Memorandum of Understanding

Among Member Organizations of the United States Environmental Protection Agency-Region 2 Caribbean Science Consortium

Purpose

As the EPA Region 2 lead for science, the Region 2 Division of Environmental Science and Assessment formally established the EPA Region 2 Caribbean Science Consortium in January 2012. The EPA Region 2 Caribbean Science Consortium is comprised of members of the EPA Region 2 Division of Environmental Science and Assessment, EPA Region 2 Caribbean Environmental Protection Division and government and university organizations in Puerto Rico and the US Virgin Islands. The main goal of the EPA Region 2 Caribbean Science Consortium is to expand science communication and collaboration and facilitate the exchange of information among the mutual environmental science programs and activities of the member organizations. The EPA Region 2 Caribbean Science Consortium will identify and share resources, where applicable and within the member organization's resources, including technical assistance, education, and outreach. The EPA Region 2 Caribbean Science Consortium will leverage the strengths and resources of individual member organizations in order to build the capacity of the territories to respond to their environmental science needs.

The purpose of this Memorandum of Understanding (MOU) is to establish a mutually beneficial collaborative working relationship involving educational, scientific, and technical programs among member organizations of the United States Environmental Protection Agency (EPA) Region 2 Caribbean Science Consortium. In addition, for the remainder of this MOU, the EPA Region 2 Caribbean Science Consortium will be referred to as the "Science Consortium" and its member organizations will be collectively known as "the Members."

The Science Consortium is comprised of the following member organizations:

- US EPA Region 2, Division of Environmental Science and Assessment
- USEPA Region 2, Caribbean Environmental Protection Division
- Puerto Rico Department of Health, Public Health Laboratory
- Puerto Rico Environmental Quality Board, Laboratory and Water Quality Area
- Inter American University of Puerto Rico, Center for Environmental Education, Conservation and Research of Inter American University
- Ponce School of Medicine and Health Sciences, Public Health Program

- University of Puerto Rico (UPR) - Rio Piedras Campus
- University of Puerto Rico (UPR) - Mayaguez Campus
- University of Puerto Rico (UPR) - Medical Sciences Campus
- University of Virgin Islands (UVI)
- US Virgin Island Department of Planning and Natural Resources, Division of Environmental Protection

The goals of this Science Consortium include, but are not limited to, the following:

- improve and facilitate communication and interaction among participating organizations;
- facilitate the identification of potential opportunities for collaboration;
- leverage limited scientific and laboratory resources, e.g., equipment, supplies, facilities;
- provide the opportunity to partner with US EPA Region 2 or other members, e.g., workshops, research, community monitoring, green initiatives;
- identify and work to address education, outreach, and training needs;
- improve our understanding of the roles, responsibilities and interactions of the regulatory and research communities, e.g., methods, accreditation, requirements;
- identify and work to address laboratory support needs, e.g., training, lab design, methods; and,
- promote and foster a Laboratory Network, including both university and government laboratories, that can be accessed, as needed, to provide analytical support, where appropriate, within the limits of each participating organization.

Background

A common problem in the territories is that state and academic research institutions, individually, lack adequate resources in terms of capability or capacity to conduct environmental science programs and activities. The limited resources are not leveraged in any systematic way. As the EPA Region 2 lead for science, the Division of Environmental Science and Assessment (DESA), working with the Caribbean Environmental Protection Division (CEPD), have addressed this issue by working with government and academic scientific institutions in the U.S. Virgin Islands and Puerto Rico to establish the EPA Region 2 Caribbean Science Consortium. In this way, the Region has promoted the use of sound science in support and implementation of environmental programs in the Caribbean.

In addition to promoting science, EPA has a consistent demand for highly trained, diverse professionals with science based skills to fulfill its mission. Broadening opportunities for and enabling participation of all individuals are essential to the health and vitality of science. To this end, EPA would like to establish partnerships with Minority Academic Institutions (MAIs), including Hispanic Serving Institutions (HSIs) and Historically Black College and Universities (HBCUs). All of the university members of the Science Consortium are considered MAIs. The university members from Puerto

Rico are HSIs; the university member from the Virgin Islands is an HBCU. The participation of MAIs in federal and state programs increases their capacity to promote science, provide high-quality science education and increases the supply of highly trained, diverse professionals.

A brief overview of each Member's science organization is provided in the appendix to this MOU.

