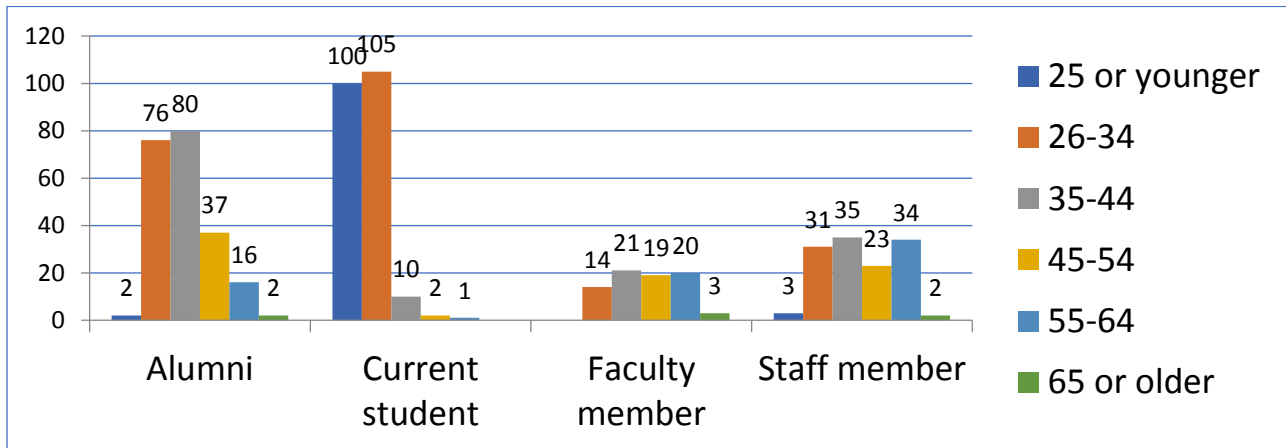
Diversity in terms of race is reflected in PHSU among alumni, students, members of the faculty, and employees. We found Asian graduates, African staff members, and mixed and Caucasian races in students, graduates, and faculty.

**Figure G1-5.2: Distribution by Gender at PHSU**



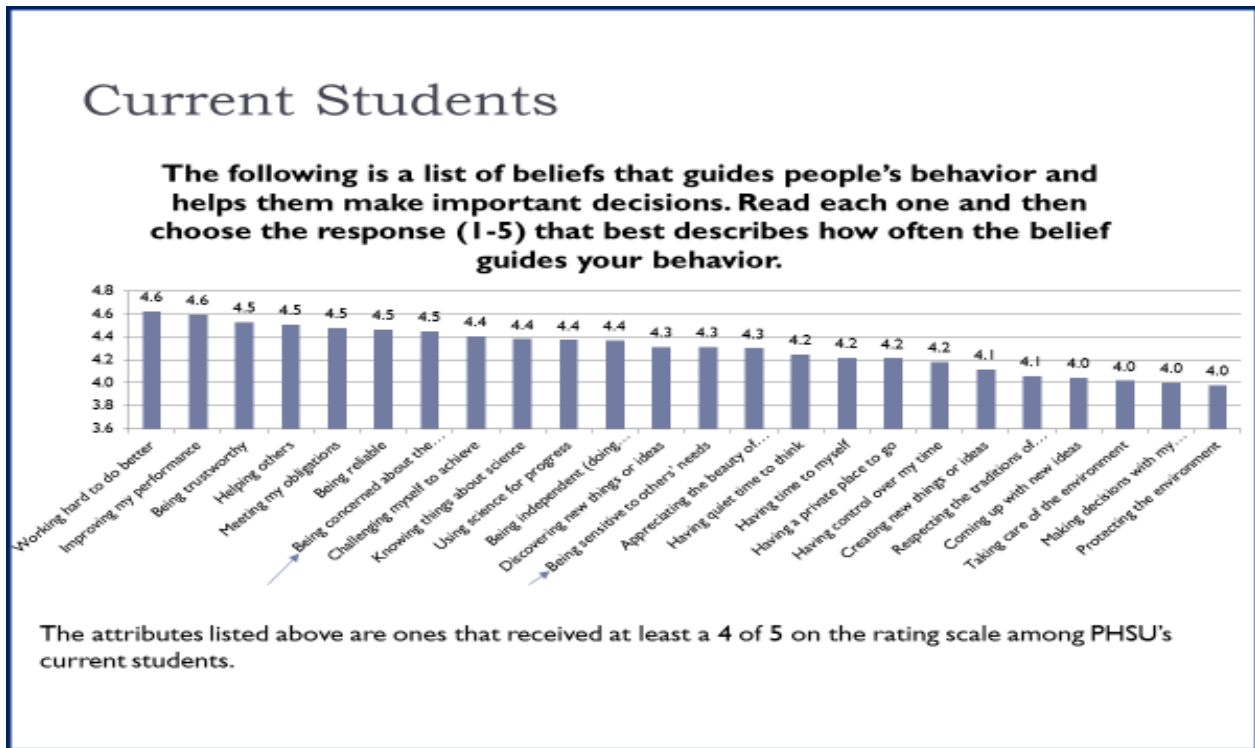
Diversity in terms of gender is reflected in PHSU among alumni, students, members of the faculty, and employees. In the figure above, one can observe a higher representation of the female gender among students, graduates, faculty, and staff members.

**Figure G1-5.3 Distribution by age at PHSU**



Diversity in terms of age is reflected in PHSU among alumni, students, members of the faculty, and employees. We found different age groups distributed within all the academic population. The lowest presence was found in the 65 or older group.

