

Puerto Rico Bridge-to-the-Doctorate Program: A Five Year History in Pictures



Cohort I Fellows



Cohort I and II Fellows



Cohort II Fellows



Cohort III Fellows



Cohort III and IV Fellows



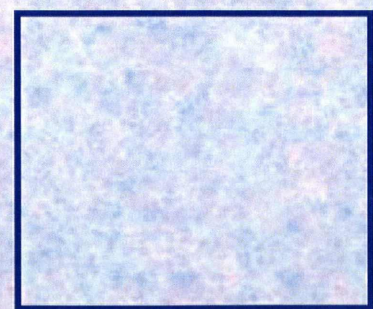
Cohort IV Fellows



Cohort V Fellows

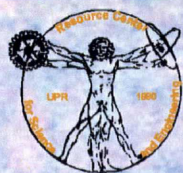


Cohort IV and V Fellows



Cohort VI Fellows

Puerto Rico Louis Stokes Alliance for Minority Participation



THE PUERTO RICO BRIDGE-TO-THE-DOCTORATE PROGRAM

THE FIRST FIVE YEARS — A SUCCESS STORY!

The Puerto Rico Bridge-To-The-Doctorate Program (BDP) initiative began August 2003. As of August 2007 a total of 58 BDP fellowships had been awarded. Of these, 56 are in the pipeline for the PhD. All STEM disciplines are represented by these fellows.

STEM Disciplines	Fellows
Chemistry	28
Biology	12
Engineering	7
Physics	6
Marine Science	3
Mathematics	2
Total	58

A survey conducted March 2007 shows:

- 43 Fellows obtained a GPA of 3.5 or higher; 16 obtained a 4.0 GPA.
- Fellows benefited from 90 workshops, conferences and field trips offered by the BD Support Program.
- 31 fellows intend conducting post-doctoral work either in Puerto Rico or in the USA mainland.
- 50 intend to follow faculty positions at research-oriented institutions.
- 62 papers have been published from Fellows' research work in peer review journals.
- All 58 fellows have presented their research work production in scientific conferences at the national level.

- 409 local, national, and international conferences have been attended by Fellows.
- 21 have made presentations at international congresses held in:

Australia	Hungary
Austria	India
Brazil	Italy
Denmark	Mexico
France	New Zealand
Germany	Poland
Greece	Spain
Guadeloupe	Turkey
Guatemala	United Kingdom
Holland	

During the summer of 2008 a group of nine Fellows is attending the International Conference on Global Warming to be held in Istanbul, Turkey. Other 12 Fellows have elected to participate in the 4th International Conference on Bio-Engineering and Nanotechnology, to take place in Dublin, Ireland.

Cohort	Fellows	Publications	Scientific Conferences
Cohort I	10	25	112
Cohort II	12	3	66
Cohort III	12	23	115
Cohort IV	12	6	83
Cohort V	12	5	33
Total	58	62	409

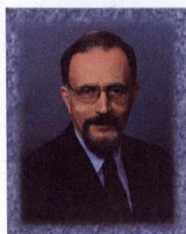


Institutional Site for the BD Program

The University of Puerto Rico at Río Piedras (UPR-Río Piedras) is the flagship institution of the Island's public higher education system. Located in the San Juan metropolitan area, UPR-Río Piedras enrolls almost 18,000 undergraduate students and over 3,000 graduate students.

The large majority of students, 98%, are Puerto Rican; 68% are women, and 60% are first generation college students. The institution grants bachelors' degrees in 69 areas of specialization, 10 master's degrees in 43 areas of specialization and three doctoral degrees (Ph.D., J.D. and Ed.D.) in 14 areas of specialization. Although the Carnegie Foundation classifies UPR-Río Piedras as a Research Intensive University, it is positioned to become a Research Extensive University while maintaining its commitment to quality undergraduate education. Nationwide, 10% of the Hispanics who earned a Ph.D. degree in a natural science field from 1996 to 2001 attained their BS degree from UPR-Río Piedras.

BD COHORT I



"The PR-LSAMP Bridge to the Doctorate Program will contribute to increase the pool of highly qualified STEM PhDs in research and/or university teaching. This will have a long-term impact in Puerto Rico, particularly when taking into consideration the cumulative effect of graduates' life careers in academia and the thousands of students whose learning will be impacted".

Bridge-to-the-Doctorate Coordinator

Prof. Javier Figueroa, the Assistant Coordinator of the PR-LSAMP Program is the BD Coordinator. His field of specialization is Biology and Ecology. He has conducted research in Population Biology, biogeographical distribution and systematics of the Order Odonata in neotropical environments with emphasis in the Greater Antilles.

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Bridge-to-the-Doctorate Participants

Karilys González



Undergraduate Institution: UPR-Río Piedras
Undergraduate Major: Chemistry
BS Degree in Chemistry (June 2003)
Graduate Major: Chemistry
Career Goal: To become a researcher in an industrial setting to develop specific dyes to improve resolution in magnetic resonance images and teach college level courses.

Luzed Díaz Pérez



Undergraduate Institution: UPR-Río Piedras
Undergraduate Major: Biology
BS Degree in Biology (December 2002)
Graduate Major: Cellular Molecular Biology
Career Goal: I would like to become a college professor in the field of cellular and molecular biology; my main interests are in the area of biological membranes.

Daniel Caballero



Undergraduate Institution: UPR-Río Piedras
BS Degree in Biology and Chemistry (June 2003)
Graduate Major: Biochemistry
Career Goal: To become a university professor in the fields of Biochemistry and Biophysics and do research in the area of Ion Channel Biophysics.

Marilyn García Arriaga



Undergraduate Institution: UPR-Río Piedras
Undergraduate Major: Chemistry
BS Degree in Chemistry (June 2002)
Graduate Major: Organic Chemistry
Career Goal: Teach and conduct research in the field of Organic Chemistry.

Omar A. Cruz Nieves



Undergraduate Institution: UPR-Río Piedras
Undergraduate Major: Biology and Chemistry
BS Degree in Biology and Chemistry (June 2003)
Graduate Major: Biochemistry
Career Goal: To become a professor and researcher in Biochemistry and Biophysics, specifically in the area of ligand-gated ion channels such as the nicotinic acetylcholine receptor (and a famous race car driver!).

Agustín Díaz Díaz



Undergraduate Institution: UPR-Río Piedras
Undergraduate Major: Chemistry
BS Degree in Chemistry (June 2003)
Graduate Major: Inorganic Chemistry
Career Goal: Conduct research in the field of Bioinorganic Chemistry developing artificial photosynthesis systems.

Betzaida Castillo Cruz



Undergraduate Institution: UPR-Humacao
Undergraduate Major: Industrial Chemistry
BS Degree in Industrial Chemistry (May 2002)
Graduate Major: Biochemistry
Career Goal: To become a professor and researcher in the field of Biochemistry in the areas of Biotechnology and non-aqueous enzymology.

Yamaris Pacheco Moctezuma



Undergraduate Institution: UPR-Río Piedras
Undergraduate Major: Chemistry
BS Degree in Chemistry (July 2002)
Graduate Major: Biochemistry
Career Goal: To secure a position in an internationally competitive pharmaceutical and conduct research in the areas of biochemistry or biotechnology.

Azlin Biaggi Labiosa



Undergraduate Institution: UPR-Mayagüez
Undergraduate Major: Chemistry and Physics
BS Degree in Chemistry (June 1999) and Physics (June 2003)
Graduate Major: Chemical Physics
Career Goal: To become a college professor in the field of solid state physics and do research in the field of nanotechnology, particularly with nanocrystalline silicon films.

Jessica Oyola Cintrón



Undergraduate Institution: UPR-Río Piedras
Undergraduate Major: Chemistry
BS Degree in Chemistry (June 2003)
Graduate Major: Chemical Physics
Career Goal: To be a college professor and a researcher in the field of Biophysics developing structural and conformational studies for azurin from pseudomonas aeruginosa (blue copper protein).

BD COHORT II

With these additional 12 BDP fellows at UPR-Mayaguez, PR-LSAMP has awarded 22 fellowships for graduate studies in STEM fields. The UPR-Mayaguez program is mirrored on the successful BD Program implemented at UPR-Río Piedras last year. Together they will help build a highly competitive STEM education and research workforce required to enhance Puerto Rico's economic development and to assist in meeting the national need for a diverse STEM workforce."

Manuel Gomez, Ph.D., Project PI

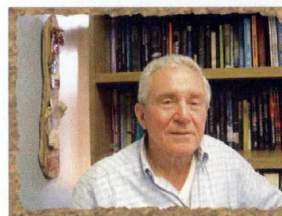


Bridge-to-the-Doctorate On-Site Coordinator

Dr. Juan G. Gonzalez Lagoa is the director of the Resource Center for Science and Engineering in Mayaguez and the on-site BD Coordinator for the PR-LSAMP Program. His field of specialization is Marine Biology.

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The University of Puerto Rico-Mayaguez (UPR-Mayaguez), the second largest campus of the University of Puerto Rico System, was selected by PR-LSAMP as the second site for the 2004 BDP fellowships. Located in the western part of the Island, UPR-Mayaguez enrolled a total of 11,079 undergraduate students and 1,069 graduate students in the Fall of 2003. Forty percent of its undergraduate students are enrolled in the School of Engineering, the main and largest school of engineering in Puerto Rico. In 2004, UPR-Mayaguez awarded 1,063 BS degrees in STEM fields. At the graduate level, 170 MS degrees and 11 PhD degrees were awarded in 2003.

UPR-Mayaguez awards bachelor's degrees in agriculture, arts, sciences, business administration and engineering with 56 areas of specialization; master's degrees in 45 areas of specialization and doctoral degrees in 4 areas of specialization.