Program Activities

Through this MOU, the Members express their intention to work together to enhance cooperation. The Members recognize that there are many possible areas in which enhanced cooperation could be beneficial, including but not limited to the areas listed below. The Members may agree to work to enhance cooperation in other areas without amending this Agreement.

The following are the chief components of the MOU:

Scientific Initiatives/Activities – The Science Consortium may cooperate in efforts to strengthen and enhance mutually beneficial scientific initiatives and activities conducted jointly and independently by its members.

Education/Outreach/Information Sharing - The Science Consortium may identify, coordinate and promote education, outreach, training and sharing of, project information among its members.

Internships – The Science Consortium may provide internships, consistent with each Member's policies and procedures, where applicable and within the limits of each participating Member's resources, to students of the member institutions.

Use of Facilities - The Science Consortium may provide the use of science facilities, consistent with each Member's policies and procedures, where applicable and within the limits of each participating Member's resources, to other Members.

Technical Assistance – The Science Consortium may provide technical assistance, consistent with each Member's policies and procedures, where applicable and within the limits of each participating Member's resources, to other Members. The assistance may include but not limited to the following activities: Sampling assistance, analytical assistance; and use of scientific equipment.

Training and Site Visits – The Science Consortium may coordinate, consistent with each Member's policies and procedures, where applicable and within the limits of each participating Member's resources, the arrangement of faculty and student attendance at training courses and selected site visits. The forum for site visits may include consultations, meetings, workshops, and seminars relating to environmental monitoring, e.g., field, analytical and quality assurance activities, to the extent funding is available.

Scientific Equipment Loans – To the extent authorized by Federal property disposal regulations and policies, EPA may provide excess and surplus scientific equipment to

the Science Consortium Members that meet the needs of current and planned education, research and/or training programs, particularly within Science Consortium Members' environmental science-based research programs. The equipment loaned by EPA will remain the property of EPA until transferred to the Science Consortium Member in accordance with Federal property regulations and policies. EPA and Science Consortium Members will identify how equipment transfer charges would be paid, i.e., EPA, Science Consortium Member, or a combination thereof. When EPA pays the full transportation cost, the gaining institution must present a statement certifying funds are not available to support moving the equipment.

Meetings - The Science Consortium will hold quarterly videoconference/conference calls to discuss Consortium business. The meetings will be held on the first Wednesday of the months of September, December, March and June. The primary representatives from each participating organization are expected to attend the quarterly meetings.

Document Center - The Science Consortium will establish a Web-based document center for the intent to share documents in the promotion of information exchange among the Members.

Program Administration

The Science Consortium has established a Program Committee consisting of appropriate representatives of each participating organization to manage the implementation of this Agreement. The Program Committee is not a legal entity with powers to enter into contracts, incur liabilities, own or create intellectual property, or otherwise make legally binding commitments of the funds or other assets of the Agency.

The participating organizations of the Science Consortium may modify the Program Committee membership (replacement or additional) by submitting a written notice, e.g., e-mail, to the EPA Region 2 DESA representatives. New members from organizations that are not currently part of the Science Consortium may be added based on written request to and agreement by, all current members. The Program Committee membership will be reviewed annually.

The Program Committee membership organizations and their primary representatives are as follows:

- US EPA Region 2, Division of Environmental Science and Assessment (DESA): Deb Szaro, John Bourbon, Patricia Sheridan, Rachael Graham
- USEPA Region 2, Caribbean Environmental Protection Division (CEPD): Adalberto Bosque, Jim Casey
- Puerto Rico Department of Health (PRDOH), Public Health Laboratory: Myriam Garcia-Negron (Interim Laboratory Director), Melba Aviles Aviles, Nancy Sanchez
- Puerto Rico Environmental Quality Board (PREQB): Janette Cambrelen (Laboratory Director), Edward Aviles, Eileen Villafane

- Inter American University of Puerto Rico (IAUPR), Center for Environmental Education, Conservation and Research of Inter American University: Dr. Graciela Ramirez
- Ponce School of Medicine and Health Sciences (PSMHS), Public Health Program: Dr. Mayra Roubert, Dr. Himilce Velez
- University of Puerto Rico (UPR) - Rio Piedras Campus, Department of Environmental Science: Dr. Rafael Rios Davila, Dr. Loretta Roberson
- University of Puerto Rico (UPR) - Mayaguez Campus, Department of Civil Engineering and Surveying: Dr. Ingrid Padilla
- University of Puerto Rico (UPR) - Medical Sciences Campus, Department of Environmental Health: Dr. Pablo Mendez, Dr. Carlos Rodriguez
- University of Virgin Islands (UVI), College of Science and Mathematics: Dr. Sandra Romano (Interim Dean), Dr. Stanley Latesky; Dr. Bernard Castillo; Diana Freas-Lutz
- US Virgin Island Department of Planning and Natural Resources, Division of Environmental Protection (VIDPNR-DEP) (Anita Nibbs and Nadalie Joseph)

