Undergraduate Research Education and Training Program (URGREAT)

By Lilliam Lizardi-O’Neill, Ph.D.

Nov. 12, 2004
What I decided to do?

How?

- talking to administrators and colleagues
- participating in the mission committee
- brainstorming with different persons
- reading the literature
- working with colleagues in a five year plan for the school
- looking for possible ways to fund the process needed to be performed to achieve our goals.
To achieve what?

A GOAL - A VISION

UNE's researchers will become first class (R01) researchers in 10 years.
How that goal, that vision will be achieved?

A GOAL - A VISION

Step 1: Since we mainly work with undergraduate students and in order to develop a graduate school we need funded researchers, first start with the development of a model of undergraduate research.
URGREAT Model

Principles

- Systemic
- Constructivist
- Unity in Diversity
- Processes and result oriented

Construction of Knowledge

Processes and Results

Under-graduate Research

Ethical, High Esteem, Team Working

Science Careers

Local and Global Community

Universidad del Este

School of Science, Math, and Technology

School of Liberal Arts, School of Health Sciences
How that goal, that vision will be achieved?

A GOAL - A VISION

Step 2: Develop the human, fiscal, physical, academic and emotional infrastructure needed to transform the research culture at UNE, obtain the funds from different sources for doing it, and accomplish what you say you will accomplish so that you develop credibility (like when a young person starts to develop credit) in AGMUS administrators and in the funding agencies.
And the money comes from........

- UNE’s funds from Undergraduate Research Board (JIS)
- MSEIP
  USA Dept. of Educ.
- MBRS-RISE
  NIGMH-NIH
How that goal, that vision will be achieved?

A GOAL - A VISION

In Steps

Step 3: Utilize the activities from the funded project to influence faculty, collaborators and administrators to influence in the right direction mental schemes, attitudes, policies, and physical facilities.
What is happening now?
“Curricular and Developmental Activities Geared to Undergraduate Education and Training (URGREAT) at Universidad del Este”

Year 2

Oct 1, 2003 – Sept 30, 2004
The Minority Science and Engineering Improvement Program (MSEIP) provides grants to effect long-range improvement in science and engineering education at predominantly minority institutions and to increase the flow of underrepresented ethnic minorities, particularly minority women, into scientific careers.
“Curricular and Developmental Activities Geared to Undergraduate Education and Training (URGREAT)”

US Dept. of Education
MSEIP Staff

Lilliam Lizardi
PI

Myriam Rivera
Administrative Assistant

Lionel López
Statistician

Evelyn Molina
Internal Evaluator
**CAPSTONE ACTIVITIES**

<table>
<thead>
<tr>
<th>Seminars</th>
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<tr>
<td>Workshops</td>
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<td>Journal Club</td>
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<tr>
<td>Undergr. Research Courses with Students Enrolled</td>
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<tr>
<td>Courses on Animal Care</td>
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<tr>
<td>Scientific Meetings at PR: Attended including UNE’s Underg Symp.</td>
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<tr>
<td>Scientific Meetings outside PR where presentations/or posters are given</td>
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<td>Support Group Meetings</td>
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MSEIP ACTIVITIES per YR

<table>
<thead>
<tr>
<th>ACTIVITIES</th>
<th>2002-2003</th>
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<tbody>
<tr>
<td>Seminars</td>
<td>7</td>
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<tr>
<td>Workshops</td>
<td>6</td>
<td>2</td>
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<tr>
<td>Journal Club</td>
<td>1</td>
<td>1</td>
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<tr>
<td>Undergr. Research Courses with Students</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Courses on Animal Care</td>
<td>0</td>
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<tr>
<td>Support Group Meetings</td>
<td>2</td>
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Curricular and Developmental Activities Geared to Undergraduate Education and Training (URGREAT)
“Curricular and Developmental Activities Geared to Undergraduate Education and Training (URGREAT)”