Thirteen percent of the Hispanics nationwide who obtained a PhD in an Engineering field received their BS at UPR-Mayaguez.

Madalis Casiano

Undergraduate Institution: Pontifical Catholic Univ.
BS Degree in Chemistry (2005)
Graduate Major: Chemistry
Career Goal: Obtain my Ph.D. in Chemistry, become a college professor and conduct research.



Lourdes Cabello

Undergraduate Institution: Pontifical Catholic Univ.
BS Degree in Industrial Chemistry (2005)
Graduate Major: Applied Chemistry
Career Goal: Obtain my Ph.D. in Bio-Chemistry, and become a college professor in this field.



Deborah Acevedo

Undergraduate Institution: UPR-Mayaguez
BS Degree in Chemistry (2004)
Graduate Major: Chemistry
Career Goal: Become a researcher in Iorganic Chemistry and a faculty member at UPR Mayaguez



Yashira Estrada

Undergraduate Institution: UPR-Mayaguez
BS Degree: Biology (May 2004)
Graduate Major: Marine Sciences
Career Goal: Become a researcher in the field of Marine Science, involving coral reefs, sharks and some mammals.



Yeira Padilla

Undergraduate Institution: UPR-Mayaguez
BS Degree: Chemical Engineering (May 2003)
Graduate Major: Chemical Engineering
Career Goal: To pursue a career in industry and conduct research focused on environmental fields and alternative energy resources



Olga Abreu

Undergraduate Institution: UPR-Mayaguez
BS Degree: Biology (May 2004)
Graduate Major: Marine Sciences
Career Goal: To obtain a Ph.D. in Marine Biology and teach at the University and serve as a role model for future Marine Sciences Majors.



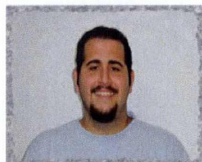
Luis A. Rodriguez

Undergraduate Institution: UPR-Mayaguez
BS Degree: Civil Engineering (May 2004)
Graduate Major: Geotechnical Engineering
Career Goal: To become a profesor and researcher in Geotechnical Engineering, specifically in the area of Deep Foundations



Luis Gonzalez

Undergraduate Institution: UPR-Mayaguez
BS Degree: Civil Engineering (May 2004)
Graduate Major: Structural Engineering
Career Goal: To complete a Ph.D. degree in structural engineering, conduct research in structures and apply the knowledge gained to the field of design and construction



Laura Granell

Undergraduate Institution: UPR-Mayaguez
BS Degree: Chemistry (May 2004)
Graduate Major: Chemistry
Career Goal: Receive my master degree in Chemistry and continue studies towards a Ph.D. in Biochemistry to become a professional in the academic world and the chemical industry



Priscilla Santiago

Undergraduate Institution: Pontifical Catholic Univ
BS Degree: Chemistry (May 2004)
Graduate Major: Chemistry
Career Goal: Complete my MS degree in Chemistry and a Interdisciplinary Ph.D. degree in Biochemistry and Biophysics. I would like to work as a researcher in the pharmaceutical industry and as a professor and mentor at the

Miguel Gonzalez

Undergraduate Institution: Interamerican Univ.
BS Degree: Chemistry (May 2004)
Graduate Major: Chemistry
Career Goal: Receive my master degree in Chemistry and a Ph.D. degree in Biochemistry to become a recognized professional in the academic and the chemical industry sectors.



Yaritza Maldonado

Undergraduate Institution: UPR-Humacao
BS Degree: Marine Biology (December 2004)
Graduate Major: Biological Oceanography
Career Goal:



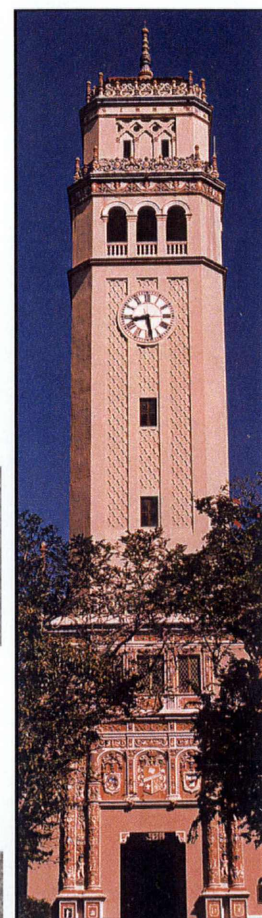
BD COHORT III

These twelve Fellows increase the total number of BDP Fellowships in Puerto Rico to thirty four: Twenty two at UPR-Rio Piedras (Cohorts 1 and 3) and twelve at UPR-Mayaguez (Cohort 2). All ten Fellows from Cohort 1 are in a PhD Program and are expected to complete the degree requirements by 2007. The twelve Fellows from Cohort 2 will complete in 2006 their second year of graduate studies. There is no doubt that the Bridge-to-the-Doctorate Program is significantly contributing to the preparation of the next generation of scientists in Puerto Rico and in the US Mainland, increasing the nation's pool of well-prepared, competent scientists with diverse views".

Manuel Gomez, Ph.D, Project PI



Prof. Javier Figueroa, BD Coordinator



Ana V. Longo

Undergraduate Institution: UPR-Rio Piedras
BS Degree in Biology (2005)
Graduate Major: Population Biology
Career Goal: Obtain my Ph.D. in Biology, become a college professor and conduct research for the conservation of our biodiversity, especially our amphibians.



Dámaris Suazo

Undergraduate Institution: UPR-Humacao
BS Degree in Industrial Chemistry (2005)
Graduate Major: Analytical Chemistry
Career Goal: Obtain my Ph.D. in Analytical Chemistry, become a college professor in this field and conduct research in Electrochemistry.

Yisaira Diaz

Undergraduate Institution: UPR-Humacao
BS Degree in Chemistry (2005)
Graduate Major: Physical Chemistry
Career Goal: Once I obtain my Ph.D. I want to become a college professor in the field of Physical Chemistry and Photochemistry, and conduct research in this area.



Enid Contes

Undergraduate Institution: UPR-Rio Piedras
BS Degree in Chemistry (2005)
Graduate Major: Chemistry
Career Goal: Obtain my Ph.D. in Chemistry and pursue research in nanotechnology.



Giselle M. Flores

Undergraduate Institution: UPR-Rio Piedras
BS Degree in Chemistry (2005)
Graduate Major: Biochemistry
Career Goal: Enhance my knowledge and research abilities in the area of biochemistry and biotechnology by obtaining a Ph.D. and a post-doctorate in this area.



Pamela Medina

Undergraduate Institution: UPR-Rio Piedras
BS Degree in Biology (2005)
Graduate Major: Biology
Career Goal: Pursue post-doctoral studies in conservation biology to directly contribute to the conservation of all species of animals, especially amphibians and reptiles.



Manuel Rivera

Undergraduate Institution: UPR-Rio Piedras
BS Degree in Physics (2005)
Graduate Major: Physics
Career Goal: To conduct fundamental research in physics that will not only contribute to the existing body of knowledge but will also provide insight on areas that overlap with other disciplines.



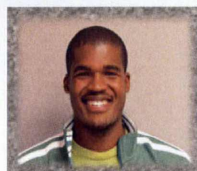
Sofia Burgos

Undergraduate Institution: UPR-Humacao
BS Degree in Marine Science (2005)
Graduate Major: Coastal Marine Biology
Career Goal: Obtain my Ph.D. And continue research on viroplankton in different streams and lakes in Puerto Rico.



Francisco Solá

Undergraduate Institution: UPR-Rio Piedras
BS Degree in Physics (2005)
Graduate Major: Solid State Physics
Career Goal: Become a Physics Professor and do research with nanoscale semiconductors and its applications.



Felix Araujo

Undergraduate Institution: UPR-Rio Piedras
BS Degree in Biology (2005)
Graduate Major: Molecular Evolution
Career Goal: Obtain a Ph.D. in Molecular Evolution.



Jose A. Gonzalez

Undergraduate Institution: UPR-Aguadilla
BS Degree in Biology (2005)
Graduate Major: Molecular Biology
Career Goal: To obtain a Ph.D. in Molecular Biology.



Yazmin E. Martinez

Undergraduate Institution: UPR-Rio Piedras
BS Degree in Physics (2005)
Graduate Major: Physics
Career Goal: Complete a Ph.D. in meteorology and/or oceanography and collaborate in the development and implementation of an undergraduate and graduate program in earth sciences in PR.



BD COHORT IV

“ Through the Bridge-to-the-Doctorate Program, PR-LSAMP has awarded a total of 46 fellowships to former PR-LSAMP undergraduate STEM students for their first two years of graduate studies. This year we conducted the first external evaluation on the academic progress of Cohort I (2003) and results showed that Fellows outperformed their peers in all categories; the average number of credits completed was substantially higher; publications were greater; presentations of research projects in national scientific conferences were nearly doubled, and first time passing grades on qualifying exams was much higher. The BD Program has indeed proved to be very successful in helping students achieve academic excellence while pursuing their doctoral studies”

Manuel Gomez, Ph.D, Project PI



Prof. Javier Figueroa, BD Coordinator



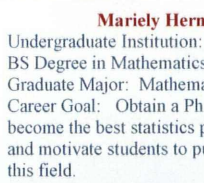
Pamela Vallejo

Undergraduate Institution: UPR-Rio Piedras
BS Degree in Physics (2006)
Graduate Major: Chemistry
Career Goal: Complete a Ph.D. and pursue research in material science working specifically with photoluminescent properties of silicon nanoparticles.