Figure G1-5.4: Beliefs that guide students' behavior

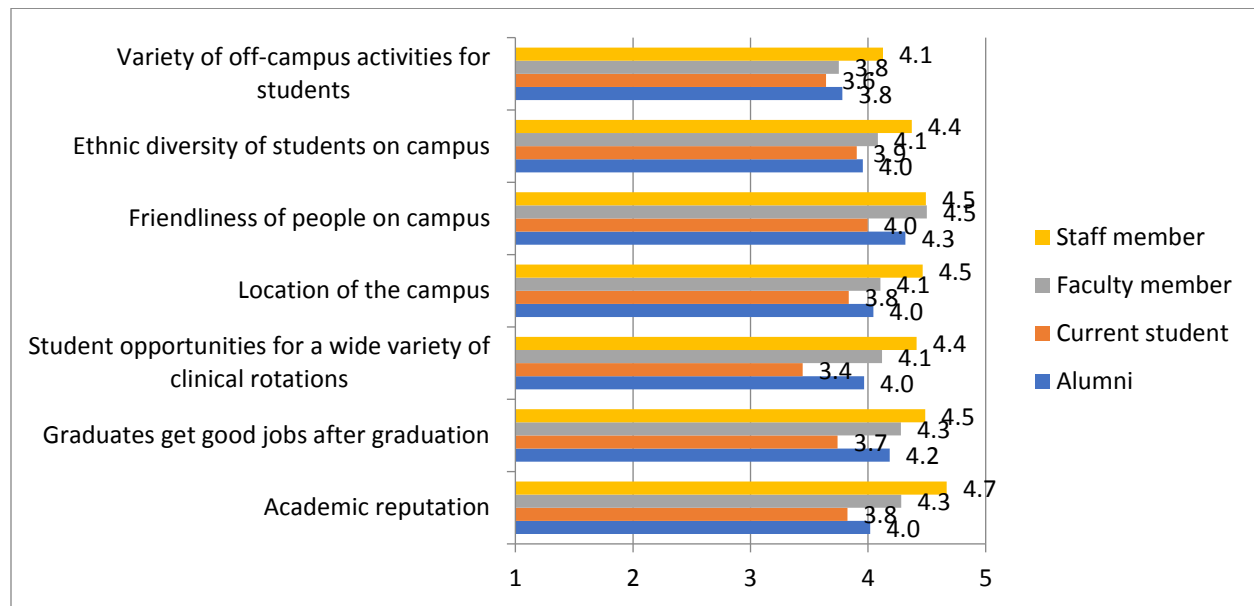


Among the beliefs that guide PHSU students' behavior to make important decisions, 4.5% indicated that they base it upon their own needs and rights, while 4.3% indicated they base those decisions on the needs of others. This indicated to us that students know their rights and take the needs of their university peers under consideration.

**Source:** PHSU administered the “Ponce Health Sciences University Net Promoter Score and Internal Audiences Study”, a web survey of Ponce’s current students, faculty and alumni conducted in May and June 2017. (See Resource File)

**Figure G.1.5.5 Attributes of PHSU**

**Please rate Ponce Health Sciences University on each attribute (using the following 5-point scale, where 1 = very poor and 5 = very good)**



The attribute related to ethnic diversity that was evaluated by the academic community, including students, faculty, alumni, and staff members, was valued at a 4 out of a scale from 1 to 5. One was considered very poor, and 5 was very good.

Our curriculum has a very strong emphasis on diversity, ethics and community service. More than half of our required and elective courses include attention to diversity or minority populations through direct instruction, case studies and/or examples. Students directly interface with communities around Ponce or San Juan in about 20% of the courses. PHSU public health students in MPH program and Dr.PH have a full trimester three credit course in Bioethics. The introductory sessions explicitly cover cultural competence and respect for diversity (*See Resource File Section B.2 syllabi*). Our Faculty’s commitment to diversity is evidenced by regular sharing of diversity resources, and for some specialized health disparities and bioethics training.

Encouraging a learning environment that welcomes disparity is not easily measured quantitatively. However, serious violations of PHSU’s diversity policy would be referred to a grievance committee; the number of referrals would serve as a quantitative proxy. A limitation to this measure is anticipated under-reporting which is common in reporting of sensitive issues for potentially disenfranchised populations. To date, there have been no such violations reported.

A qualitative measure of a “diversity-welcoming” learning environment would be the successes the organization of the Straight and Gay Alliance (SAGA) by the MPH class of 2013. The goal of the group is to promote an alliance between people from all genders and sexual orientation in the school encompassed in an environment of unity, solidarity, respect, dignity and open-mindedness through the acceptance and recognition of human worth. In our survey, where the sexual orientation variable was measured, this served to maintain a diversity environment in the program.

At the institutional level, the Vice President of Academics Affairs and the Vice President of Students Affairs, PHP Associate Dean and faculty members monitor plans and policies ensuring its implementation among staff, students and faculty. The diversity plan is embedded in the strategic priorities of the PHP and used by faculty, staff and students for recruitment priority identification for research proposals, community activities and course development. The PHP Associate Dean and the PHP assessment committee use the Annual report as a mechanism to evaluate if approved policies

are being implemented in a way consistent with success attainment. Student evaluation of courses and graduation surveys and the course of Inter- Professional Perspectives in Health Disparities reflect on the PHSU Program's success for student achievement of diversity and cultural competency goals. In addition, diversity and all other PHP goals, objectives and indicators were revised and discussed during the faculty meeting where the evaluation committee presented the metrics used for evaluation.

A crucial point to address is what happened during the academic year 2016-2017. One of the students in our program self-identified as transgendered. PHP, together with the Provost/Vice – President for Academic Affairs, the Dean of Education and Health Sciences, the Vice President for Students affairs, and the Committee for Diversity, activated a training program geared to educate students and faculty about this issue. This training focused on helping the community manage the topic in a respectful and sensitive manner in a welcoming environment for the student. Among the pertinent arrangements was the identification and designation of unisex bathroom facilities in the University. There is now a clearly identified unisex bathroom within the PHP facilities.

We understand this will be a cultural challenge within the Hispanic context in Puerto Rico, which is sexist and matriarchal. This is an important consideration when it's time to design strategies.

The program considers it a priority to increase the representation of fully bilingual (Spanish/English) faculty. We anticipate that such an inclusion could increase the proportion of bilingual students, and result in better cultural awareness.

**G1- 6 - If applicable, assess strengths and weaknesses related to this criterion and plans for improvement**

**Strengths:**

- Our PHP is a multicultural and diverse program with representatives of different nations and continents.
- A rapid response has been initiated once a specific situation as the transgender one was identified, and joint efforts have begun to formulate an effective policy.
- A balanced gender ratio with strong female representation in the PHP's leadership roles and in female leadership contribution to PHSU activities.
- The outreach and inclusion of students from poor towns of Puerto Rico has been consistent and strong.
- Puerto Rico, as a minority and health disparities setting, is a great base for diversity-oriented learning, service and research. Lessons more easily learned in this predominantly Hispanic setting have enormous potential for transference to Hispanic populations wherein conditions make it harder to isolate and study the Minority populations.

**Weaknesses**

- There is a need to develop educational workshops focused on themes related to inclusion and diversity.
- We should develop better and more effective efforts so that our program is identified as one open to diversity.

**Plans:**

- To include themes about diversity and inclusion in seminars and lectures at MPH and Dr.PH as pointed out by the survey from March 2017.
- To promote the program through the office of recruitment of PHSU in the various parts of the island where underrepresented minorities are present.
- To formalize a liaison with the Civil Rights Commission of Puerto Rico (Comisión de Derechos Civiles de Puerto Rico), especially on issues related to LGBTT

## H1. Academic Advising

**H1-1 Describe the school or program’s academic advising services. If services differ by degree and/or concentration, a description should be provided for each public health degree offering. (self-study document).**

### Institutional Academic Advising Services

Academic Advising Services are available to all PHSU students, including public health students, through the Office of Student Affairs. These services are student-centered, integrate the efforts of professional counselors, faculty, students and administrators and provide support to the students in all aspects of their academic development. They allow them to adapt to highly demanding academic programs, enhance their academic performance, and ensure students' progress toward graduation. Institutional academic advising has been structured to include preventive and interventional phases for early identification of students at risk of academic difficulties. The following strategies are used to identify students in academic difficulty:

- a. Interview with the counselor at the beginning of each academic year and when determined necessary for the benefit of students.
- b. Interview with the faculty advisor at least once per trimester.
- c. Interview with the dean or coordinators after each period of exams.
- d. Peer tutors can identify students with special needs that warrant intervention and can recommend the intervention or refer them for services.
- e. Review of academic performance by the dean and course coordinators at the end of each exam block and referral of the student to counseling.
- f. If any faculty member identifies a student with any academic difficulty or challenge, he/she refers the students to academic counseling.
- g. Any student that fails any exam is referred for counseling services.