CAPSTONE ACTIVITIES

Faculty Developmental Activities

This year MSEIP URGREAT-Research Mentors: 6

Dr. Juan Martínez  Prof. Michael Martínez  Dr. Nydia Rodriguez
“Curricular and Developmental Activities Geared to Undergraduate Education and Training (URGREAT)"

CAPSTONE ACTIVITIES

Faculty Developmental Activities

This year MSEIP URGREAT-Research Mentors: 6

Dr. Jennifer Barreto

Prof. Ana Olga González

Dr. Lilliam Lizardi
A. Faculty Developmental Activities

- Mini-Proposal – Peer and Externally evaluated: 5 projects
- Summer Research Salary
- Participation in MSEIP Seminars
- Participation in workshops
- Two faculty members invited to attend the NIMH’ sponsored workshop at NIH in January 13-14, 2004: “Write Winning Grants”: Dr. Lilliam Lizardi and Dr. Jennifer Barreto
A. Faculty Developmental Activities

- Two faculty members submitted proposals to NIH:
  1. Dr. Nydia Rodriguez: Approved
  2. Dr. Jennifer Barreto: waiting for review panel

- Two publications: Dr. Nydia Rodriguez and Dr. Jennifer Barreto, but NOT from experiments performed with MSEIP funds.


2. Jennifer Barreto and Juan Carlos Jorge: Modulation of affect after chronic exposure to the anabolic steroid 17α –methyltestosterone in adult mice. *Behavioral Neuroscience, In press (to be published in October 2004)*
A. Faculty Developmental Activities

- Two (2) MSEIP Faculty Mentors traveled funded by UNE’s Undergraduate Research Board (URB):

1. Dr. Juan Martínez. Poster at the American Society for Biochemistry and Molecular Biology. June 12-16, 2004: *Inhibition of lipid-linked oligosaccharide (LLO) arrests capillary endothelial cells in G1 and induces apoptosis.*

2. Prof. Michael Martínez:
   - a) To NCUR Meeting in Indianapolis. April 15-17, 2004
   - b) To Lago Enriquillo-Dominican Republic to met consultants from Washington University, Lee University in Virginia and Mayaguez Campus-UPR, and to collect geological samples. June 10-20, 2004
B. Curricular Developmental Activities

1. URGREAT Interdisciplinary Research Courses:

   UNRE 201: 3 credit course - 9 students enrolled
   UNRE 202: 1 credit course – 3 students enrolled
“Curricular and Developmental Activities Geared to Undergraduate Education and Training (URGREAT)"

**CAPSTONE ACTIVITIES**

C. Student Development Activities

1. MSEIP-URGREAT Research Students’ Scholars

![Graph showing Undergraduate Research Projects and Students per year from 2001-2002, 2002-2003, and 2003-2004.](image)

- **2001-2002 (before MSEIP):**
  - # of MSEIP research projects: 2
  - # of students in MSEIP Underg. Research Projects: 0
  - # of other research projects: 4
  - # of students in other Underg. Research Projects: 2

- **2002-2003:**
  - # of MSEIP research projects: 4
  - # of students in MSEIP Underg. Research Projects: 0
  - # of other research projects: 7
  - # of students in other Underg. Research Projects: 0

- **2003-2004:**
  - # of MSEIP research projects: 5
  - # of students in MSEIP Underg. Research Projects: 4
  - # of other research projects: 9
  - # of students in other Underg. Research Projects: 6
“Curricular and Developmental Activities Geared to Undergraduate Education and Training (URGREAT)”

Lorelis Rosado

Glorimar Madera

Lenny Rivera

Gladys Márquez

Lorelis Rosado y Glorimar Madera
“Curricular and Developmental Activities Geared to Undergraduate Education and Training (URGREAT)”

Carlos Burgos

Magda Torres

Wilfredo Morales
“Curricular and Developmental Activities Geared to Undergraduate Education and Training (URGREAT)”