Griselle Hernandez

Undergraduate Institution: UPR-Rio Piedras
BS Degree in Chemistry (2006)
Graduate Major: Chemistry
Career Goal: Obtain a Ph.D. in organic chemistry and continue research either in the academia or the industry.



Mariely Hernandez

Undergraduate Institution: UPR-Cayey
BS Degree in Mathematics(2006)
Graduate Major: Mathematics
Career Goal: Obtain a Ph.D. in this area to become the best statistics professor ever, and motivate students to pursue studies in this field.



Pablo Hernandez

Undergraduate Institution: UPR-Rio Piedras
BS Degree in Biology (2004)
Graduate Major: Biology
Career Goal: Obtain my Ph.D. and continue post-doctoral studies to be better prepared for an academic position as a professor and researcher.



Edward Aviles

Undergraduate Institution: UPR-Rio Piedras
BS Degree in Chemistry (2006)
Graduate Major: Analytical Chemistry
Career Goal: Specialize in nanotechnology focusing in subnanostructuring of catalyst for direct methanol fuel cell in order to find alternatives for sources of energy.



Francheska Ruiz

Undergraduate Institution: UPR-Humacao
BS Degree in Biology-Wild Life Mgmt (2006)
Graduate Major: Ecology
Career Goal: Obtain my Ph.D. and continue to do research in Environmental Biology and Conservation with an interdisciplinary approach.



Maria del Mar Garcia

Undergraduate Institution: UPR-Rio Piedras
BS Degree in Chemistry (2006)
Graduate Major: Analytical Chemistry
Career Goal: Obtain a Ph.D., enhance my knowledge in Biotechnology and contribute to the development of biosensors and devices to improve the quality of life.



Ivan Lopez

Undergraduate Institution: UPR-Rio Piedras
BS Degree in Physics (2006)
Graduate Major: Physics
Career Goal: Obtain a high quality education while engaging in productive research projects, to become a professor and researcher.



Jesuan Betancourt

Undergraduate Institution: UPR-Rio Piedras
BS Degree in Physics (2006)
Graduate Major: Chemical Physics
Career Goal: Complete my Ph.D. , continue my research and become a college professor.



Fernando Piñero

Undergraduate Institution: UPR-Rio Piedras
BS Degree in Mathematics (2006)
Graduate Major: Mathematics
Career Goal: Become a professional mathematician and work in the application of algebra to real-world problems.



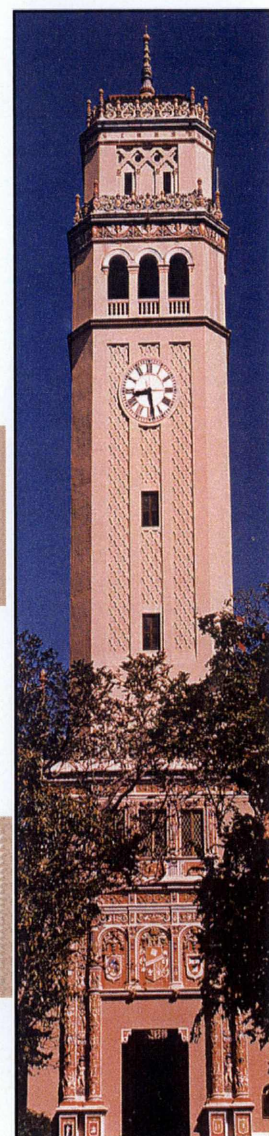
Barbara Casañas

Undergraduate Institution: UPR-BS Degree in Chemistry (2006)
Graduate Major: Inorganic Chemistry
Career Goal: Obtain a Ph.D. in Inorganic Chemistry and become a researcher.



Yanira Enriquez

Undergraduate Institution: UPR-Rio Piedras
BS Degree in Chemistry (2006)
Graduate Major: Analytical Chemistry
Career Goal: Work in the pharmaceutical industry doing characterization, analysis and structural determinations of biological compounds. Becoming a college professor is also part of my career plans.



BD COHORT V

“ This year in particular the BDP program is giving special emphasis to the emerging fields of nanoscience and nanotechnology to join efforts with the recently NSF funded EPSCoR Institute of Functional Nanomaterials to make a significant contribution to the diversity of the US nanotechnology workforce. Current and new BDP Fellows will benefit from the educational initiatives to be developed by the Institute, including courses and educational modules that will incorporate nanoscience pivoted on core scientific concepts into the curricula to educate students in the basic concepts, tools and processes of nanoscience ”

Manuel Gomez, Ph.D, Project PI



Prof. Javier Figueroa, BD Coordinator



Dionne Hernandez

Undergraduate Institution: UIA-Arecibo
BS Degree in Chemistry (2004)
Graduate Major: Bio-Chemistry
Career Goal: Obtain my Ph.D. in Biochemistry and continue a post-doc in this area. Would like to become a researcher in the area of neurodegenerative diseases.



Ismael Alicea

Undergraduate Institution: UPR-Humacao
BS Degree in Chemistry (2006)
Graduate Major: Bio-Chemistry
Career Goal: Obtain a Ph.D. in Biochemistry; Continue a post-doc in chemical-physics and become a researcher in treatments for diabetes.

Manuel Delgado
Undergraduate Institution: UIA-Arecibo
BS Degree in Biology (2003)
Graduate Major: Neurobiology
Career Goal: Obtain a Ph.D. in this area focused on neuromuscular diseases and continue a post-doc training in neural stem cell biology.



Ida Pantoja

Undergraduate Institution: UPR-Rio Piedras
BS Degree in Biology (2007)
Graduate Major: Microbiology
Career Goal: Obtain my Ph.D. and continue a post-doc in this area. Also, become a college professor and conduct research in my area of study.



Karinel Nieves

Undergraduate Institution: UPR-Rio Piedras
BS Degree in Chemistry (2007)
Graduate Major: Organic Chemistry
Career Goal: Obtain my Ph.D. and Post-doc in this area. Also, become a college professor and researcher to synthesize novel bioactive compounds.



Ana R. Cameron

Undergraduate Institution: UPR-Mayaguez
BS Degree in Chemical Engineering (2007)
Graduate Major: Chemical Engineering
Career Goal: Obtain my Ph.D. and become a researcher focused on developing novel nanomaterials.

Ruth Hidalgo
Undergraduate Institution: UPR-Mayaguez
BS Degree in Mechanical Engineering (2007)
Graduate Major: Mechanical Engineering
Career Goal: Obtain my Ph.D. in Materials Engineering with emphasis in nanomaterials, work as a researcher in a high tech company and become a professor.



Denisse Soto

Undergraduate Institution: UPR-Mayaguez
BS Degree in Chemical Engineering (2007)
Graduate Major: Chemical Engineering
Career Goal: Obtain a Ph.D. and work as a researcher in nanomaterials. Also, I would like to become a professor in my field of study.



Damian Reyes

Undergraduate Institution: UPR-Mayaguez
BS Degree in Chemical Engineering (2007)
Graduate Major: Chemical Engineering
Career Goal: Conduct research in the area of nanostructures; work first in industry and later in a University.



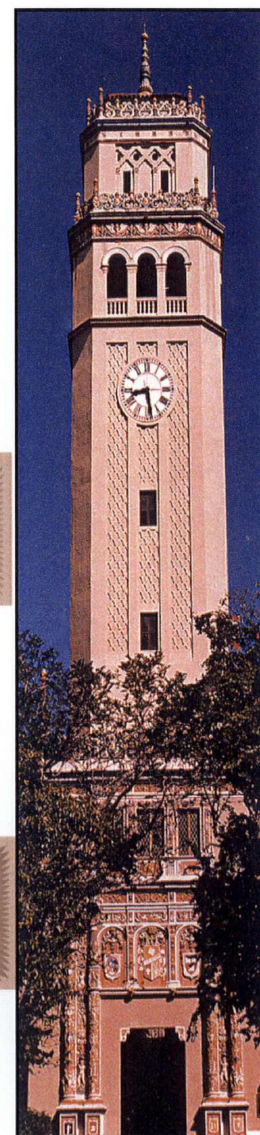
Carlos A. Rodriguez

Undergraduate Institution: UPR-Rio Piedras
BS Degree in Biology (2007)
Graduate Major: Ecology
Career Goal: I am mostly interested in interactions at the ecosystem level, specially in exotic species and the effects on local and native communities. I would like to become a researcher and professor at the University.

Rosalyn Gonzalez
Undergraduate Institution: UPR-Cayey
BS Degree in Biology (2007)
Graduate Major: Molecular Biology
Career Goal: Obtain a Ph.D. in Molecular Biology and become a researcher.



Juan Burgos
Undergraduate Institution: UPR-Rio Piedras
BS Degree in Physics (2007)
Graduate Major: Physics
Career Goal: Obtain my MS degree in Physics and continue my Ph.D. in Theoretical High-Energy Physics. I would like to seek a postdoctoral position that will enable me to attain a position as a faculty member.