In addition to the actions described above, the student may be referred to receive other types of interventions such as:

- a. Individualized and group tutoring, in which advanced level students offer reviews in the identified areas of need. This service is coordinated by the Counseling Unit of the Student Affairs Office.
- b. Review of study habits and time management provided by experts
- c. The Counseling Program- this consists of licensed professional counselors, psychologists and psychiatrists. The Professional Counselors assess the student situation and provide adequate counseling service. Also, if students require any specialized intervention, they can be referred to contractual psychologists and psychiatrics from the community, without any cost to the students. The institution allocates the financial resources to support this service through the budget of the Vice President of Student Affairs.

The objectives of the PHSU advising system are the following:

- a. Observe student performance and provide adequate guidance toward academic and personal success.
- b. Facilitate students’ knowledge and understanding of academic policies, rules and regulations.
- c. Identify resources and implement strategies for individual student academic success.
- d. Execute educational plans consistent with student needs, interests and goals.
- e. Achieve scholastic standards and activities in the field of interest.



The major components of the institutional academic advising system are:

- a. Faculty Advising
- b. Counseling Services
- c. Academic Support
- d. Peer Mentoring
- e. Tutoring
- f. Behavioral Services

### **PHP Academic Advising Services**

At the program level, the dean and coordinators oversee the students' performance in courses, practical experiences and examinations. They also identify students at risk and meet with them, send notifications identify their academic concerns, or refer them to the institutional counselor for further evaluation or for needed interventions. Entering and active students who have a GPA less than 3.00 are classified as students at academic risk, according to the program parameter. Both the dean and track coordinators are responsible to monitor students' academic progress.

The specific responsibilities of the program's dean are to:

- Meet with the students to discuss their academic performance and make appropriate recommendations.
- Identify students' needs.
- Refer students for professional services, if needed.
- Identify faculty advisors
- Distribute students to each faculty advisor.
- Oversee the program's mentoring services

The responsibilities of the track coordinators are:

- To oversee the students' academic progress
- To perform academic advising to their track students.
- To determine student's counseling needs.

(For more information about Track Coordinators responsibilities and advisory process please refer to the Track Coordinator Manual included in the Resources File).

The APE and ILE coordinators also provide academic advising and directions to public health students during these processes. These coordinators are appointed by the associate dean of the program. The Thesis Director also serves as advisor to Dr.PH students to support them in the dissertation process.

Each student is assigned a faculty advisor at the beginning of their first year of the program. The faculty advisors identify students' strengths as well as any challenge or academic issue that can affect the student's academic performance. They are also available to provide career counseling.

Faculty advisors may use different strategies to communicate with their students such as individual meetings, small group meetings, e-mails, letters, phone calls, social media, or others; always ensuring confidentiality in the student-advisor relationship. They will refer to the counselor students that are identified with any issue that requires professional help for any situation that may interfere with their academic performance and/or mental health. They may also refer the student for intervention on issues related to time management difficulty, studying skills and habits, family problems or personal situations. The advisor may use the student's referral form or the e-mail services to communicate with the professional counselors.

## **H1-2 - Explain how advisors are selected and oriented to their roles and responsibilities.**

The Associate Dean appoints faculty advisors. She meets individually with each one and discusses his/her role and responsibilities. On a regular basis, the Associate Dean meets with each one to discuss any issue within his or her responsibility, as needed. Faculty advisors also oversee students' academic progress, provide advising services and refer students' problems or concerns to the Track Coordinators.

The general responsibilities of the faculty advisors are to:

- Schedule appointments with the student.
- Provide information to the student regarding institutional and program policies, rules and academic requirements.
- Monitor the student academic progress and refer to appropriate support services when needed.
- Assist in the identification and development of scholarly activities based on individual abilities and interests.
- Monitor the student educational plans and assist with the appropriate selection of strategies and activities.

The specific tasks of the faculty advisors are as follows:

### First/Initial meeting:

- Meet with the student to assess the student's expectations, interest, needs, and areas of difficulties
- Discuss consent and confidentiality issues
- Discuss the best strategy for communication between both
- Establish the dates of meetings
- Provide the student with an advising calendar that includes office hours and contact information

### Subsequent meetings:

- Meet with each student to help him/her to identify strengths and weaknesses
- Discuss or review the student's performance in the current courses
- Assess areas of personal needs or academic difficulties.
- Discuss any issue that affects the student's academic performance.
- Identify circumstances that deserve the consideration of referrals to specialized/professional help.

### Intervention tasks of faculty advisors:

- Meet with the students to discuss their grades
- Identify factors that affect the student's performance
- Recommends services or resources to strengthen areas of weakness
- Refer the student to counseling service, if needed

**H1-3 - Provide a sample of advising materials and resources, such as student handbooks and plans of study that provide additional guidance to students.**

PHP provides students a series of advising materials and resources that offer them additional guidance. Some of them are:

- Academic/ Student Policies
- Policies and Procedures for a Drug- Free Community
- Public Health Program Plagiarism Statement
- PHSU Student Policy Manual
- PHSU Catalog 2013-2018
- MPH General Track Curriculum Planner
- MPH Epidemiology Track Curriculum Planner
- MPH Environmental Track Curriculum Planner
- Dr.PH Curriculum Planner
- Practical Experience Instructional Materials

These materials are included in the electronic resource file (ERF).

**H1- 4 - Provide data reflecting the level of student satisfaction with academic advising during each of the last three years. Include survey response rate, if applicable.**

**Level of Student Satisfaction**

The following instruments were used to rate the level of satisfaction of public health students in advising and related services:

**1. MPH Student Need Assessment Survey**

Purpose: This survey was conducted in 2015 to assess student satisfaction, academic performance, students' needs and concerns, faculty advisors and areas in need of improvement.

- Total number of students in the first year of the MPH program- n = 32
- Response rate = 97 % (31/32 completed the survey)

**2. DrPH Student Need Assessment Survey**

Purpose: To identify program's needs. It was implemented during March 2015 under the new PHP Administration.

- Total number of students= 13
- Response Rate: 85% (11/13 completed)

**3. Practical Experience Report**

Purpose: To assess student satisfaction, the practicum experience, the overall course performance evaluation during APE; the new instrument was generated in 2015.

- Total number of students – N= 29
- Response rate = 93 % (27/29 completed)

**4. Dr.PH Student Need Assessment Survey (2016-2017)**

Purpose: This survey was conducted to assess student satisfaction, academic performance, students' needs and concerns, faculty advisors and areas in need of improvement.

- Total number of students N =41
- Response rate= 71% (41/58)

**5. MPH and Dr.PH Graduate Exit Interviews**

Purpose: To rate the level of students' satisfaction with support services and facilities using an internally-developed questionnaire developed by the Office of Student Affairs. Public Health students completed this questionnaire before graduation during 2017-2018.