Lorrayne Del Mar Cruz
Almodovar

Rennier Gutierrez
Molina

Carmen Urbina

Lorrayne Del Mar Cruz
Almodovar
“Curricular and Developmental Activities Geared to Undergraduate Education and Training (URGREAT)”

Longitudinal effect:
Average GPA of all students that have participated in MSEIP Undergraduate Research, even after they have left the program

<table>
<thead>
<tr>
<th>Average</th>
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<tr>
<td>BEFORE MSEIP</td>
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<tr>
<td>3.28</td>
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<tr>
<td>3.29</td>
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<tr>
<td>3.3</td>
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</tbody>
</table>

3.29 3.3 3.28
CAPSTONE ACTIVITIES

3. Poster and Oral Presentations at Scientific Meetings:


(1) Carmen Urbina, MSEIP Student Scholar: 1 poster
Paleologic Study of the Ponce Limestone (Miocene) in the Southwest Igneous Province of Puerto Rico

(2) Aixa Tapia (oral presentation) and Marlene Sosa (poster presentation), UNE’s students, presented their internship research
“Curricular and Developmental Activities Geared to Undergraduate Education and Training (URGREAT)”
“Curricular and Developmental Activities Geared to Undergraduate Education and Training (URGREAT)”
“Curricular and Developmental Activities Geared to Undergraduate Education and Training (URGREAT)”

C. Other Development Activities Performed

3. Cont. Poster and Oral Presentations at Scientific Meetings:

c. MIE IV Undergraduate Research Symposium: Oct. 1-2, 2004
4. “Funding and Careers in the National Institutes of Health”
Attendance: 8 faculty members + 23 students
CAPSTONE ACTIVITIES

D. Institutional Developmental Activities

1. CECMAT’s URGREAT Support Center.

Attendance from Sept 8, 2003 to Sept 30, 2004: 726
Curricular and Developmental Activities Geared to Undergraduate Education and Training (URGREAT)

CAPSTONE ACTIVITIES

D. Institutional Developmental Activities

1. CECMAT’s URGREAT Support Center

2. URGREAT Research Laboratory
   a. IACUC and Assurance Number at NIH: Still a problem!!
   b. Connection to Electrical Emergency Unit: Problems and actions taken.

¡First Research Laboratory at UNE!
D. **Institutional Developmental Activities**

2. Continuation… **URGREAT Research Laboratory**
   
   c. Certification of laminar flow and hood
   d. Security procedures and access during nights and weekend
   e. Independent air conditioning
Evolution of the First Undergraduate Research Laboratory at UNE
One lab with four areas: microbiology, cellular-molecular, geology and neuroscience
Inauguration of URGREAT Lab and Support Center with the Ecolotifada Symposium:

Answers from Scientific Ethics, Ecologic Theology and Community Practice.
UNE's MBRS-RISE PROJECT:

URGREAT

(1 R25 GM066250-01A1 – RISE)
NIH = National Health Institutes  
NIGMS = National Institute of General Medical Sciences  
URGREAT = Undergraduate Research Education and Training de la UNE  
MBRS = Minority Biomedical Research Support  
RISE = Research Initiative for Scientific Enhancement Program
I. Purpose of MBRS-RISE Program

To enhance the research environment at minority-serving institutions.

II. Goal of the Program

To increase the interest, skills, and competitiveness of students and faculty in pursuit of biomedical research careers.
The goal of UNE's RISE project is to develop research capabilities on the UNE Campus, by focusing on the development of a strong human, physical, and academic infrastructure for conducting undergraduate research related to biomedical and behavioral sciences.
UNE’s MBRS-RISE PROJECT

Specific aims

(1) To extend the scope of the URGREAT development program to create a community of learners with a positive emotional climate, and the academic, emotional, social, and financial support needed to improve student opportunities to succeed in college and pursue a biomedical career.