BD Fellowship Requirements

The Bridge-to-the-Doctorate Fellowship covers the first two years of graduate studies in a STEM field, subject to academic performance, and includes:

- A \$30,000 fellowship per year
- Tuition expenses, institutional fees and health plan
- \$1,500 per year for travel expenses
- \$2,000 per year for educational materials

BD Fellowship Requirements:

- Applicant was an LSAMP student during his/her undergraduate studies
- Applicant intends to pursue a PhD degree in a STEM field
- Submitted an application for admission to UPR-Rio Piedras and is accepted to begin graduate studies in August 2008
- Had a GPA of 3.0 or higher in undergraduate studies

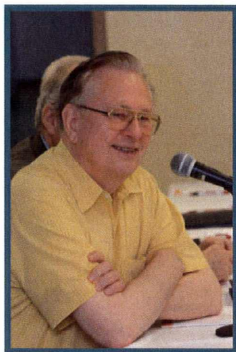
Program Participation Requirements:

BD Fellows are required to:

- Meet each semester all the requirements established by the Graduate School, and the Bridge to the Doctorate Program.
- Obtain each semester a grade of B or higher in all courses.
- Complete nine credits per semester, for a minimum of 36 credits of graduate work by the end of the fellowship.
- Take and pass the qualifying exams on the date established by the Department, if required.
- Submit the thesis proposal on or before the date in which the BD fellowship ends
- Be a mentor to an undergraduate PR-LSAMP student.
- Participate in all BD activities, as established in the program's calendar for each semester.
- Serve as role model to high school students

BD Fellows Meet with Dr. Arden Bement, Director of NSF, during his Visit to Puerto Rico

"Tell me about your educational and research experience, and where you foresee yourself in the year 2011" asked Dr. Arden Bement, NSF Director, at the roundtable discussions with NSF fellows at UPR-Rio Piedras and UPR-Mayaguez.



LSAMP Bridge-to-the-Doctorate, AGEP, and EPSCoR Fellows shared their educational and research experience, and career plans with Dr. Bement during his visit to UPR-Rio Piedras and UPR-Mayaguez. Most fellows visualize themselves as professors and researchers at an academic setting, either in Puerto Rico or the US mainland. *"I have been very fortunate to be one of the recipients of a BD fellowship, and as a professor I want to help others achieve their academic goals"* said, Daniel Caballero, now a fifth year doctoral student in biochemistry at UPR-Rio Piedras.



BD Fellows Cohort II
UPR - Mayaguez



NSF FELLOWS AT UPR RIO PIEDRAS
Front row: Dr. Weiner, Dean of Natural Sciences at UPR-Rio Piedras, Dr. Bement, Dr. Guadalupe, Dean of Graduate Studies at UPR-Rio Piedras, and Dr. Gomez, Director of the Resource Center for Science and Engineering

Giovanna Cartagena, a freshman student at UPR Rio Piedras, with lab mentor, Azlin Biaggi, Cohort I Fellow.



On January 27 and 28, 2006, Dr. Arden Bement, NSF Director visited Puerto Rico with Dr. Michael Turner, NSF Assistant Director for Mathematical and Physical Sciences. The two-day site visit included meetings with NSF fellows and researchers, at UPR-Mayaguez and UPR-Rio Piedras; a visit to the Arecibo's National Astronomy and Ionosphere Center, and participation in the Second National AGEP Evaluation Capacity Workshop, held at the Windham Condado Hotel in San Juan.

At both institutions, meetings were held first with NSF-EPSCoR Start-up Grantees and other NSF Grantees, where Dr. Bement saw first hand the impact that the Research Infrastructure Improvement EPSCoR Program has had in developing more than seventeen young competitive scientists. The visits to the laboratories were followed by lively roundtable discussions with NSF fellows, which included Bridge-to-the-Doctorate fellows and fellows from AGEP and EPSCoR programs – *"The highlight of my trip"*, said Dr. Bement.

The BD Transdisciplinary

The First Transdisciplinary Research Conference

In December 2005 the BD Program held the First Transdisciplinary Scientific Research Conference for faculty, researchers and graduate students. The topic selected was Nanotechnology. The Plenary Speaker was Dr. Gunther Oberdorster from Rochester University with the topic: *“Engineered Nanoparticles: Can They be Harmful?”*. Other speakers included: Dr. John Carlisle, from Argonne National Laboratory; Dr. Diego Díaz, from Beckman Institute for Advanced Science and Technology; Dr. Luis Solá, from Dupont of Puerto Rico; Dr. Ram Katiyar, Dr. Carlos Cabrera, and Dr. Gerardo Morell, from UPR-Rio Piedras; and Dr. Miguel Castro and Dr. Carlos Rinaldi, from UPR-Mayaguez. Graduate students, including PR-LSAMP BD Fellows who are conducting research in this field, presented their research projects in a poster session. Approximately 200 STEM faculty members and graduate students attended the conference.



The Second Transdisciplinary Research Conference

Held in May 2006, the conference's theme was also nanotechnology. Local and international researchers presented the latest research trends in this field. The invited speakers were Dr. Eric D. Isaacs, Center for Nanoscale Materials, Argonne National Laboratory, and Dr. Gregory N. Tew and Dr. Jim Watkins, Polymer Science and Engineering, University of Massachusetts, Amherst. Fifty two STEM faculty members, 84 STEM graduate students, and 51 undergraduate STEM students attended the conference, which was held on May 5, 2006 at the Mayaguez Resort Hotel. Seventy five students presented their research projects in a poster session.



Local speakers included Dr. Oscar Perales (UPR-Mayaguez) – *“Size and Structure Control at the Nanoscale: Improving the Quality of the Building Blocks for Advanced Nanostructures”*; Dr. Luis Fonseca (UPR-Rio Piedras) – *“Nanocrystalline Silicon for Display Applications”*, and Dr. Nicholas Pinto (UPR-Humacao) – *“Fabrication and Electrical Characterization of Conducting Polymer Nanofibers Via Electrospinning”*.

Research Conference

The Third Transdisciplinary Research Conference

The conference was held on September 28, 2007, and the topic was "Climate, Climate Change, and Education". Four main speakers addressed the latest research trends in this area: Dr. Edwin Nuñez from COLSA Corporation; Dr. Jim Kasting from Penn State University; Dr. Craig Lingle from The University of Alaska, and Dr. José Molinelli from the University of Puerto Rico at Rio Piedras.

BD Fellows from the different Cohorts attended the activity together with 91 STEM undergraduate students, 74 STEM faculty members, and 5 high school students. Participants received a copy of the book "The Atlas of Climate Change: Mapping the World's Greatest Challenge" by Kristin Dow and Thomas Dowing.



BD Fellows from the different Cohorts

From left to right: José Alonso, Arecibo Observatory; Craig Lingle, Jim Kasting, Edwin Nuñez, Daniel Altshuler, Jose Molinelli, Javier Figueroa and Aurelio Mercado



The Puerto Rico Interdisciplinary Scientific Meeting (PRISM)

The Puerto Rico Interdisciplinary Scientific Meeting (PRISM) is the largest annual local scientific forum, where STEM undergraduate and graduate students present their research projects to their peers and STEM faculty members. Every year the conference is held at a different PR-LSAMP institution. Approximately 350 students present their research projects to an audience of 600 to 700 participants.

2005



Dr. Leon Lederman
Nobel Prize in Physics (1988)
"The Need for Scientists to Get Involved in the Process of Improving Science Education at all Levels"

P
L
E
N
A
R
Y

2006



Dr. Kurt Gibble
Penn State University
"Atomic Clocks: How They Work and Why We Need Them"

S
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2007



Dr. Ramon Lopez,
University of Texas, Arlington
"Space Weather: Storms from the Sun"

2008

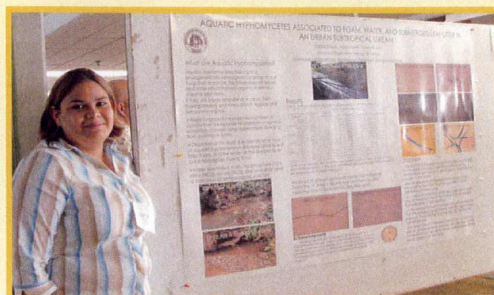


Dr. Angel Garcia
Rensselaer Polytechnic Institute
"Understanding the Molecules that give Origin to Life"

BD Fellows present their Research Projects At the Puerto Rico Interdisciplinary Scientific Meeting (PRISM)



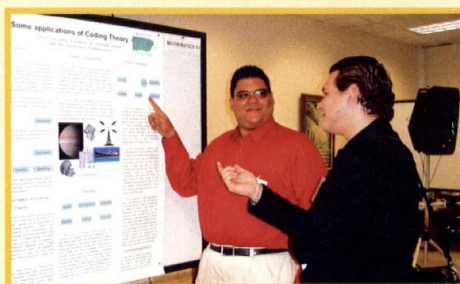
Pamela Medina
Cohort I; PRISM 2006



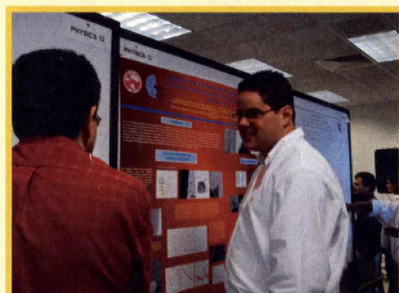
Yashira Estrada
Cohort II; PRISM 2005



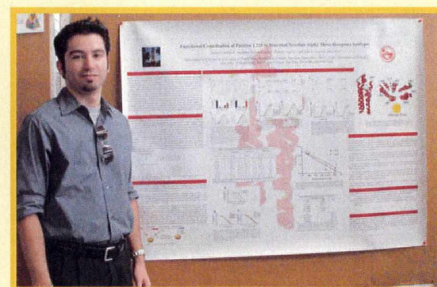
Damaris Suazo
Cohort III; PRISM 2007



Fernando Piñero
Cohort IV; PRISM 2007



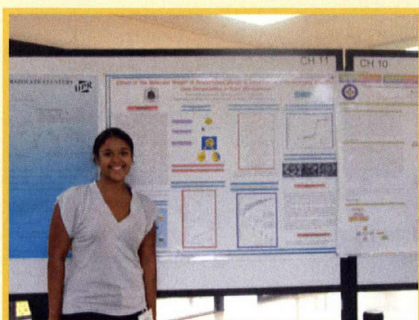
Francisco Sola
Cohort III; PRISM 2007



Daniel Caballero
Cohort I; PRISM 2005



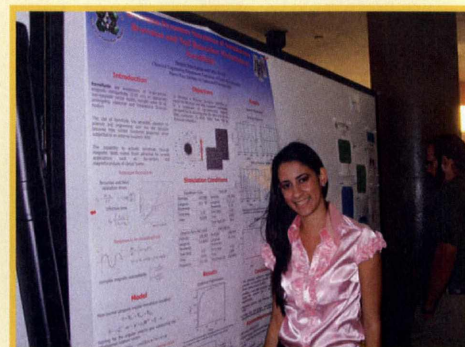
Mariely Hernandez
Cohort IV; PRISM 2007



Giselle Flores
Cohort III; PRISM 2006



Carlos Andres Rodriguez
Cohort V; PRISM 2008



Denisse Soto
Cohort V; PRISM 2008

Workshops, Conferences, and Field Trips To Enhance the Academic Preparation of BD Fellows