The primary responsibilities of the Program Committee include:

(1) Preparation of an Annual Action Plan and the preparation of an-Annual Program Report;

(2) General program liaison necessary to meet mission goals and objectives;

(3) Coordinate scientific and technical support for activities under this MOU.

(4) Participation at quarterly videoconference/conference calls to discuss Consortium business

Terms and Conditions

Each Member will bear its own costs for activities undertaken in furtherance of this MOU. Nothing herein shall be construed to require a Science Consortium Member to obligate or expend funds on behalf of the goals, objectives, or responsibilities set forth in this MOU, or give rise to a claim for compensation for services performed to further the goals of this agreement. Any obligation or expenditure of funds by a Member in furtherance of the goals of this MOU must be consistent with existing legal authorities. All obligations and expenditures of funds by a Member will be subject to the availability of funds and the Member's sole discretion in making budgetary determinations.

Nothing in this MOU, in and of itself, obligates a Member to expend funds or to enter into any contract, assistance agreement, interagency agreement, or other financial obligations.

This MOU is neither a fiscal nor a funds obligation document. Any endeavor involving reimbursement or contribution of funds among the members of this MOU will be handled in accordance with applicable laws, regulations, and procedures, and may be

subject to separate subsidiary agreements that will be effected in writing by the particular Members. A Member may not submit a claim for compensation to EPA or any other Federal agency on the basis of this MOU.

Collaboration under this MOU shall be in accordance with applicable statutes and regulations.

This MOU does not restrict the Parties from participating in similar activities or arrangements with other entities or Federal agencies.

Any Member may unilaterally withdraw at any time from this MOU by transmitting a signed written notice to that effect to the other Members. By mutual agreement, which may be either formal or informal, each Member may modify the list of intended activities set forth above, and/or determine the practical manner by which the goals, purposes and activities set forth in this MOU will be accomplished. Modification to other written parts of this MOU must be made in writing and signed by either the member or their designees.

Nothing in this MOU shall be construed to authorize or permit any violation of any Federal, State or local law, including, but not limited to, any environmental law administered and/or enforced by EPA, PREQB, PRDOH and VINPNR.

Members agree that they do not expect, nor will they ever seek to compel from any other Member in any judicial forum, the payment of money, services or other thing of value from Members based upon the terms of this MOU. The foregoing provision does not in any way affect any legal rights accruing to the Members by virtue of any other law, contract and/or assistance agreement. Members understand and acknowledge that, as institutions of the Federal and State Governments, EPA, PREQB, PRDOH and VINPNR have a duty to refrain from providing any entity an exclusive privilege without receiving payment, therefore and, as a consequence, that the relationship of EPA, PREQB, PRDOH and VINPNR with Members in no way affects, alters or otherwise constrains their right to provide similar (or identical) services to, or establish similar (or identical) relationships with, any other entity.

The Members understand that the participation by EPA, PREQB, PRDOH and VINPNR in this MOU does not constitute an endorsement, express or implied of (a) any policy advocated by the Members or (b) any good or service offered or sold by any Member.

EPA Region 2 enters into this MOU under the authority of Section 103 of the Clean Air Act, 42 U.S.C. §7403, Section 104 of the Clean Water Act, 33 U.S.C. §1254, and Section 8001 of the Solid Waste Disposal Act, 42 U.S.C. §6981, Section 6604 of the Pollution Prevention Act, and Section 324A of the Energy Policy and Conservation Act, which provide EPA with authority to undertake cooperative efforts with private organizations to promote the coordination and acceleration of research, studies, training, and other efforts to prevent, reduce and eliminate pollution.

This MOU does not create any right or benefit, substantive or procedural, enforceable by law or equity against the Parties, their officers or employees, or any other person.