(2) To heighten faculty theoretical concepts, technical and research skills to increase faculty abilities to incorporate research into the curriculum and increase their preparedness for seeking external grants toward supporting research and inquiry teaching.
(3) Improve UNE's physical, human and academic infrastructure, and outreach activities to support undergraduate research, provide resources for faculty, inform students and their families about biomedical careers, and further develop contacts with the community, local and international institutions.
Attendance to the

*Council of Undergraduate Research Meeting*

*in Wisconsin*
Visit of Dr. Hinda Zlotnik y Dr. Toliver from MBRS-RISE and SCORE, NIH
UNE’s MBRS-RISE PROJECT

Components and Directors

- **Student Component**: Mr. Karlo Malavé – full time

- **Faculty and Institutional Infrastructure Component**: Prof. Sandra González - part time

- **Family and Community Component**: Prof. Lydia Pabón – part time

- **Literacy and Global Component**: Dra Gisela Gely – part time
UNE’s MBRS-RISE PROJECT

Other Staff Members

Part-time Administrative Assistant: Miss. Yazmin Bigio

Part-time Secretary: Miss. Carol Cirilo
UNE’s MBRS-RISE PROJECT

Start up

Administrative Infrastructure:

- Revision of Budget
- New evaluation plan
- Meeting with Human Resources Office
- Elaboration of Job Descriptions
- Opening of accounts!!!!!!
- Hiring of personnel
- % effort policy
- Policy for paying students
- Preparation of assessment and evaluation instruments
- SSMART and undergraduate research students selection criteria
- Preparation of application forms
- Preparation of dissemination flyers, brochures and posters
- Meetings with UNE and SUAGM Administration
- Work plan by Component
- Commitments for Latin American Congress and Advertisement at the Movies promoting Biomedical Careers
UNE’s MBRS-RISE PROJECT

Start up

Divulgation:

• Brochure
• Newsletter
• Video
• Posters at Inter-institutional Meeting and at Ethics in Research Meeting
• Oral Presentation to UNE’s Faculty at General Assembly
• Oral Presentation at Asociación de Maestros de Ciencia de PR
• Oral Presentation and Meeting with members of Internal Advisory Board
• Oral Presentation at Ana G. Méndez Science Advisory Board
UNE’s MBRS-RISE PROJECT

URGREAT

PHYSICAL FACILITIES
DEVELOPMENT
PHYSICAL FACILITIES

• Specific Aim:
  – Improve UNE’s physical infrastructure to:
    • Support undergraduate research projects at UNE
    • Provide basic research resources to allow faculty to conduct biomedical research and inquiry experiences at UNE.
# PHYSICAL FACILITIES

## 1. Identify needs for MBRS-RISE offices and for the faculty Core Laboratory

- a. Report prepared and handled to authorities
- b. Meetings with Chancellor and UNE’s Physical Facilities and Operations Office

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>COMPLETED</th>
<th>IN PROGRESS</th>
<th>PENDING</th>
<th>OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identify needs for MBRS-RISE offices and for the faculty Core Laboratory</td>
<td></td>
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- Office for the PI
- L-107 identified as space for RISE office and L-106 as space for CORE Faculty Lab.
- People and furniture formerly at those spaces already moved.
### ACTIVITY

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</table>
| 2. Identify and request quotations for equipment for the Core Lab and for RISE Office. | | X | | . We have received two quotations for the offices.  
. We have allocated $4,000 from matching funds for these furniture.  
. The Chancellor approved extra funds ($12,000) from his office budget to complete the costs of RISE office furniture.  
. One company has sent the quotation for the laboratory; another is pending.  
. As soon as we have an approximate date for the completion of the remodeling of L-106, we will submit purchase order of equipment. |
### PHYSICAL FACILITIES

#### OUTCOMES

<table>
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<tbody>
<tr>
<td>3. Request quotations and purchase for other equipment, materials and reagents.</td>
<td></td>
<td>X</td>
<td></td>
<td>Some purchase orders have been submitted. Other are pending quotations.</td>
</tr>
</tbody>
</table>
UNE’s MBRS-RISE PROJECT