Mangrove Forest



Mona Island; Dolomites Formations



Waterfalls in the Karst Zone Area
Mountain Central Region



Studying Geological Faults
and Landsliders



Mariely Hernandez; Plant
Sampling in the Tropical Forest



Coral Reefs in Cayo Enriquez at
La Parguera

Workshops, Conferences, and Field Trips To Enhance the Academic Preparation of BD Fellows



Dr. Ana Guadalupe, Dean of Graduate Studies, on "How to Succeed in Graduate School"



Leadership Workshop



Dr. Richard Wilson, Caltech Institute



Annette Casiano, a former PR-LSAMP Student and currently a PhD candidate at Michigan State University, Ann Arbor



Magic, Science, and Education Workshop



Dr. Gerardo Morell, Chairman of the Physics Dept, on "Effective Poster and Oral Presentations"

BD Fellows Participate in the NSF/HRD Joint Annual Meeting

The 2006 NSF/HRD Joint Annual Meeting



Dr. A. Hicks, LSAMP Director, with Cohort III Fellows



Congressman Louis Stokes

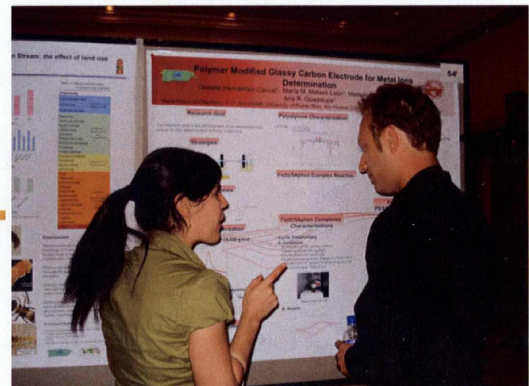


Congressman Stokes with Cohort III Fellows

The 2007 NSF/HRD Joint Annual Meeting



Agustin Diaz, Cohort I Fellow, shares with new fellows the challenges and experiences encountered

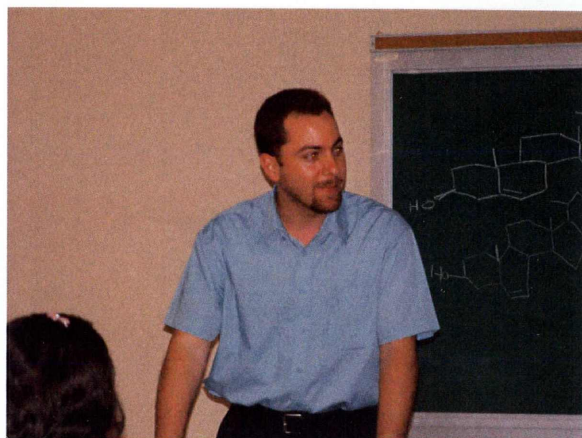


Griselle Hernandez, Cohort IV Fellow, discusses her research project at the poster session



Cohort IV Fellows with Prof. Javier Figueroa, BD Coordinator

**Angel and Ricardo Martí:
Two Brothers and Former PR-LSAMP Students,
Meet with BD Fellows to Share their Post Doctoral Experiences
and Current Research Work**



Angel Martí, Ph.D.



Ricardo Martí, Ph.D.

Angel and Ricardo were born in Utuado, Puerto Rico, a coffee producing municipality in the island's central mountain region. Their parents are coffee growers, and both hold positions in the public education system. Angel and Ricardo come from a family of four children, and all attended the municipality's public schools. They grew up in the traditional Puerto Rican agricultural culture, where family values are nurtured by the love of the land and the work in the field. Although they are now professionals in the U.S. mainland, they still come back home every year to help their parents during the coffee harvest. The oldest of the four siblings, Angel and Ricardo are in Chemistry fields, while the two youngest brothers are Engineers. Both Angel and Ricardo did their undergraduate work in Chemistry at the University of Puerto Rico at Rio Piedras, and were PR-LSAMP participants since their freshman year.

Angel obtained his PhD in 2005 from UPR-Rio Piedras in Inorganic Chemistry; while Ricardo obtained his PhD in 2006 from Texas A&M in Biochemistry. Angel holds a postdoctoral position at Columbia University under the supervision of Dr. Nicholas Turro, a world authority in photochemistry. Next Fall, Angel will join the faculty at Rice University. Ricardo held his first postdoctoral position in Texas A&M, and is now a postdoc at Los Alamos National Laboratory. Angels field of research is on the detection of specific mRNA and DNA sequences using binary probes, and has over 20 publications; Ricardo's research area is on the understanding of fundamental principles involved in enzyme-catalyzed chemistry and protein structure, and has eight publications, the last being awarded first page coverage on Nature Scientific Magazine.

The BD Program invited these two outstanding role models to share their academic and professional experiences with BD Fellows from Cohorts IV and V

BD Fellows Attend the Best Practices

2005: TOPIC-"A CELEBRATION OF EINSTEIN'S MIRACLE YEAR"



Luis Otero Carvajal-Universidad Complutense, Spain
Dudley Herschback-Harvard Univ.
David Santiago-Stanford Univ.
Manuel Gomez-UPR



Dudley Herschback
1986 Nobel Prize in Chemistry



Group of Cohort II Fellows at the Poster Session

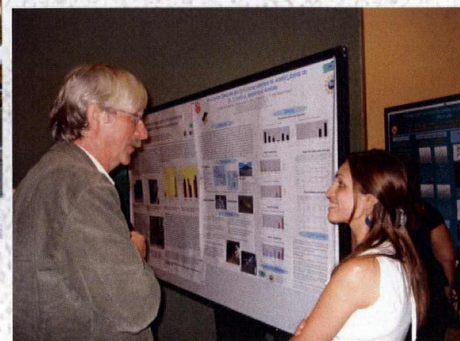
2006: TOPICS-"HOW THE MATERIALS WORLD MODULES PROGRAM ARE IMPACTING STEM EDUCATION"; "INTEGRATING MATHEMATICS INTO THE UNDERGRADUATE BIOLOGY CURRICULUM", AND "MENTORING STEM STUDENTS: MYTHS, MODES AND MODELS"



Robert Chang-Northwestern U.
John Jungck-Beloit College
Howard Adams-Adams & Associates
Denny Fernandez-UPR Humacao
Elio Ramos-UPR Humacao



BD Fellows from Cohorts III and IV



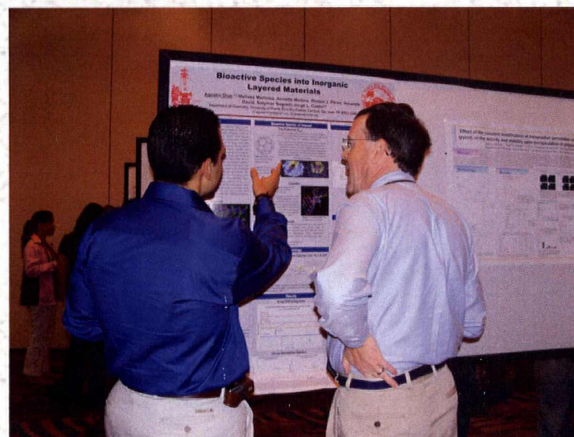
Pamela Medina, Cohort III Fellow, with Dr. Skellekens, Director of the Geology Dept at UPR Mayaguez

Conference on Teaching & Learning

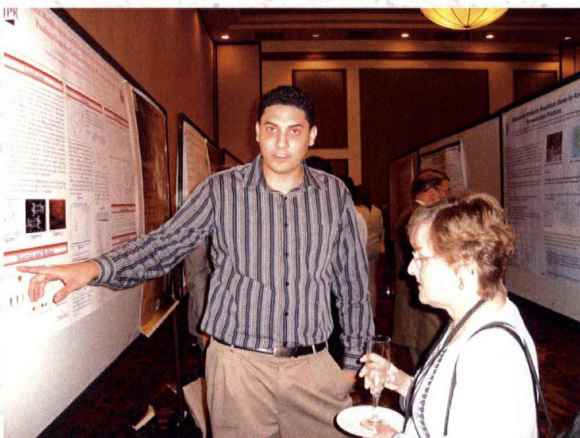
2007: TOPICS-“CALIBRATED PEER REVIEW”; PEER-LED TEAM LEARNING; “USE OF CONCEPT INVENTORIES TO IDENTIFY MISCONCEPTIONS”, AND “CHEM-2-CHEM: A ONE-TO-ONE SUPPORTIVE LEARNING ENVIRONMENT”



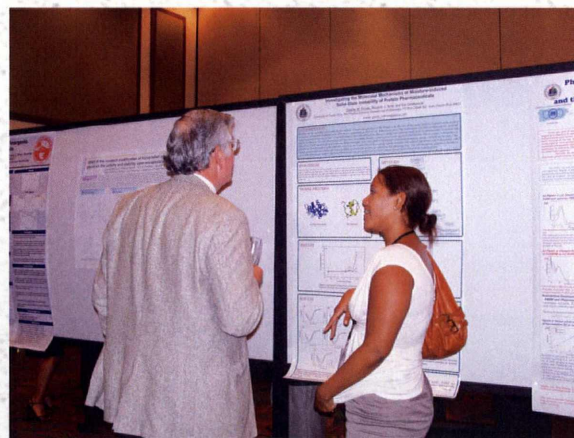
James Becvar - Univ of Texas, El Paso
Arlene Russell - UCLA
Rosita Baez - UPR Cayey
Ronald Miller - Colorado School of Mines
Luis Perez - UPR Cayey



Agustin Diaz-Cohort I Fellow, with
Dr. Miller at Poster Session



Eduardo Aviles, Cohort IV Fellow, with
Dr. Russell at Poster Session



Giselle Flores, Cohort III Fellow, with
Dr. Becvar at Poster Session

BD Fellows Present their Research Projects at the 2007 PR-EPSCoR Meeting

The 2007 PR-EPSCoR meeting was a celebration of the latest successful phase in Puerto Rico's quest to develop internationally competitive research and development: The Institute for Functional Nanomaterials. (IFN). BD Fellows from Cohorts III and IV attended the conference, and presented their research projects in a poster session. Four BD Fellows are doing research with IFN researchers.