- Total number of students -N= 32
- Response rate= 78% (25/32)

The table below provides some results:

<b>Table H1-4: Students Level of Satisfaction</b>		
<b>Results</b>	<b>MPH First Year - 2015</b> <b>n = 32</b>	<b>DrPH -2016 -2017</b> <b>n = 41</b>
	Good coordination and organization	The students on average are satisfied with the availability of faculty.
	Excellent faculty advisors	100% of the students strongly agree and agree with the communication between faculty and students.
		100% of the students strongly agree and agree with faculty mentoring.
		100% of the students strongly agree and agree with received good feedback from the faculty to complete their studies.
<b>Practical Experience Report -2015</b>		
<b>Results</b>	<b>MPH First Year</b> <b>n = 29</b>	
	I received on time feedback from my assigned faculty advisor during the practicum – 3.3 (Agree)	
	The feedback provided by my assigned faculty advisor was of help in the practicum performance. – 3.4 (Agree)	
	I would recommend my assigned faculty advisor for future students. – 3.4 (Agree)	
<b>MPH and Dr.PH Graduate Exit Interview (2017-2018)</b>		
	<b>MPH</b>	<b>DrPH</b>
How effective was the advising from your major advisor?	92 % of the students were satisfied and considered it appropriate.	Dr.PH: 100% of the students were satisfied
I believe that my program provided me with good academic mentoring during my program	96% of the students indicated that they agreed with the mentorship provided in the program.	100 % of the students indicated that they agreed with the mentorship provided in the program.

**Assessment of the effectiveness of the academic advising**

To assess the overall effectiveness of the academic advising and counseling services, a satisfaction survey has been adapted to the public health program. The survey includes 18 items targeted at evaluating the student satisfaction with the elements of academic advising. The survey asked for the levels of agreement of the students to each of the 18 items using a four- point scale ranging from strongly disagree to strongly agree. Those items that could not be rated are recorded as not applicable. This survey will be implemented at the end of the student learning experience. A copy of the survey is provided below:

#	SURVEY QUESTIONS	ALL STUDENTS				
		Not Applicable	Strongly Disagree	Disagree	Agree	Strongly Agree
		%	%	%	%	%
1	I recognize that our public health program provides Academic Advising Services.					
2	I recognize that the Academic Advising Services integrates the efforts of faculty advisors, coordinators and students to support the student needs.					
3	I feel that the Academic Advising Services respond to the student needs.					
4	I am satisfied with the availability of the Professional Counselor to help me with my academic problems.					
5	I am satisfied with the availability of the Professional Counselor to help me with any issue in my personal life that interferes with my studies.					
6	I recognize that the institution offers tutorial services.					
7	I am satisfied with the Academic Advising Services offered by PHSU.					
8	I have a faculty advisor.					
9	I have tried to contact my assigned faculty advisor.					
10	I have been contacted by my faculty advisor.					
11	I am satisfied with the services provided by my Faculty Advisor in the Academic Advising Services.					
12	I recognized that my institution has in place Counseling Services available to the students.					
13	I recognized that all Counseling interventions available to the students are confidential.					
14	I feel that the Counseling Services respond to the student needs.					
15	I recognize that our Counseling Services are also available to help me with my academic problems.					
16	I feel satisfied with the Counseling services available to help me with my academic problems.					
17	I feel satisfied with the services provided by the Professional Counselor regarding Careers Counseling services.					
18	In general, I am satisfied with the academic advising services provided by the program.					

**H1 -5 - Describe the orientation process. If these differ by degree and/or concentration, provide a brief overview of each. (self -study).**

Incoming public health students receive a one- week orientation session in which they receive information such as: Financial Aid Services, Student Policies and Procedures, Violence Prevention, Students Activities and Associations, HIPPA, Educational Services, Library Services, Practicum Experience, Culminating Experience, Plagiarism, APA Writing Style and Dr.PH Dissertation process. In addition, first-year MPH students receive a series of seminars during their first trimester. Some of the seminars are: Time Management /Study Methods, Team Work, Curriculum Vitae, Ethics Behavior, Professional Image and Employment Interview, among others.

Student's assistance is an essential part of the program and as such the PHP has assigned faculty advisors to provide support throughout the duration of the program. Faculty advisors receive the names of the assigned students; students also receive the names of their faculty advisors. Likewise, faculty advisors receive an orientation about their roles as advisors.

All advisors should be available to meet with students as needed. Faculty advisors shall complete the newly created 2017 Student Advisory Form included in the PHP Coordinator Manual to maintain record of issues discussed during the meetings. All interventions must be kept confidential. The Faculty Advisors should refer to the Track Coordinator students that require further assistance. At the end of the academic year, the Faculty Advisor shall submit to the Track Coordinator a copy of the student file with the Student Advisory Form. Track Coordinators will discuss with faculty advisors any issue that requires their intervention or will refer to institutional counseling or mentoring those students in need of these services. Coordinators must inform the Program's Dean of any referral.

The selection of the concentration track is a crucial step for first-year MPH students. As such, they receive orientation of all tracks available for their choice. Tracks presentations (general, epidemiology and environmental) are usually delivered during the third trimester of the first year. Each coordinator describes the tracks and presents the curriculum content and competencies to allow first-year MPH students to make an informed selection of the track. Right after presentations, students must complete a form where they choose their track of preference.

During the Applied Practicum Experience (APE) MPH as well as Dr.PH students receive orientation from the APE Coordinator related to policies and procedures to be followed. MPH students performing the Integrative Learning Experience (ILE) also receive orientation from the ILE Coordinator. The APE and the ILE Coordinators are available to provide advising services to students, as requested.

The DrPH –Epidemiology Coordinator provide the students the following advising activities:

- Individual or group academic advising each trimester before pre-registration period or when requested by the student(s).
- Students Assessment Questionnaire administration and follow up meetings at least twice a year.
- Comprehensive exams presentation to notify dates, competencies, type of exam to expect, faculty members to provide questions, grading, among other information related.
- Doctoral dissertation orientation includes the following topics:
  - Academic advisor distribution
  - DrPH Dissertation Manual Presentation and discussion
  - First trimester workshops attendance:
    - How to be successful at the doctoral dissertation
    - PHSU Library Data Base Workshop
    - EndNote Workshop
    - PHSU Plagiarism Policy
    - APA Reference Workshop

**H 1- 6 - If applicable, assess strengths and weakness related to this criterion and plans for improvement in this area.**

**Strengths**

- The PHP has developed its own system of academic advising to support the learning experience of public health students.
- Students are satisfied with the program academic advising services.
- The PHP has compiled a series of documents to provide additional guidance in academic advising.
- Public Health faculty are available to serve as faculty advisors to public health students.

**Weaknesses**

- Due to the nature of the program, students working during the day time might have problems to meet with their faculty advisors unless arrangements are made between students and advisors.
- A more coordination is needed between the office of student affairs and the program to provide public health students the range of advising services available at the institutional level.