URALREAT

FACULTY DEVELOPMENT
COMPONENT

Prof. Sandra González
FACULTY DEVELOPMENT
COMPONENT

• SPECIFIC AIMS:
  – To heighten faculty theoretical concepts, technical and research skills, through a Faculty Biomedical Research Training Program, to:
    • Increase faculty’s research competitiveness
    • Incorporate research into the curriculum
    • Increase external funds-seeking activities
  – Institutionalization of Faculty Biomedical Research Training Program through the creation of a Director of Undergraduate Research that responds to the Vice-Chancellor Office.
## Faculty Development Component

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</thead>
<tbody>
<tr>
<td>1. Recollection of baseline data of participating faculty.</td>
<td></td>
<td>X</td>
<td></td>
<td>There is a clear delimitation between what has been a MSEIP accomplishment and what will be considered an accomplishment for MBRS-RISE.</td>
</tr>
<tr>
<td>2. Determination of Faculty Development Plan for 2004-05.</td>
<td></td>
<td></td>
<td>X</td>
<td>Faculty participants have decided upon which areas they need development.</td>
</tr>
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</table>
Faculty Development Component

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<th>OUTCOMES</th>
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<tbody>
<tr>
<td>3. Identification of students’ specific research tasks for the first semester.</td>
<td></td>
<td>X</td>
<td></td>
<td>Level 1 and 2 investigators have informed their students’ work plan for this semester. The progress reports will be based on these plans.</td>
</tr>
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### FACULTY DEVELOPMENT COMPONENT

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<tr>
<td><strong>4. Seminars and workshops:</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Modeling of a Journal Club Meeting</td>
<td></td>
<td>X</td>
<td></td>
<td>a. Although the interactive nature of the journal club activity was discussed with the faculty, the faculty member in charge of the discussion gave a power point presentation of the article. Other faculty members had to continually interrupt in order to participate. We fear students are not clear in what is expected of them.</td>
</tr>
<tr>
<td>b. Neuroscience Seminar: Extinction of Fear</td>
<td></td>
<td>X</td>
<td></td>
<td>b. Assessment and Evaluation were excellent but poor faculty participation.</td>
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</table>
4 seminars offered by research mentors: Summer 2004
## FACULTY DEVELOPMENT COMPONENT

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<tr>
<td>c. Writing Skills workshop for Liberal Arts and Science faculty</td>
<td>X</td>
<td></td>
<td></td>
<td>c. Excellent assistance. Poor physical facilities. Too many participants for an effective Workshop.</td>
</tr>
<tr>
<td>d. On Being a Mentor of Undergraduate Research</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
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- c. Excellent assistance.
<table>
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<tr>
<th>ACTIVITY</th>
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<th>IN PROGRESS</th>
<th>PENDING (Dec.)</th>
<th>OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>e. Microbiology Seminar</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Molecular Biology Seminar</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. On Being a Mentor of Undergraduate Research I</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Other</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
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FACULTY DEVELOPMENT COMPONENT

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<tr>
<td>5. Development of assessment and evaluation instruments for the activities and to obtain faculty profile.</td>
<td>X</td>
<td></td>
<td>X</td>
<td>With the help of the assessment consultant various instruments were developed and have already been administered. Work has been in collaboration with student and community components.</td>
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### FACULTY DEVELOPMENT COMPONENT

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<tbody>
<tr>
<td>6. Give support to faculty in endeavors such as:</td>
<td></td>
<td>X</td>
<td>X</td>
<td>Workshops and seminars at collaborating institutions have been identified. We are waiting to receive the schedule of these workshops and seminars. Deadlines for abstract submission of future meetings and congresses have been identified and forms will be obtained.</td>
</tr>
<tr>
<td>• Abstract submission for poster or oral presentations</td>
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<td></td>
</tr>
<tr>
<td>• Assistance to seminars/workshops at collaborating institutions.</td>
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<tr>
<td>7. Recruit new participants for the second year of project.</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
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**OUTCOMES**