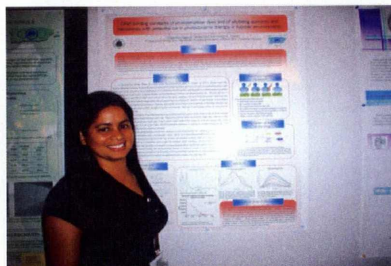
Manuel Gomez, PR-EPSCoR Co-PI, Denise Barnes, NSF EPSCoR Program Officer, and Brad Weiner, EPSCoR PI



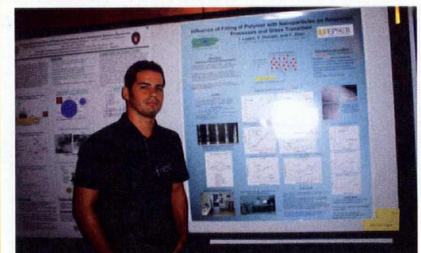
Antonio Garcia Padilla, President UPR; Eric Isaacs, Argonne National Lab; and Manuel Gomez, UPR Resource Center for Science and Engineering.



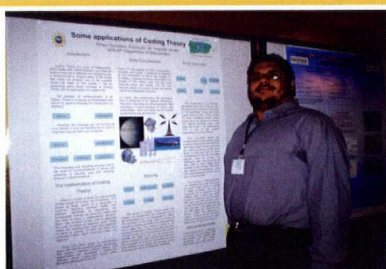
Francisco Sola, Cohort III and Azlin Biaggi, Cohort I, Physics



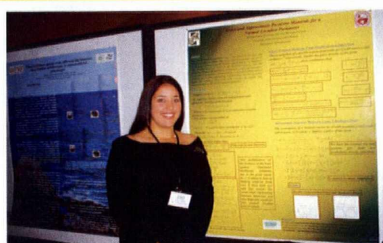
Yisaira Diaz, Cohort III, Chemistry



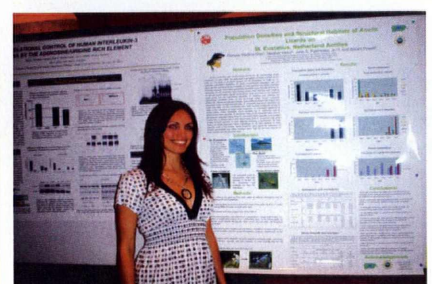
Ivan Lopez, Cohort IV, Physics



Fernando Piñero, Cohort IV, Mathematics



Mariely Hernandez, Cohort IV, Mathematics

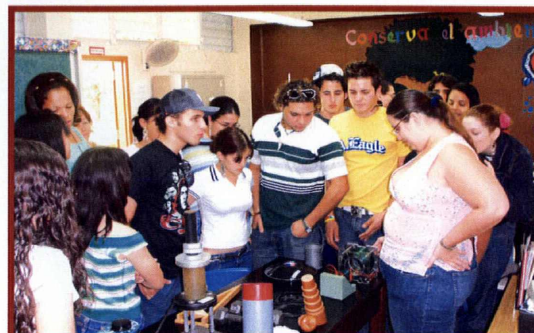


Pamela Medina, Cohort III, Biology

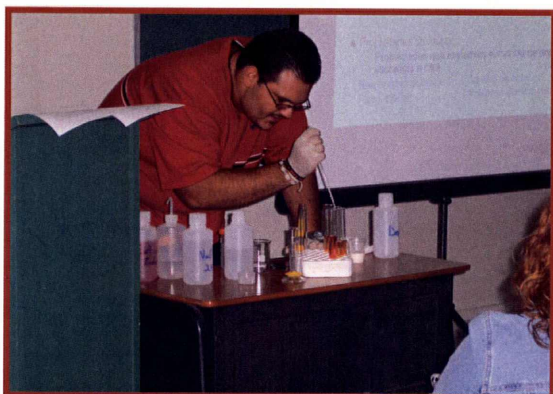
BD Fellows Serve as Resources and Role Models to High School Students



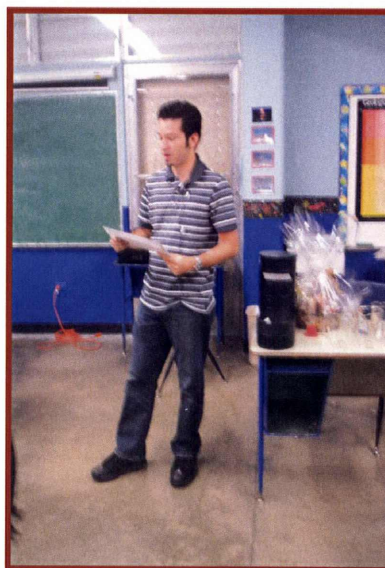
Ruth Hidalgo, Cohort V Fellow, at the Carlos Gonzalez High School, Aguada PR



Physics Academy
Azlin Biaggi, Cohort I Fellow



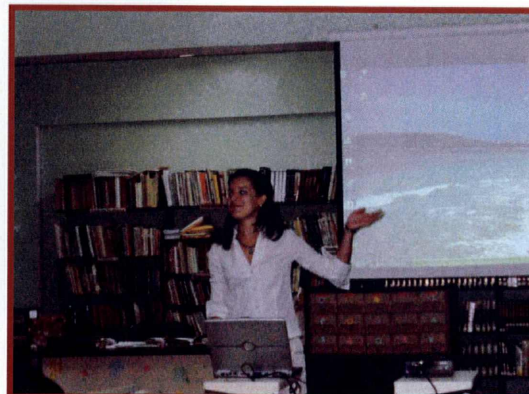
Chemistry Academy
Agustin Diaz, Cohort I Fellow



Life Science Academy,
Daniel Caballero,
Cohort I Fellow



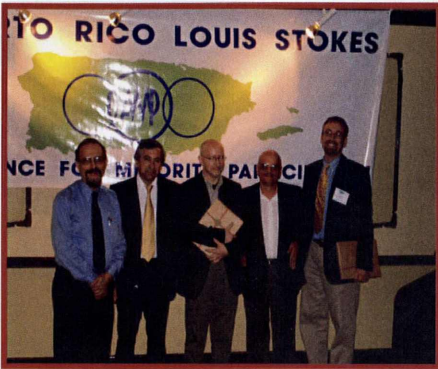
Geology Summer Academy
Agustin Diaz, Cohort I Fellow



Luzed Diaz, Cohort I Fellow, at the
Eloisa Pascual High School, Caguas PR

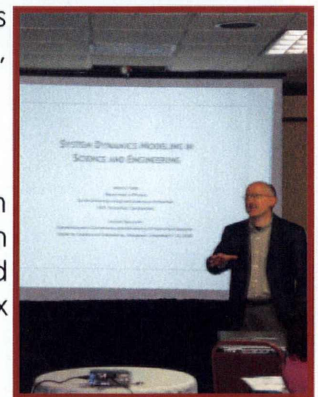
Bridge-to-the-Doctorate System Dynamics Congress

Since 2001, PR-LSAMP has sponsored a series of workshops on the application of system dynamics to the teaching process. As a result of these workshops, a group of faculty members have joined efforts to create the System Dynamics Institute. The goal of the Institute is to create a critical mass of practitioners of system dynamics modeling to transform the institution's teaching and learning culture.



Manuel Gómez with Invited Speakers

On December 8, 2006, PR-LSAMP celebrated the First System Dynamics Congress at the Mayaquez Resort and Casino. Invited speakers included Dr. Hans Fuchs, Professor of Physics, Zurich University in Switzerland; Dr. Andrew Jones, Researcher at the Sustainability Institute in North Carolina, and Dr. Juan Martín García, Director of the System Dynamics Chair, Ramón Llull University in Barcelona, Spain.



Hans Fuchs

Dr. Fuchs addressed the topic "System Dynamics Modeling in Science and Engineering"; Dr. Jones spoke on "System Dynamics Modeling: A Tool for Learning in a Complex World", and Dr. Martín on "Practical Applications of System Dynamics in a Complex World: An Engineering Perspective".



Andrew Jones

The plenary conference was followed by two days of hands-on workshops offered by the speakers. The workshop topics were: "The Flow of Blood in the Systemic Circuit: Introducing System Dynamics Modeling and Simulation" (Fuchs); "A Hands-on Workshop in System Mapping and Simulation Modeling" (Jones), and "Practical Exercises on System Dynamics" (Martín).