**Plans**

- Schedule advising meetings at a convenient time for public health students to attend.
- Coordinate a meeting with the Professional Counselors and public health faculty and students to describe the institutional advising services available to the PHP.
- Assess regularly the effectiveness of the advising system using the new form



## H2. Career Advising

**H2 -1 - Describe the program's career advising and services. If services differ by degree and/or concentration, a brief description should be provided for each. Include an explanation of efforts to tailor series to meet students' specific needs.**

The Public Health Program developed the new position of *Career & Program Promotion Services Coordinator*, in response to the Council on Education for Public Health's (CEPH) new 2016 accreditation criteria presented at the 2016 APHA Conference (Chicago, IL) and at the 2017 Accreditation Workshop (Washington, D.C.). This position is currently held by Ms. Ivette Ponce, who started on May 1<sup>st</sup>, 2017. The *Career & Program Promotion Services Office's* mission is to support and advance the career and professional development of PHSU students and alumni. Career Services assist students in the realization of their public health career potential and goals and offer comprehensive career and professional development tools and strategies to maximize the success of their efforts. The following services are provided around *Career & Program Promotion Services*:

### Alumni-Related Tasks:

Post-Graduation Outcomes (Criterion B3)

- Present outcomes within one year of graduation by designing and presenting collection data instruments.
  - Alumni Perception of Curricular Effectiveness (Criterion B-4) by:
    - Collecting information on self-assessment of achievement of defined competencies.
    - Applying competencies after graduation.
  - Career Advising (Criterion H2) outcomes by:
    - Providing access to qualified faculty or individual consultations.
    - Encouraging the enrollment on professional associations, networking and mentorship.

### Current Students-Related Tasks:

- Defining and designing an ongoing, systematic and well-documented evaluation practices plan to be translated into action (Criterion B5-B6). Some of them could include:
  - Exit interview surveys
  - Students' perception and satisfaction surveys
  - Other instruments to be designed and administrated
- Contribute into the assessment of curriculum competencies at the MPH and Dr.PH level by translating data collected at professional (individual) serving in public health functions in the community agencies institutions (Criterion D4).
- Identifying opportunities available to all students in service and community engagement and professional development activities (Criteria F1-F2).

- Assessing professional development needs of individual's serving in public health functions in the community by formal and informal methodologies (Criterion F3).
- Career advising (Criterion H2) outcomes by:
  - Accessing to qualified faculty or individual consultations. Currently, this has been student-initiated, based on familiarity with a professor who has taught them before or knowledge of specific professor's interests. No criteria for best student-faculty fit for career advising exist at this moment. In the next section (H2- 2), a description of plans to integrate and orient faculty into their career advising roles will be described.
  - Coordinating resumé workshops, mock interviews, professional panels and networking events.

### **Specific Activities for Career Planning Advising**

Career advising services are shared by both MPH/DrPH students and alumni, although MPH students have received more services so far. These services are included in the **Electronic Resource File(ERF)**:

- A strategically-placed bulletin board with job and fellowship announcements.
- Targeted emails to current students and alumni with job and fellowship announcements.
- Live workshops on diverse career-related topics.
- Information via email on career-related topics (examples: how to prepare a C.V. and the introduction letter).

## H2-2 - Explain how individuals providing career advising are selected and oriented to their roles and responsibilities.

Career advising for MPH/DrPH students is offered primarily by the Public Health Program's *Career & Program Promotion Services* Coordinator (currently Ms. Ivette Ponce) and by faculty. Ms. Ivette Ponce was an internal recruitment within PHSU. Her academic qualifications include: a master's degree in Education and two years and a half of graduate credits towards the Ph.D. in Education, with a specialty in Curriculum. Her academic background is supplemented by her years of experience at PHSU, including her previous position at the Public Health Program and interaction with both alumni and current students. Thus, both her academic qualifications and years of experience at PHSU have given her knowledge on the Public Health Program's curriculum and the institution. Ms. Ponce works in coordination with staff from PHSU's Student and Counseling Services to keep updated on university policies and events related to career services and to facilitate specific events for MPH/DrPH students. In addition, during the upcoming months, Ms. Ponce will begin to outreach to APE preceptors to become knowledgeable about job opportunities at these sites and develop a network of potential employers.

Before the advent of the Public Health Program's *Career & Program Promotion Services Office*, faculty participation in career advising has been informal. It includes some faculty sharing information on job announcements and it has been mainly based on student-initiated contact with individual faculty members. However, plans are underway to formally integrate and orient Public Health Program's faculty into career advising. These include:

- Short (~15 minutes) orientations by the Public Health Program's *Career & Program Promotion Services* Coordinator in faculty meetings on:
  - Achievements of career services.
  - Explain how faculty can participate in career advising.
- Have faculty as resources to offer workshops for students.
- Hold a faculty panel where professors can discuss their variety of public health job experiences.
- Structured mock interview sessions throughout the year, conducted by faculty for students to prepare for job/graduate studies interviews.
- Develop a workshop on the tentative topic: *Workshop on Career Advising for Faculty: How to be a Better Mentor*.
- Hold brainstorming sessions to determine best student-faculty fit for career advising, since no criteria have been determined yet.

**H2 -3 - Provide three examples from the last three years of career advising services provided to students and one example of career advising provided to an alumnus/a. For each category, indicate the number of individuals participating.**

- 1) Provide three examples from the last three years of career advising services provided to students and one example of career advising provided to an alumnus/a. For each category, indicate the number of individuals participating.**

The Public Health Program's *Career & Program Promotion Services Coordinator* offered a Seminar on helpful tools to get ready for a job interview (3/21/18) to MPH 2019 (n = 37) and Dr.PH (n = 1) students. This seminar represented the beginning of upcoming workshops and seminars to be offered by the Public Health Program's *Career & Program Promotion Services Office* on professional development. In addition, the seminar was a complement to the first *Public Health Career & Job Fair* offered on 3/27/18. This job fair was attended by a total of 97 participants, distributed as follows: 60 students (MPH = 47, DrPH = 13); 12 alumni (MPH = 5, DrPH = 7); and 25 general public. Public Health Program students also have access to PHSU's activities on professional development. Recent offerings include: "Interview Skills" (1/19/18), Professional Etiquette (2/9/18). Other activities offered to current students include: emailing MPH/Dr.PH students' *curriculum vitae* to potential employers; posting public health-related job positions on the Public Health Program's Facebook page; follow-up on students' job position applications; and processing Rosseta Stone licenses for English language learning. For alumni, the *Career & Program Promotion Services Office Coordinator* has a comprehensive plan, which started with the development of a data base of alumni's contact and relevant information; sending emails to all alumni about public health-related job positions, internships and trainings; including them in the 3/27/18 job fair. Direct referral of alumni by the *Career & Program Promotion Services Office Coordinator* to a potential employer for interviews have led to four (4) MPH and one (1) DrPH alumni being hired by the latter. Refer to the electronic resource file for a detailed list of activities.