- **PENDING**
- **IN PROGRESS**
- **COMPLETED**
UNE’s MBRS-RISE PROJECT

STUDENT DEVELOPMENT COMPONENT

Mr. Karlo Malavé Llamas
Main Problem

• The Universidad del Este (UNE) undergraduate students, social, financial and emotional reality, plus their lack of several basic and technical scientific skills impaired their research competitiveness and their pursuit of completing a biomedical or behavioral career.
Specific Aim

• To create through the Undergraduate Research Education and Training (URGREAT) development program a community of learners with a positive emotional climate and the academic, emotional social and financial support needed to improve student qualifications and competitiveness to succeed in college and pursue a biomedical research career.
Objectives

• Help students successfully complete their first year of college.
• Curricular Revision and incorporate long term projects.
• Increase Undergraduate student participation in research projects, internship programs and developmental activities.
• Create on-campus related jobs opportunities to increase student retention.
**Student Component**

- **SSMART (Survival Skills Mastery and Research Training Program)**
  - **Mentored**
    - Students recently graduated and admitted to the School of Science, Mathematic and Technology of the UNE.
  - **Mentors**
    - Students that already had surpassed their first year of college and can act as leaders and support this newly admitted students

- **Undergraduate Research**
  - Students that had demonstrated exceptional leadership skills and are committed to their education and future goals. Students that are interested in perusing graduate studies or that want to have additional experiences to those offered only through the curriculum.
Undergraduate Research Symposium at UNE

Preparing the presentation with the help of research faculty mentor
Happy but tired, waiting for the poster to dry

¡Brave man!
Wilfredo was the first to present.
Activities for the Students

- **Mini courses**
  - SPSS
  - Power Point
  - Basic Principles of Statistics
  - Excel
- **Journal Clubs**
  - Quantum dot ligands provide new insights into erbB/HER receptor-mediated signal transduction
  - Translation Initiation Factor 4E Blocks Endoplasmic Reticulum-mediated Apoptosis
- **Symposium**
- **Conferences**
  - Dr. Quirk
  - Dr. Perez
- **Science at the Movies**

* = in coordination with other components
Participation of the Students

- **Mini courses**
  - SPSS (25%)
  - Power Point (25%)
  - Basic Principles of Statistics (67%)
  - Excel (75%)

- **Journal Clubs**
  - Quantum dot ligands provide new insights into erbB/HER receptor-mediated signal transduction (80%)
  - Translation Initiation Factor 4E Blocks Endoplasmic Reticulum-mediated Apoptosis (53%)

- **Symposium (****)**

- **Conferences**
  - Dr. Quirk (89%)
  - Dr. Perez (79%)

- **Science at the Movies (****)**
Other Activities

- Preparation of flyers and brochure promoting SSMART.
- Promotion of SSMART and Biomedical Science Careers at UNE’s classrooms.
- Meetings with students
- Divulgation of SSMART and Biomedical Careers at Antilles Military School.
Future Activities

• **Mini curses**
  - Word
  - Basic Computer Skills
  - Library data base
  - Reading and comprehension

• **Journal Clubs**

• **Symposium**
  - Neuroscience

• **Conferences**

• **Science at the Movies**
UNE’s MBRS-RISE PROJECT

Family and Community Component

Prof. Lydia Pabón
SPECIFIC AIM

• Improve UNE’s human infrastructure and outreach activities to:
  – Support URGREAT –RISE students’ family activities so that they encourage their daughters and sons to follow and finish a biomedical career and to persevere in performing undergraduate research
  – Enhance biomedical literacy of our community
## Family and Community Component