Martin Garcia

Bridge-to-the-Doctorate Fellows, graduate students, and STEM faculty members attended the Congress.



Joaquin Medin,
Moderator, UPR Bayamon



Javier Figueroa,
BD Coordinator

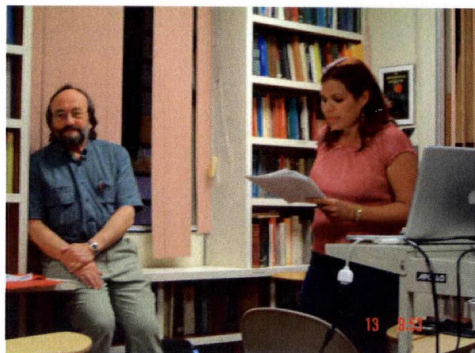


Audience of Professors and
Graduate Students



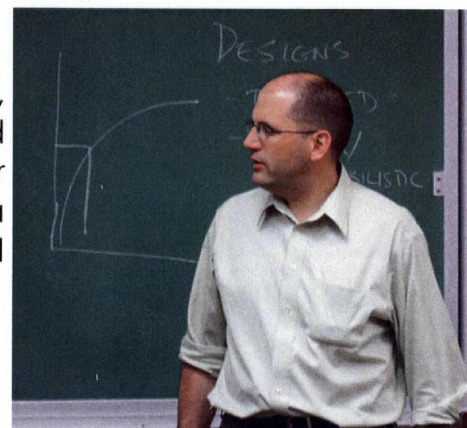
Workshop Session

International and National Scientists Invited to Puerto Rico by BD Fellows



Alex Von Zelewsky, University of Tribourg, Switzerland, invited by Karilys Gonzalez, Cohort I Fellow. Topic: "Stereoselectivity in Coordination Compounds"

Michael Paul, TETRATECH Corp, Maryland, USA, invited by Pablo Hernandez, Cohort IV Fellow, offered two conferences: "Bioassessment Tools and Their Applicability to Puerto Rico" and "Nutrient Criteria Development for Puerto Rico: Current and Recommended National Approaches".



INVITED NATIONAL SCIENTISTS

- Jennifer Tank, Notre Dame University
- Richard Wilson, California Institute of Technology
- Phillepe M. Fauchet, Rochester University
- Xiaoliang Sunney Xie, Harvard University
- John Cook, University of Texas, Anderson Cancer Research Center
- Daniel Romo, University of Texas, A&M.

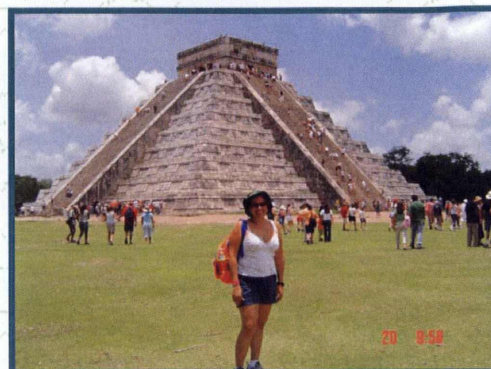
INVITED INTERNATIONAL SCIENTISTS

- Francesco Secundo, Istituto di Chimica del Riconoscimento Molecolare in Milano, Italy
- Francisco Barrantes, UNESCO
- Issac Balberg, The Hebrew University of Jerusalem
- Sergio Salba, University of Buenos Aires, Argentina.

BD Fellows Participation in International Conferences, Courses, and Research Experiences



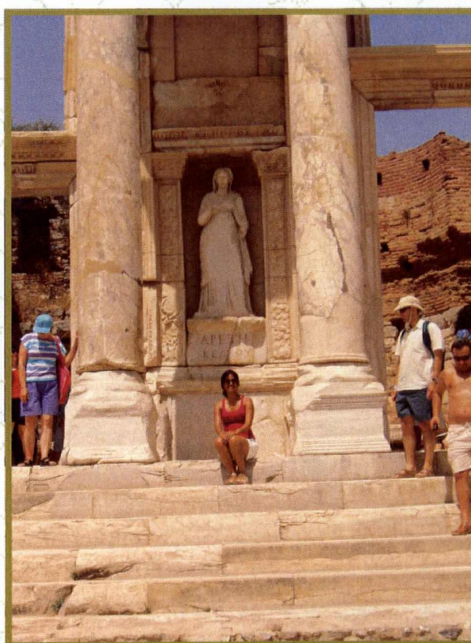
Azlin Biaggi, Cohort I Fellow and Francisco Sola, Cohort III Fellow, at the First International Workshop on Semiconductor Nanocrystals in Budapest, Hungary



Karilyn Gonzalez, Cohort I Fellow, at the 36th International Conference on Coordination Chemistry in Merida, Mexico

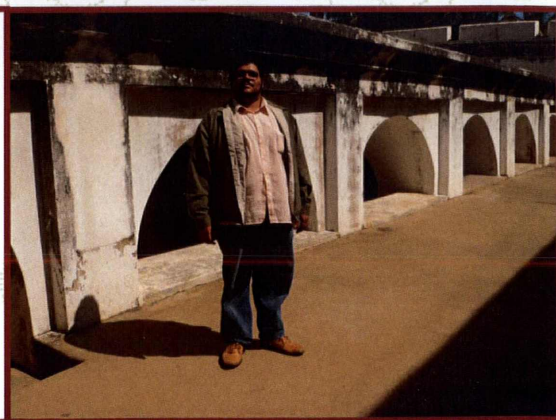


Damaris Suazo and Giselle Flores, Cohort III Fellows at the "13th European Congress on Biotechnology" in Barcelona, Spain

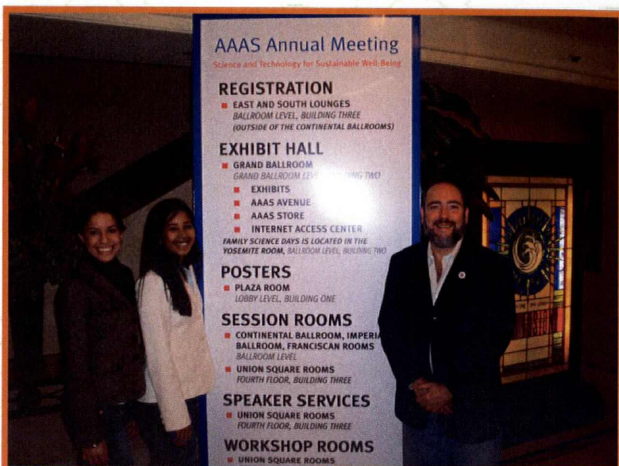


Enid Contes, Cohort III Fellow attended "The NATO Advanced Study Institute on Mini-Micro Fuel Cells as Electric Energy Generators" in Izmir, Turkey

Fernando Piñero, Cohort IV Fellow, attended The International Conference on "Applicable Algebra and Error Correcting Codes" in Bangladesh, India. He also conducted research with Dr. Tom Hoeholdt in Denmark during the summer. Dr. Hoeholdt is a world authority in Code Theory.



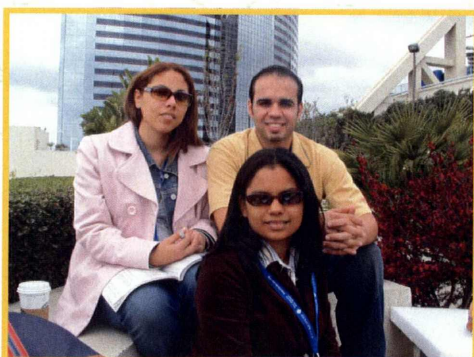
BD Fellows Participation in National Conferences, Courses, and Research Experiences



2007 AAAS Annual Meeting
Enid Contes and Damaris Suazo, Cohort III Fellows,
with Prof. Javier Figueroa, BD Coordinator



Karilys Gonzalez,
Cohort I Fellow, at the
Crystallography
Summer School at the
Univ of California at
San Diego



Marilyn Garcia and Betzaida
Castillo, Cohort I Fellows, at the
ACS National Meeting in
San Diego, CA



Yeira Padilla, Cohort II Fellow, spent a year at the
University of Arizona, Tucson, taking courses,
conducting research, and supervising undergraduate
students from PR
during the summer



Karilys Gonzalez, Cohort I Fellow, at the 23rd ACS
National Meeting in New Orleans, Louisiana

THE PR-LSAMP 2007 ADVISORY BOARD MEETING



On December 6, 2007 PR-LSAMP had its annual meeting of the Advisory Board. Members attending were Anson Hines, the Smithsonian Institute; Jeanne Narum, Project Kaleidoscope; Sandra Borrés, Pfizer of P.R., and Mildred Huertas in representation of Alberto Maldonado, Chancellor of Universidad del Este. Yolanda George, AAAS, was not able to join us this year.

The agenda included the following topics: "Phase IV (2006-07: Completion of Year 1: Strategies and Outcomes" by Ana C. Piñero, Co-PI of PR-LSAMP. "The Impact of PR-LSAMP on R&D and Innovation in Puerto Rico, and Future Directions" by Manuel Gómez, PI of PR-LSAMP. "The Bridge-to-the-Doctorate Program: A Major Initiative under PR-LSAMP" by Javier Figueroa, BDP Coordinator, and "The Value-added of the PR-LSAMP Program to STEM Undergraduate Education: A Dean's Perspective" by Brad Weiner, Dean of the College of Natural Sciences at UPR-Rio Piedras.