**H2-4 - Provide data reflecting the level of student satisfaction with career advising during each of the last three years. Include survey response rates, if applicable.**

Data on students' experiences with career counseling and networking was available only for the 2017-18 academic year, based on the **MPH and Dr.PH Public Health Program's Graduate Exit Interview**. Twenty-five (25) MPH and three (3) DrPH students participated in this survey. When asked about PHSU graduate education's career counseling and networking, 72% (8/25) MPH and 100% (3/3) DrPH students reported being satisfied with these services. In addition, when asked about whether PHSU graduate education provided professional and/or academic preparation relevant to their career plans, 76% (19/25) MPH and 100% (3/3) DrPH students indicated being satisfied with this statement.

**H2-5 - If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.**

The Public Health Program's *Career & Program Promotion Services Office* has less than one year of existence. However, in its short time, it has been able to offer its services to both current students and alumni. It offers specific services to public health students, who can complement their career advising needs with the activities offered by PHSU. It is expected that career advising services will continue to grow and develop, to enrich the professional development in a continuum, including students' time at the university and beyond.

### **H3. Student Complaint Procedures (SPH and PHP)**

Required documentation: (Student Complaint Policy -2016), PHP – 2017-Coordinator Manual)

**H3- 1 - Describe the procedures by which students may communicate any formal complaints and/or grievances to school or program officials, and about how these procedures are publicized. (self-study document)**

PHSU has a grievance policy that addresses complaints from faculty, students and staff. It is intended that all problems be resolved, whenever possible, before the filing of a formal grievance in the relevant forum.

Any member of the academic community may report any incident of abuse or violation to PHSU policies. The complaints could be formal or informal. An informal Complaint could be expressed either verbally or in writing to a relevant administrator or faculty, which is not dealt with through a formal process of the University. It may involve a discussion with relevant parties to receive information and explore options on resolving the matter. It does not involve a formal investigation or the determination of evidence.

Once a formal complaint is submitted, an investigation will take place. A formal complaint could be a concern that has not been resolved informally. Any student has the right to submit to the Office of the Vice President of Student Affairs a written report of a concern or complaint of any violation to the PHSU policies and /or professional ethic without any retribution or consequences. A copy of the PHSU Grievance Policy is included in the Student Policy Manual (2013-2018), available in the PHSU webpage.

The Vice President for Students Affairs tracks the reports and resolutions of the complaints. Any student who has been subjected to a disciplinary action has the right to appeal the adverse decision. The appeal process will be done according to the regular Due Process Policy of PHSU.

**H3-2 - Briefly summarize the steps for how a complaint or grievance filed through official university processes progresses. Include information on all levels of review/appeal. (self-study document)**

PHSU has established a Due Process Policy to appeal an adverse decision. The procedures are described below:

Any member of the academic community may report any incident of abuse or violation to PHSU policies. The incident should be reported to the Vice President for Student Affairs or designee. He or she will gather all pertinent information on reported cases.

If the incident is resolved, no further action will be taken. A description of the incident must be in writing. The report of a resolved incident will contain the description of the action plan followed.

A follow up on the incident will be made between six or eight weeks to assure that there has been no retribution.

If the incident is not resolved, the Provost/Vice President of Academic Affairs will appoint three members as Investigation Committee to re-evaluate the case. All parties involved will be informed of the composition of the committee and will have the opportunity to present any disagreement on the membership of the committee and the reasons for the challenge.

If necessary, the University's legal counsel will be notified of the case and will be kept informed of the progress of the investigation. The Investigation Committee will review the information and make a recommendation to the Provost for further action. The Provost will inform the student of the decision. The entire process should be addressed within three months.

After receiving the notification by the Provost, the student has the right to appeal the decision in writing to the President within seven working days.

#### Appealing (Due Process)

The President will evaluate the appeal and the investigation report. Rejection of the appeal by the President is final. However, the President may overturn the decision. If the President has a reasonable doubt, about the student's allegation or the investigation, he/she can appoint an Ad Hoc Committee, comprised of members of the faculty, student body and administration to re-evaluate all evidence.

The Ad Hoc committee will notify the student in writing of the date and time when the case will be heard. The Ad Hoc committee has the discretion to re-interview the persons involved if necessary. The committee has seven (7) working days to submit to the President its report.

The President will receive the Ad Hoc committee recommendations and make the final decision within forty-eight (48) hours.

All decisions, favorable or unfavorable, will be reported to the student in writing. All decisions by the President is final.



**H3 -3 - List any formal complaints and/or student grievances submitted in the last three years. Briefly describe the general nature or content of each complaint and the current status or progress toward resolution. (self-study document).**

There has been no formal or informal complaint and/or grievance submitted in the last three years.

**H3-4 - If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)**

**Strengths**

- PHP has been able to maintain a friendly and respectful environment and no complaint or grievance has been issued.
- Students has been advised on the procedures and steps to follow.

**Weaknesses**

- The time since the complaint is filed until a decision is made is too long.
- This policy needs to be updated.

**Plan**

- The PHP will recommend a revision of this policy to the Vice President of Student Affairs who is the guardian of the student policies.

#### **H4. Student Recruitment and Admissions (PHP)**

**H4 -1 - Describe the school or program’s recruitment activities. If these differ by degree (eg, bachelor’s vs. graduate degrees), a description should be provided for each.**

In order to achieve PHSU’s goal of improving student selection and recruitment from diverse backgrounds, the university has established recruitment procedures to be conducted by the Public Health Program and the Office of Admissions.

The Office of Admissions has established a recruitment schedule which includes providing literature on all PHSU academic offerings to high school and undergraduate students, including underrepresented communities. Personnel from the Admissions Office distribute brochures, flyers and other promotional material at every activity (see 2017 PHP admissions brochure in the electronic resource file). The various places for student recruitment include high schools and local universities, as well as local and state conferences, conventions and fairs. The brochures, flyers and any other promotional material include a summary of PHSU, the MPH tracks and Dr.PH program, tuition and application requirements and links to the school and Public Health Program web-pages.

The official page of Ponce Health Sciences University is [www.psm.edu](http://www.psm.edu), in which applicants can review the entire official up-to-date program and course offerings. The program webpage also has links, e-mails and phone numbers for admissions or the PHP office to answer any questions personally. Recognizing that most of PHP’s students are young and are typically thought of as being comfortable with technology, PHSU uses various social networking media like Facebook, Twitter, Instagram and YouTube. Currently, social networks are used to promote PHSU programs, open houses, activities, conferences, fairs, congresses and doctoral defenses.

On January 2016, the Public Health Program activated its Admissions Committee and Promotions Committee and presented a plan for student recruitment (refer to the electronic resource file). In 2016, the committees approved the admission of 15 students for the Dr.PH and 30 students for the MPH. For May 2017, the Admission Committee approved the admission of 12 students for Dr.PH and 40 students for the MPH.