Signed:

Judith A. Enck
Judith A. Enck
Regional Administrator
United States Environmental Protection Agency.
Region 2

2-13-14
Date Signed

Olga Rodríguez de Arzola, MD, FAAP
President and Dean
Ponce School of Medicine and
Health Sciences

Date Signed

Manuel J. Fernós
President
Inter American University of Puerto Rico

Date Signed

Professor Lucas N. Avilés Rodríguez
Interim Chancellor
University of Puerto Rico at Mayaguez

3-7-14
Date Signed

Ethel Ríos Orlandi, M.Sc., Ph.D.
Interim Chancellor
University of Puerto Rico at Rio Piedras

Date Signed

Edgar Colón Negrón, MD, MACR
Interim Chancellor
University of Puerto Rico at Medical Sciences
Campus

Date Signed

Dr. David Hall
President
University of the Virgin Islands

Date Signed

Ana C. Rius Armendariz, MD
Secretary
Puerto Rico Department of Health

Date Signed

Laura M. Vélez Vélez, Esq.
Chairwoman
Puerto Rico Environmental Quality Board

Date Signed

Honorable Alicia Barnes
Commissioner
Virgin Islands Department of Planning and
Natural Resources

Date Signed

Appendix – Science Consortium Member Organization Background (ONE PARAGRAPH TO BE COMPLETED BY EACH ORGANIZATION)

1. EPA Region 2 – DESA

   DESA is the Region 2 lead for science and quality assurance, and supports the Agency's and region's environmental, compliance, and ambient monitoring programs for air, water, hazardous waste sites, and ecosystems. The division sets priorities and identifies the resources needed to plan projects, collect and analyze environmental samples, and interpret the resulting data.

   DESA provides integrated, comprehensive scientific support to the programs for decision-making purposes through field sample collection, laboratory analysis and quality assurance

2. EPA Region 2 – CEPD

3. PREQB – Laboratory

   The Environmental Research Laboratory of Puerto Rico (LIAPR for its Spanish acronym) was created aimed at the preservation of the environment, as provided by Law 416 of September 22, 2004, known as Environmental Public Policy Act. This Act recognizes the importance of restoring and maintaining environmental quality and creates to and maintains conditions under which man and nature can exist in productive harmony.

   The LIAPR aims to provide scientific and laboratory support to PREQB programs, the Department of Natural and Environmental Resources, and other government agencies to obtain the necessary information to comply with the environmental public policy of the Commonwealth of Puerto Rico. LIAPR activities include:

   - Sampling analytical activities and methods necessary to determine the status of the land and the quality of water, air and biological, chemical or physical or natural systems or any resources required as part of the issuance, amendment, suspension, revocation or enforcement of any permit, license or other approval from PREQB.
   - Sampling analytical activities and methods necessary to monitor compliance with state and federal laws, regulations and orders regulating the quality of water resources, air and land of PR.
   - Scientific research related to environmental and natural resources existing in PR and disseminates their results.
   - Provide laboratory services related to research and analysis of natural and environmental resources to government agencies of the Commonwealth of Puerto Rico, the U.S. Government and private institutions.
   - Conduct research and analytical work, following the highest standards and accepted practices in the field of natural sciences.

LIAPR's objective of protecting the environment requires a reliable assessment of the present conditions and a determination of the effectiveness of corrective measures. LIAPR also helps and provides support to students at different school and college levels to perform studies related to the environmental field.

4. PRDOH – Laboratory and Laboratory Certification

5. VIDPNR-DEP

6. UVI. College of Science and Mathematics

The University of the Virgin Islands, a Historically Black University and a Land Grant Institution founded in 1961, is strongly motivated to developing the human resources necessary for a strong Virgin Islands of the 21st century. UVI serves approximately 2600 students, approximately 75% Black and 73% female. UVI is cognizant of its role as the primary source of higher education for the Virgin Islands community and has developed innovative formal and informal educational experiences aimed at the specific needs of its constituents. It has shown its commitment to developing quality interdisciplinary initiatives that are relevant to the Virgin Islands experience, including a general education science course that teaches science through the study of hurricanes, earthquakes and tsunamis.

The territory has a population of approximately 110,000, nearly 81% of whom are Black. Hispanics make up approximately 15% of the population. The Virgin Islands Department of Education provides education to approximately 18,000 public school students, 98% of whom are of African descent or Hispanic heritage.

In August, 2009, Dr. David Hall began his term as the fifth president of the University of the Virgin Islands. His presidency has focused on (i) improving retention and graduation rates; (ii) working to improve K-12 education in the territory and (iii) implementing an initiative aimed at attracting more male Virgin Islanders to the University and providing tools and support to help them graduate.