Manuel Gomez



Brad Weiner



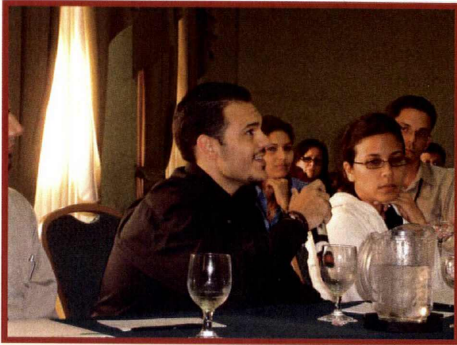
Anson Hines

"... It is clear that the leadership continues to sustain remarkable success in undergraduate training of STEM students, and now is also making excellent progress to extend this support to "bridge" to graduate degree programs. The UPR students are clearly among the best and brightest, and are getting excellent training that is driven by high standards and expectations. The PR-LSAMP has made substantial progress in analysis of program results, especially in presenting long-term trends of achievement over the 16 years of support. The long-term trend analysis is important to convey program success over its decadal and inter-generational evolution, and it helps to instill confidence in the face of inherent annual variation and "noise" in the social systems of the university.

...PR-LSAMP leadership has acted to incorporate prior recommendations into the program, such as programs on entrepreneurship, highlighting international and travel opportunities, and leadership skills. This responsiveness to evaluation and suggestion is a clear mark of good leadership..."

Excerpt from Dr. Hine's Report on behalf of the Advisory Board

A GROUP OF BD FELLOWS REPRESENTING ALL COHORTS, SHARED THEIR EXPERIENCES WITH THE ADVISORY BOARD MEMBERS



Agustin Diaz, Cohort I Fellow



Sofia Burgos, Cohort III Fellow



Yashira Estrada and Yeira Padilla, Cohort II Fellows, and Francisco Sola, Cohort III Fellow



Azlin Biaggi, Cohort I Fellow

"It is clear that the addition of the "Bridge" component to the PR-LSAMP is having a major positive effect. The students are well funded, well trained and working hard. Their leadership skills and open enthusiasm is contagious and helping to pull the group along. Clearly this is good value for the NSF dollar. This is again a role model for other LSAMP groups across the country..." (Dr. Hine's Report)



Manuel Delgado, Cohort V Fellow

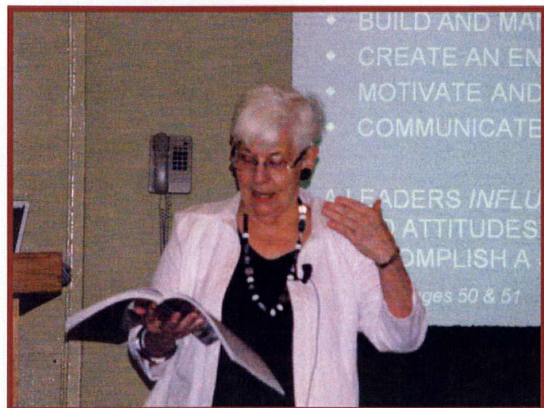


Yashira Estrada, Cohort II Fellow



Ruth Hidalgo, Cohort V Fellow

THE BRIDGE-TO-THE-DOCTORATE LEADERSHIP WORKSHOP: “Leaders and Leadership in Undergraduate Science (STEM)”



On December 6, 2007, PR-LSAMP sponsored the workshop “Leadership in STEM Education” for the Bridge-to-the-Doctorate Fellows. The workshop was offered by Jeanne Narum. Narum is the founding Director of Project Kaleidoscope (PKAL), a national initiative to transform STEM undergraduate education. PKAL’s initiatives are well known for addressing solutions rather than problems and promoting “best practices” that have proven successful in strengthening the learning process and environment. Over 900 colleges and universities nationwide have participated in one or more PKAL activities.

Narum designed the workshop around three goals:

Goal I – “To address leadership development from the professional perspective: Exploring how visions of student learning and of the future of STEM fields – as well as the broader national context- must be considered in developing a STEM leadership plan”.

Goal II – “To address leadership development from the political perspective: Exploring how the skills of leadership – imagining, connecting, creating, communicating, collaborating, negotiating, and reflecting – are translated into action by leaders within and beyond undergraduate STEM learning environments”

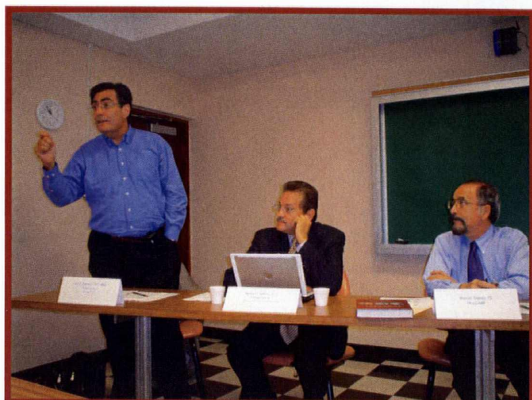
Goal III – “To address leadership from the personal perspective: Exploring how awareness of self and the ability to manage one’s self are critical characteristics of leaders, within and beyond undergraduate STEM”.

A total of 35 BD Fellows, representing all cohorts, attended the workshop. Participants received the following materials: 1) Project Kaleidoscope BD Fellows Seminar Manual – which included the strategies (what works) to achieve the goals stated above; 2) The 2006 Annual Report of the Research Corporation: A New Paradigm for Undergraduate Science Education, and 3) Making the Right Moves: A Practical Guide to Scientific Management for Postdocs and New Faculty by the Burroughs Wellcome Fund and the Howard Hughes Medical Institute.



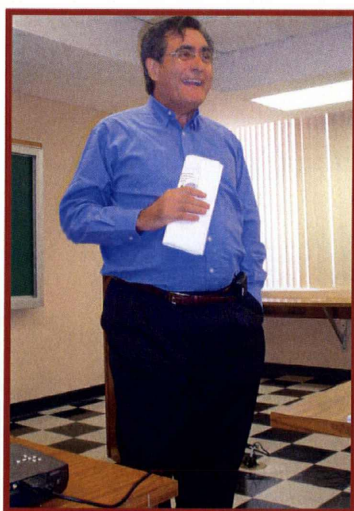
Developing Leadership Skills

SCIENTISTS AS ENTREPRENEURS



At the 2006 PR-LSAMP Advisory Board meeting, members had the opportunity to meet with a group of BD Fellows, and were surprised that not one of them expressed an interest in becoming an entrepreneur. Following the Advisory Board's recommendation, PR-LSAMP offered the workshop "Scientists as Entrepreneurs", to expose BD Fellows to successful entrepreneurs. Two local entrepreneurs were

the main speakers: Dr. Manuel Figueroa, President, Virtual Educational Resources, Inc. (VERNET), a software development and ISP company located in Puerto Rico. Under his leadership the company grew from no revenues to \$3M in two years while maintaining profitability. It is now the leading educational software development company in Latin America. The second speaker was Mr. Luis Romero, President of Optivan, Inc., a telecommunications company, that exports its systems to Europe, Middle East, Latin America, Asia, and Africa. They both explained the nature of entrepreneurship, the skills needed to be a successful entrepreneur, the challenges and opportunities of entrepreneurship in Puerto Rico, and how entrepreneurs contribute to the economic development of Puerto Rico. They described their life experiences as successful entrepreneurs and then interacted informally with the students.



Luis Romero,
CEO Optivan



Audience



Manuel Figueroa,
CEO VERNET

THE BRIDGE-TO-THE-DOCTORATE PROGRAM

LETTER FROM THE DIRECTOR



The Bridge-to-the-Doctorate (BD) Program, an initiative within the LSAMP Program, began in August of 2003, with ten former undergraduate PR-LSAMP students being awarded BD fellowships for their first two years of graduate studies at the University of Puerto Rico. Since then, 58 fellowships have been awarded (Cohorts 1 to 5). Fellowships recipients cover all STEM disciplines: Chemistry (28); Biology (12); Physics (6); Marine Sciences (3); Engineering (7), and Mathematics (2). Forty three of the Fellows (62%) have GPAs of 3.5 or higher, and sixteen of them have a GPA of 4.0.

All BD Fellows have presented their research projects at national scientific meetings, and twenty-one have attended international scientific congresses in Hungary, Holland, Denmark, Italy, France, New Zealand, Spain, Greece, Turkey, United Kingdom, Germany, Australia, Poland, Austria, India, Guatemala, Mexico, and Brazil. Fellows from all cohorts have attended 409 local, national, and international scientific conferences. On the other hand, the BD Support Program has offered during this 5-year period over 90 workshops, conferences, and field trips.

The first external evaluation on the academic progress of Cohort 1 showed that Fellows outperformed their peers in all categories: GPA, number of graduate course credits completed, publications, and presentation of research projects at national and international conferences. The BD Program has indeed proved to be very successful in helping students achieve academic excellence while pursuing their graduate studies. The BD Program is also significantly contributing to the preparation of the next generation of scientists in Puerto Rico and in the US mainland, increasing the nation's pool of well-prepared, competent scientists with diverse views.

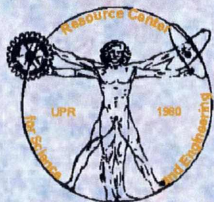
*Manuel Gómez, PhD
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Professor of Physics at UPR-Rio Piedras*

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PR-LSAMP LIAISON OFFICERS





PUERTO RICO LOUIS STOKES



Contact Us!!

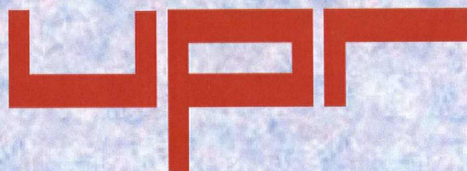
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