The Public Health Program has been actively recruiting additional students through several promotional efforts which include the following:

- During the 2015-2016 and 2016-2017 academic years, the PHP conducted or participated in public health activities such as the “Orientation about Zika virus”, “Climate change and health”, “Hope for old age”, “Bioterrorism and Public Health”, “Prevalence of Zoonotic Disease”, “A Coffee for Alzheimer’s”, “*Ponte el sombrero por el Autismo*”, “Building Bridges of Hope” and “Water Quality Monitoring Day”. During the Public Health Week, students developed several activities at PHSU and in various communities, for example, “International Health and Emergent Diseases in Puerto Rico” at the San Juan Bautista School of Medicine and “Nutrition and Exercises for Children” at the Julia Torres Methodist School, Ponce. While the purpose of these activities is primarily orientation and service to the community, as more people learn about PHSU through these events, potential PHSU applicants are more aware of the University and its positive reputation.
- During 2015 to 2017, faculty members of the PHP participated in the TV program “*Tu Salud Informa*” as guest panelists. The interview or conversation is approximately 5 minutes in length and covers many themes in public health areas. It is an excellent opportunity to promote the program.
- The PHP offers an “Open House” of the program. Advertising is done through the newspaper, billboards, Facebook and student email invitations, resulting in 39 visitors attending in 2016 and almost 30 in 2017 to learn about the MPH tracks and Dr.PH. The 2017 Open House activities were transmitted by *Facebook Live*. It was an opportunity to establish contact with possible applicants outside Puerto Rico.
- The recruitment of health professionals is enhanced by offering workforce development activities (refer to the electronic resource file). The workforce activities have attracted applicants from other departments at our institution, various health professionals and the general community. For 2014-2015 we had three activities with

64 attendees, for 2015-2016 we had seven activities with 155 attendees and from 2016-2017, we had six activities with 136 attendees.

During the academic year 2016-2017, PHSU established a Marketing Office at PHSU with Mr. Shipley as a Vice President. Since May 2017, student recruitment is mainly a function for the Recruitment, Marketing and Admission Offices, but by working together with the Public Health Program. The PHP received a budget of \$3,000 to buy promotional products. In 2017, both PHSU and the PHP have, for the first occasion, placed banners in the buildings to identify the program. Banners are very important marketing tools for our program.

Some plans are underway to make some improvements to the web page that benefit the promotion of the PHP, such as:

- The PHP website will be extensively redesigned to correct and update old information and to be informative, interesting and regularly refreshed with new events. Plans for the updated website include:
  - Creation of a web page in Spanish because it is the official language in Puerto Rico.
  - Include in the web page a photo, a description of our faculty, including research experience and the contact information. The purpose is to introduce students to our faculty.
  - Include videos in which our faculty and student narrate their experience in our program.
  - Include photos and videos about students in activities, classrooms, doctoral dissertation defenses or graduation ceremony. Currently, the photos on the web page are “stock” promotional images and do not represent our real faculty, students and staff.
  - Announce outreach and workforce activities.

**H4 -2 - Provide a statement of admissions policies and procedures. If these differ by degree (eg, bachelor's vs. graduate degrees), a description should be provided for each.**

The Admissions Office and the PHP Admissions' Committee are responsible for selecting the best candidates that apply for admission considering the use of language, special aptitudes, mechanical skills, health, stamina, perseverance, motivation and the intellectual capacity and interest to pursue a career in Public Health. The Admissions Office receives the applications, is responsible to conduct a pre-screening to ensure the minimum requirements to be admitted in PHSU programs and arranges interviews for public health program applicants with the public health faculty and/or Admissions Committee member. Student attributes are scored and the full Admissions Committee (includes Admissions office personnel, one PHP student representative and faculty members of PHP) for the assessing of the candidates for the student selection. The Admissions Committee is appointed by the Associate Dean of the Public Health Program.

Once the candidate's file is complete, the documents are brought to the Committee where the members review and discuss each case and make the selection. Candidates who do not meet the minimum admission requirements are notified in writing. Once an acceptance decision is reached, the candidate is informed in writing and given 20 calendar days to accept or reject the offered position.

The Admissions' Committee also looks for students with integrity and maturity who show concern for others, character and leadership potential. In evaluating the applicants, emphasis is placed upon the following:

- Potential to work with individuals, analytical skills and understanding of ethical standards of the profession.
- Past experience in research projects or potential for the development of research skills.
- Academic achievement.
- Motivation and emotional stability.
- Letters of recommendation.
- Language and writing skills in Spanish and English.
- Personal virtues of cooperation, responsibility, humanism and including the participation in extracurricular activities such as community or voluntary work.
- Interview.

Students are admitted based on individual qualifications, regardless of handicap, sex, race, religion, age, national origin, marital status, sexual or political orientation.

PHSU acts in accordance with the *Americans with Disabilities Act of 1990*. It is the student's responsibility to initiate the process to request reasonable accommodation and must submit a written request to the Office of Academic Affairs. It is recommended that students make their arrangements at or before the beginning of the course. It is the student's responsibility to make his/her condition known to PHSU Administrators and to seek out assistance.

Applicants with disabilities will be evaluated on a case by case basis, in accordance to the established institution's reasonable accommodation policy. All students must possess the physical and emotional capabilities required to independently undertake the full curriculum and to achieve the levels of competence required by the faculty.

Tuition is approved by the Ponce Health Sciences University Board of Directors and is subject to change but prospectively. It is the students' responsibility to arrange to pay their total tuition, fees and full charges in order to complete their registration if they wish to be admitted to classes. Students who may be eligible for financial assistance should consult the financial aid office as early as possible.

The Public Health admissions requirements for the **Master's Degree** are the following:

- Provide evidence of the successful completion of a bachelor's degree (BA/BS) of a college level institution accredited by the PR Council on Education or by a US accrediting organization.
- Have a minimum GPA of at least 2.75 (on a four-point scale).

- Candidates with graduate's degree are also invited to apply.
- Have completed the following required courses and credits:

Course	Credits
General Sciences	6
Social Science	6
Behavioral Sciences	3
College Mathematics	3

- Submit the following documents:
  - Official transcripts from all undergraduate and graduate institutions attended.
  - Provide results of GRE, EXADEP or MCAT not older than five years prior deadline of application.
  - Three letters of recommendations. Two of the letters of recommendation should provide input from people in responsible position who can comment on the applicants academic, employment or volunteer performance, character and interest. For undergraduate this often means professors, academic advisors or employer. The third letter must be of someone who knows the student well and can speak to their character as a future public health practitioner.
  - Provide a Resume and Personal Statement.
  - Provide a written essay explaining the motivation to pursue a public health degree.
- Attend a personal interview with the public health faculty and/or Admissions Committee member. During the interview, in a blind process, the faculty and/or Admissions Committee member does not have any information of the person to be interviewed. The classification of the evaluation is: strongly recommended; recommended; or not recommended. It is only based on the information obtained during the interviewed.
  - Criteria of Evaluation in the interview:
    - Overall presentation (personality/emotional control)
    - Oral communications skills in Spanish and English
    - Academic Deficiencies (failures, withdrawals, etc)
    - Interest in public health issues
    - Extracurricular activities (sports, arts, student organizations)
    - Motivation to become a health professional
    - Service (community, voluntary work, humanism)
    - Insight/judgment/problem solving
    - Knowledge of current events
    - Potential for acceptable academic performances
- Certificate of No Penal Record (Criminal Background Check)
- Application fee - \$80.00 non-refundable
- Once an acceptance decision is reached, the candidate is informed in writing and given up to 20 calendar days (depending on the time period before classes begin) to accept or decline the offered position. Upon the acceptance to the Master's Degree, all students are required to submit the following documents:
  - Written confirmation of acceptance. Candidates who accept admission are required to make a \$100.00 nonrefundable deposit to secure their seat in the entering class.
  - Physical Exam (using a form provided by the Admissions Office)
  - Evidence of up-to-date immunization record (must include Hepatitis B and drug detection examination).