The College of Science and Mathematics (CSM) spans two campuses, and offers Bachelors degrees in Mathematics, Chemistry, Biology, Marine Biology and Computer Science as well as Associates degrees in Computer Science, Process Technology and Physics. It also offers Masters Degrees in Marine and Environmental Sciences, and Mathematics for Secondary Teachers. The College is home to many grant funded programs, which work in concert. These include NIH funded Minority Access to Research Careers (MARC) and Research Initiative for Scientific Enhancement (RISE), NSF Scholarships in STEM, and an NIH curriculum development grant aimed at strengthening the quantitative preparedness of students majoring in the biological sciences, and enhancing the curriculum of the quantitative sciences to better prepare those students for biomedical research. CSM has strong support from the NSF funded VI-EPSCoR program which has a research focus on integrated

Caribbean Coastal Ecosystems. CSM collaborates with the Virgin Islands Department of Education and the UVI School of Education on a planning grant from NSF's Math Science Partnership program (MSP Start), and is preparing for a full MSP proposal submission to the NSF. The College, in collaboration with the School of Education, recently submitted a grant application to the NSF Noyce Program Capacity Building track for the development of a strong STEM teacher education program, based on an adaptation of the successful UTeach project at the University of Texas at Austin.

7. IAUPR, Center for Environmental Education, Conservation and Research of Inter American University (CECIA)

CECIA was created to complement traditional education, both at InterAmerican University of Puerto Rico (IAU) and among the Island's scientific and general communities. We do this by providing training and education in traditional and non-traditional manners and settings, enabling students, technicians, professionals and the public at large to become citizens with the capacity to make informed decisions concerning environmental issues. CECIA provides mechanisms to develop academic programs and research in areas related to environmental science. IAU, through CECIA, develops in our students and citizens social responsibility and critical skills concerning environmental problems and provides to professionals practical experience in the scientific understanding and conscious conservation of the environment.

CECIA is Island-wide, with facilities and staff at each of the 9 campuses and the School of Law of IAU. Headquartered at the San Germán Campus, each campus has a coordinator responsible for the implementation of CECIA programs. A central research laboratory is located at San Germán with satellite laboratories at each campus. Each campus devotes its resources and expertise to projects addressing local problems. This structure allows easy development of interdisciplinary inter-campus projects which provide students, industry, and public polities with ready access to the capabilities of the entire university. By networking 10 campuses, CECIA provides single-source access to the expertise necessary for research into environmental problems. Graduate and undergraduate students in science and science education programs at the different campuses all benefit because CECIA provides a compendium of local and Island-wide environmental problems suitable for master's theses and special research topics for undergraduates.

A general goal is the development of appropriate technology and methods for environmental protection and remediation for both the Island and the Caribbean at large. CECIA projects underway include reforestation, recycling, potable and waste water system evaluation, implementation and improvement environmental analysis and habitat conservation and restoration. Other specific goals include identification and cataloguing of information resources, classification of environmental research needs in Puerto Rico, the promotion of educational, practical and research environmental projects in association with the public sector and private industry, and the creation of an information

network in environmental sciences and ecology to promote better use of the Island's natural resources.

8. PSMHS, Public Health Program

The PSMHS was established in 1980. In 1983, the PSMHS established a research program with funds from the Minority Biomedical Research Support Program and the Research Center for Minority Institutions Program. A Graduate Program in Biomedical Sciences (DrPH program) was initiated in 1988. During 1999, PSMHS implemented the Clinical Psychology Doctoral Program. In 2002, PSM established the Public Health Program. The program offers Masters in Public Health in Epidemiology, a Masters in Public Health in Environmental Health and a DrPH in Epidemiology.

The Public Health Program at PSMHS responds to the public health needs of modern society. It provides an academic environment with multiple disciplines and with academic collaboration in which teaching, research, and community service makes it possible to contribute to the development of health promotion and protection and the prevention of disease in the community.

The mission of the Public Health Program is to prepare graduate level public health professionals with a multidisciplinary background, through teaching, research, and community service. This preparation will facilitate the development of the necessary competencies for promoting and protecting health and preventing disease in the community, taking into account the individual and collective rights and the social and cultural differences that distinguish human beings.

