

2011



December

Student

Research

Symposium

Goals

The goal of the December Research Symposium is to provide Cayey students with an opportunity to present their research results. Research projects were conducted either on Campus with UPR faculty mentors or at other research institutions. Research site is listed next to each student photo.

Research results will be given in a series of oral presentations. Questions are welcomed and indicate that these young researchers have been successful with their projects. These presentations help us achieve two primary goals. First, students convey to the public their skills as researchers and as communicators of scientific knowledge. In addition, the progress that each student makes in their professional development is made self evident.

This activity is co-sponsored by the Biology, Chemistry, and Math Departments and by an NIH grant which has been awarded for five years (2011-2016) to UPR-Cayey for developing Biological Undergraduate Research Programs. Since 1985 Minority Biomedical Research Support (MBRS) has provided research experiences to over 760 Cayey students. Additional funds and their sources are listed on the back of this pamphlet. The efforts of mentors, lab technicians, and staff are gratefully acknowledged.

Four travel awards of \$1,500 each are being given to motivate these student investigator and to recognize their achievements. These funds will enable the awardees to present their research at a national conference in the U.S. Selection will be by three external faculty listed on the last page.

Schedule

Dec. 3, 2011 Science Amphitheater

- 8:00 Setup & Refreshments
- 8:30 Welcoming Statements – Dr. Robert Ross, RISE Director
Dr. Eneida Díaz, RISE Coordinator
Dr. José Molina, Academic Dean
Dr. Juan Varona, Chancellor
- 8:45 – 10:00 Seminar Session I
- 10:00 – 10:30 Break for Refreshments
- 10:30 – 11:45 Seminar Session II
- 12:00 – 1:00 Break for Lunch
- 1:00 – 4:00 GRE Post test

Guidelines for seminars –

During these sessions students are presenting seminars.

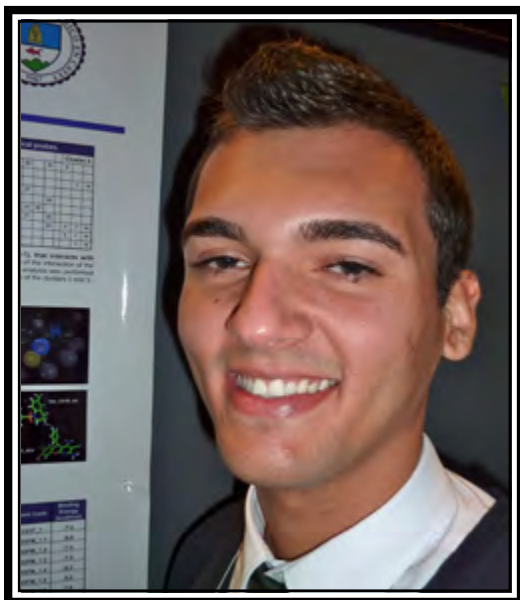
Students will be speaking for eight minutes followed by a seven-minute question period.

If there was insufficient time for all questions, please approach the student during a break and ask your question.

Each student at the end of the question period will introduce the following speaker.

Seminar Session I

8:45 – 10:00



8:45

In-Silico HIV-Antiviral Drug Development

*Mr. Carlos Castrodad
& Dr. Héctor Maldonado
Universidad Central Del Caribe*

9:00

In-Silico Discovery

of Dengue Virus Protease Inhibitors

*Mr. Carlos Santos
& Dr. Héctor Maldonado
Universidad Central Del Caribe*





9:15

NonPRASA Watershed Quality Analysis

Mr. Joeseeph Martínez

Dr. Javier Arce

UPR-Cayey

9:30

Analysis of Pesticide Residues
In Streams and Drinking Water

Mr. José Pagán

& Dr. Javier Arce & Edgardo Rivera

UPR- Cayey



9:45

Affinity Chromatographic Purification
of Plasminogen Activators
from Mammalian Cell Culture Broth

Ms. Marienid Flores

& Dr. Vibha Bansal

UPR- Cayey



10:00 – 10:30

Break for Refreshments & Questions

Seminar Session II

10:30 – 11:45

10:30

Characterization of a Fibrinolytic Agent from
Cell Culture Broth

*Ms. Vivian Rodríguez
& Dr. Vibha Bansal
UPR- Cayey*



10:45

Sputtering Deposition of
Nano-structures: From Thin Films
to Nanospheres

*Mr. Bryan Vélez
& Dr. Wilfredo Otaño
UPR- Cayey*

11:00

Electrospinning of Collagen

Nanofiber Scaffolds

Ms. Claudia Colón

& Dr. Wilfredo Otaño

UPR-Cayey



11:15

Cloning and Bioinformatics Analyses
of Novel Plant GAPDH Genes

Ms. Valeria Rivera

& Dr. Michael Rubin

UPR-Cayey

11:30

Sequence Determination and Bioinformatics

Analyses of Collagenase (MMP1) Domains

Cloned from Primate Genomic DNAs

Ms. Melisa Medina

& Dr. Michael Rubin

UPR-Cayey



Thanks to the following individuals
for their help with judging this symposium.

Dr. Sheila Ward, UPR- RioPiedras
Dr. Alia Toro-Bahamonde, UPR-Ponce
Dr. Martin Hill, Ponce School of Medicine

Congratulations
to the following RISE alumni
who were admitted to graduate programs this fall 2011.
Research experiences enabled them to continue
their career development at these institutions.

Desiree Rolon	Michigan State University	Biology
Melvin Aviles	Pennsylvania State University	Chemistry
Isamar Ortíz	Pennsylvania State University	Chemistry
Frances Rodríguez	University of California, Berkeley	Chemistry
Andres Betancourt	University of California, San Diego	Biology
Jaritzza Gómez	University of Wisconsin	Chemistry
Elvin Morales	University of Wisconsin	Chemistry





Special Thanks to the
RISE Programs' Staff –

Ms. Myra Rodríguez
RISE Secretary

Ms. Yadira Ortiz
RISE Lab Technician

Mr. Alexis Santos
RISE Administrative Assistant

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provided by both
– National Institute of Health
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Universidad Central del Caribe
University of Puerto Rico- Cayey

Refreshments provided by University of Puerto Rico- Cayey
Morning refreshment – Chancellor, Dr. Juan Varona
Luncheon – RISE Program

Travel Awards provided by
– National Institutes of Health



Proposal Presentation Day - Sept 17, 2011 - 9:00- 12:00