The Public Health admissions requirements for the **Dr.PH in Epidemiology** are the following:

- Present evidence of the successful completion of a BA/BS or master’s degree in an institution accredited by the PR Council of Higher Education or by a US accrediting organization.
- Have a minimum GPA of at least 3.00 (on a four-point scale).
- Have completed the following required courses and credits prior to admission:

Course	Credits
Biostatistics	6
Introduction to Environmental Health	3
Psychosocial Aspects of Public Health	3
Introduction of Epidemiology	3
Health Policy and Administration	3
Bioethics	3

If the student is missing any of these pre-requisites, they can be taken in our Institution (with the same application requirements as for MPH applicants) or at another institution.

- Submit the following documents:
  - Official transcripts from all undergraduate and graduate institutions attended.
  - Official Graduate Record Examination (GRE) with a minimum score of 500 (290 new score) not older than five years prior deadline of application.
  - Three letters of recommendations. Two of the letters of recommendation should provide input from people in a responsible position who can comment on the applicant’s academic, employment or volunteer performance, character and interest. For undergraduates, this often means professors, academic advisors or employer. The third letter must be of someone who knows the student well and can speak to their character as a future public health practitioner.
  - Provide an updated *Curriculum Vitae*.
  - Provide a written essay explaining why he/she decided to continue post graduate studies for a Dr.PH in Epidemiology.
- Attend a personal interview with public health faculty and/or Admissions Committee member (if the application meets the requirements). During the interview, in a blinded process, the faculty and/or Admissions Committee member does not have any information of the person to be interviewed. The classification of the evaluation is: strongly recommended; recommended; or not recommended. It is only based on the information obtained during the interview.
- - Criteria of Evaluation in the interview:
    - Overall presentation (personality/emotional control)
    - Oral communications skills in Spanish and English
    - Academic Deficiencies (failures, withdrawals, etc)
    - Interest in public health issues
    - Extracurricular activities (sports, arts, student organizations)
    - Motivation to become a health professional
    - Service (community, voluntary work, humanism)
    - Insight/judgment/problem solving
    - Knowledge of current events
    - Potential for acceptable academic performances

- The Committee will take into consideration the candidate's commitment, and professional work skills, especially if his/her work experience is in the health or related field.
- Certificate of No Penal Record (Criminal Background Check)
- Application fee - \$80.00 non-refundable
- Once an acceptance decision is reached, the candidate is informed in writing and given up to 20 calendar days (depending on the time period before classes begin) to accept or decline the offered position. Upon the acceptance to the Doctoral Degree in Epidemiology, all students are required to submit the following documents:
  - Written confirmation of acceptance and candidates who accept admission are required to make a \$100.00 nonrefundable deposit to secure their seat in the entering class.
  - Physical Exam (using a form provided by the Admissions Office)
  - Evidence of up-to-date immunization record (must include Hepatitis B and drug detection examination).

The Public Health Program application **deadline is May 30**. The [Application for Admission to the Master's degree in Public Health](#) and the [Application for Admission to the Dr.PH degree in Epidemiology](#) can be downloaded or obtained in person at the Admissions Office. The application form and fee should be mailed to PHSU Office of Admission.



**H4 -3 - Select at least one of the following measures that is meaningful to the program and demonstrates its success in enrolling a qualified student body. Provide a target and data from the last three years in the format of Template H4-1. In addition to at least one from the list that follows, the program may add measures that are significant to its own mission and context.**

<b>Template H4-1: Outcome Measures for Recruitment and Admissions</b>				
<b>Outcome Measure</b>	<b>Target</b>	<b>Year 1 2015</b>	<b>Year 2 2016</b>	<b>Year 3 2017</b>
GPA (MPH)	2.90	3.30 (2.30-3.85)	3.29 (2.75-3.94)	3.18 MPH (2.57 -3.88)
GPA (Dr.PH) -- previous BS	3.10	3.25 (2.43-3.92)	3.19 (2.91-4.00)	3.15 (2.71 -3.63)
Dr.PH – previous MSc*	3.10	3.28 (2.95-4.00)	3.73 (3.61-4.0)	3.88 (3.30 – 4.00)

\* Students entering DrPH degree with a previous Master's in Science Degree

**H4 -4 - If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.**

**Strength:**

The main strength of the PHP is that it has a comprehensive process to market its offerings through in-house and community activities. In addition, it works with crucial offices across PHSU, which enhances the recruitment and marketing potential.

**Weakness:**

The major weakness is the late deadline for applying into the program, in the sense that the application process can extend into the summer months, which may difficult having an early idea of the resources needed for the upcoming year.

**Plan**

To reduce this to a minimum, we will maintain a close relationship with the Admissions Office to monitor the situation closely.

## **H5. Publication of Educational Offerings (SPH and PHP)**

**H5-1 - Provide direct links to information and descriptions of all degree programs and concentrations in the unit of accreditation. The information must describe all of the following: academic calendar, admissions policies, grading policies, academic integrity standards and degree completion requirements.**

Here are the links to the documents or information currently available:

1. Future Students <http://www.psm.edu/future-students/>
2. General application process - <http://www.psm.edu/apply-now/>
  1. Online application is provided for both academic programs.
3. Admissions policies - <http://www.psm.edu/doc/media-manager/procedure-to-apply.pdf>
4. Program specific admission requirements
  1. MPH - <http://www.psm.edu/education/master-in-public-health-mp/>
  2. Dr.PH - <http://www.psm.edu/education/drph-in-epidemiology/>
5. Tuition and fees - <http://www.psm.edu/wp-content/uploads/2015/12/2017-2018-Approved-Tuition-and-Fees.pdf>
6. Degree completion requirements -included in the description of the programs available in the General Catalog 2017-2020 at <http://www.psm.edu/doc/media-manager/Ponce Health Sciences University General Catalog 2015-2018.pdf>
7. Academic integrity standards and grading system are included in the Ponce Health Sciences University
8. Student Manual: <http://www.psm.edu/wp-content/uploads/2016/09/Ponce-Health-Sciences-University-Consumer-Information-and-Student-Achievement-Guide.pdf>
9. Student Policy Manual 2013-2018 - <http://www.psm.edu/doc/media-manager/PONCE%20HEALTH%20SCIENCES%20UNIVERSITY%20STUDENT%20POLICY%20MANUAL.pdf>

The new PHSU web page will be Live soon. Although, the same links will be maintained, the information will be updated.