The Public Health Program has three areas of focus:

Instruction. The Public Health Program has the main goal of preparing professionals with the capacity to identify and to evaluate the health needs of the Puerto Rican population. Plan implement, and evaluate programs to address those needs.

Research. Advance in the knowledge and understanding of the determining factors that affect the health status of the populations through basic and applied research in all five major disciplines of public health with a view of reducing the prevailing causes of morbidity and mortality
Service: Through the five major disciplines of public health, the Public Health Program will create links to local, national, and international communities for the improvement of the overall health of the population by providing quality health service, technical assistance and advisory services.

9. UPR – Rio Piedras Campus, Department of Environmental Science

The Department of Environmental Sciences at University of Puerto Rico Río Piedras is a scientific community of faculty and students dedicated to cutting-edge research and outreach that will advance science that helps solve complex

environmental problems while promoting a balance between human needs and a sustainable biosphere. Our mission is to advance research in ecosystem structure and function, environmental sustainability, natural resources, and earth sciences, and to train scientists with a profound and integrated knowledge of the environment. The Department strives to integrate highly interdisciplinary research and teaching that draws from the natural and social sciences, with a strong emphasis on research, scholarship, and outreach. The Department will prepare students to identify, analyze, and generate solutions to today's and tomorrow's complex environmental problems, from local to global scales and across the hierarchical levels of ecological organization in the various compartments of our biosphere.

The Río Piedras campus is the flagship campus of the 11-unit UPR system and enrolls more than 14,000 undergraduate students, almost all Hispanic and most are officially low-income. The university serves the approximately 2.5 million inhabitants of the San Juan metropolitan area (64% of total PR population).

10. UPR – Mayaguez Campus, Department of Civil Engineering and Surveying

The University of Puerto Rico, Mayagüez (UPRM) is a Land Grant and Sea Grant State Institution. UPRM is the leading engineering university in Puerto Rico and among the top research institutions in Puerto Rico. Nationally and internationally known, UPRM is considered among the best Hispanic Serving Institutions in the nation. UPRM serves approximately 12,000 students, of which over 62% are registered in science, technology, engineering and math (STEM) degrees. The student community is approximately 47% female. Data from 2005 through 2010 reflect that UPRM has been number 1 institution graduating Hispanic and female engineers in the nation, and number 1 institution graduating doctoral students in engineering and natural sciences in the nation (National Opinion Research Center (NORC) at the University of Chicago).

UPRM offers BS, MS, and PhD degrees in a diverse number of fields with strong relevance to Environmental Science and Engineering. These include: Biology (BS, MS), Chemistry (BS, MS, PhD), Mathematics (BS, MS), Physics (BS, MS), Geology (BS, MS), Marine Sciences (BS, MS, PhD), Industrial Microbiology (BS, MS), Industrial Biotechnology (BS), Civil Engineering (BS, MS, PhD), Electrical Engineering (BS, MS), Computation Science and Engineering (PhD), Chemical Engineering (BS, MS, PhD), Surveying (BS), Agroenvironmental Science (BS, MS), Soil and Agricultural Science and Engineering (BS), and Social Sciences (BS). Last May 2012, new graduate programs have been approved by UPR-Central Administration and are currently waiting for final approval from the Education Council of Puerto Rico (CEPR, from the Spanish acronym). These programs include a Master Program in Materials Science and Engineering and PhD Programs in Bio-engineering, Mechanical Engineering and Electrical Engineering.

Nationally and internationally known, UPRM is among the top research institutions in Puerto Rico. It is competitively funded by many funding agencies

and foundations, including the National Science Foundation, National Institutes of Health, Environmental Protection Agency, Department of Energy, Department of Defense, Department of Education, National and Oceanic and Atmospheric Administration, Department of Agriculture, National Aeronautics and Space Administration, Federal Highway Administration, Sloan Foundation, Ford Foundation, and many governmental, private and industrial institutions. Several Research and Community Support Centers are housed at UPRM. These include: Puerto Rico Water Resources and Environmental Research Institute; PR Seismic Network; PR Sloan Mission Program; Agricultural Research Center; ATMOSCarib – Atmospheric Research Center; Sea Grant; Campus Verde; Institute of Research in Integrative Systems and Engineering (IRISE); COHEMIS (Center for Hemispheric Collaborations in Engineering and Applied Science Research and Education); UPRM Nanobiotechnology Center, among others.

11. UPR – Medical Sciences Campus, Department of Environmental Health