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</tr>
</thead>
<tbody>
<tr>
<td>1. Dissemination of project at a neighbor public high school José M. Lázaro.</td>
<td>X</td>
<td></td>
<td>Attendance: 125 students (GPA 3.2 and higher, interested in science careers). Four science teachers, two counselors and the school principal. Activity was evaluated as excellent. Students asked to visit our campus.</td>
</tr>
<tr>
<td>2. “Science at the Cinema”.</td>
<td>X</td>
<td></td>
<td>Attendance: 125 high school students, 50 UNE students. Five teachers and two counselors. Evaluation: 110 students evaluated as excellent; 40 students: good, and 25: satisfactory. Students were able to identify scientific misconceptions in the movie Outbreak. Students were interested in repeating the experience next semester.</td>
</tr>
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</table>
Science at the Movies
## Family and Community Component

### ACTIVITY

<table>
<thead>
<tr>
<th>Activity</th>
<th>Completed</th>
<th>Pending</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Promotion of URGREAT SSMART, and Biomedical Sciences Careers: Workshop given to Science teachers from Asociacion de Maestros de Ciencia de PR</td>
<td>X</td>
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<td>Attendance: 85</td>
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<tr>
<td>3. “Friendship Evening”- Activity to enhance biomedical literacy in parents and community in general.</td>
<td>X</td>
<td></td>
<td>Parents and students attendance</td>
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</table>
### Family and Community Component

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>COMPLETED</th>
<th>PENDING</th>
<th>OUTCOMES</th>
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</thead>
<tbody>
<tr>
<td>4. Two “Science at the Cinema” for high school students and UNE students, respectively.</td>
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</tr>
<tr>
<td>ACTIVITY</td>
<td>COMPLETED</td>
<td>PENDING</td>
<td>OUTCOMES</td>
</tr>
<tr>
<td>----------</td>
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</tr>
<tr>
<td>5. Friendship Evening II with parents and community representatives to give follow-up on specific aim.</td>
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<tr>
<td>6. Collaboration with UNE’s Public Relations Office to disseminate project activities in the media.</td>
<td>On going</td>
<td></td>
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</tbody>
</table>
Information Literacy and Global Projection

Dra. Gilda Gisela Gely
Goals and activities

- Promote information/technology literary workshops and develop on-line tutorials
  - Includes: information/research skills and Computer programs
  - Identify specific needs (survey)
  - Coordinate tutorials with Student Affairs Director
  - From the first year
Goals and activities

• Develop a 30-seconds movie theater ad promoting biomedical research careers
  – Develop concept
  – Gather external sponsors
  – Film and edit ad
  – Survey audience
  – During third year
Goals and activities

- Organize two day Forum: Latin American and Puerto Rican Biomedical Undergraduate Student and Scientists
  - Gather external sponsors
  - Identify speakers
  - Call for proposals, evaluation and selection
  - During fourth year
Goals and activities

- Organize Latin American Biomedical Scientists Exhibition
  - Develop concept with Level-3 faculty and students
  - Prepare posters
  - Present in Carolina campus and five off-campus sites
  - During third and fourth year
Outcomes

- Promote information/technology literary workshops and develop on-line tutorials
  - Survey administered
  - Workshops offered:
    - Power Point,
    - Excel,
    - SPSS
Literacy Workshops
Other activities

• Ethical course for all faculty and students participants to be given in collaboration with RCMI from Medical Sciences Campus.

• Coordination with UNE’s Career Center for Workshops in Biomedical Careers.

• Seminars and poster session during next year with Medical Sciences Campus-RISE Program.

• Coordination with Ms. Belinda Ruiz from UNE’s Honor Program to give workshops on writing an excellent summer research internship application.

• Divulgation and follow up of Scientific Meetings Abstract submission deadlines.
We need help and recommendations regarding:

- % effort policies
- Faculty participants compensation
- Seminars
- Students salaries
- Type of activities
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<th>Descripción</th>
<th>Presupuesto Federal</th>
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</table>
We are in the way. Help us through the process! We need you!!

A GOAL - A VISION

UNE's researchers will become first class (R01) researchers in 10 years.