The National Science Foundation (NSF) has funded a Research Experiences for Undergraduates (REU) program at Kean University. Dr. William Eaton is the Principal Investigator. The REU provides international experience and training for 8 students per year for 10 weeks (5 weeks in Costa Rica and 5 weeks in New Jersey) during the summers of 2013-2015. For summer, 2013, the dates are June 20-August 29.

The Kean REU project will have students conduct research as part of an international team of scientists from Kean University, the Centro Cientifico Tropical and Instituto Biologica Nacional to study the undamaged, damaged, or at-risk habitats in Maquenque National Wildlife Refuge (MNWLR), a new conservation area in the Northern Zone of Costa Rica.

Students participating in the program will develop an understanding of the connections between land use, biodiversity, and ecosystem function; present their work at a regional ESA conference and submit manuscripts to journals. Students will study the differences across different trophic communities within a continuum of habitats in the MNWLR, and the ecosystem effects that different land management practices and environmental conditions may have on these communities. The students will begin to identify potential drivers or indicators of ecosystem processes and change. This will be enhanced through GIS mapping and visualization techniques and methods that promote data discovery.

The REU students will have a value-added cultural experience working for several days in the village of Boca Tapada on a chicken egg farm and painting small school buildings with the local Women’s Association. The REU students will also make presentations to the children in the local school about their work and how it connects to and supports the MNWLR initiative; after which they will help prepare food and eat with the children and parents.

Students selected for the Kean REU program receive a weekly stipend and have all travel and living expenses paid in Costa Rica and New Jersey, as well as their travel costs to the Mid-Atlantic ESA conference for presentation of their data the following year.

REU research projects are available in every discipline funded by NSF, including psychology, education, economics, and sociology as well as in the sciences. Interested students apply to NSF REU programs through a competitive application process. By using the search function on the NSF REU website http://www.nsf.gov/crssprgm/reu/ students may use keywords to identify sites in particular research areas or with certain features, such as a particular location. Application deadlines vary but are typically in February.
Research Compliance Matters

IRB System Reminders

I want to take some time this month on a few reminders about our new online system. Students and faculty planning to submit applications to the IRB must create their online system accounts beforehand. It is recommended that applicants sign up for accounts no less than 3 business days before the deadline. Accounts can take up to 3 business days to be validated. Any account not created within the recommended three day period is not guaranteed to be activated in time to submit. It is advised that applicants get their accounts created at least one month in advance to allow themselves time to become familiar with the system. Applications submitted after the deadline will automatically be added to the queue for the next review cycle. Any faculty advisor or co-PI listed on an application must also have an IRB account. It is advised that faculty members sign up in advance if they know they’ll have students going through the IRB application process.

The faculty advisor, the Co-PI, and the student must have accounts created for their applications to go through the process. In addition to help applicants out with the system, there is a manual which can be downloaded from the ORSP webpage. The manual will walk applicants through how to create and account and how to submit an application.

Contact Dr. Joseph Cronin jcronin@kean.edu or ext 73464 for questions and guidance related to research compliance.

Grant Administration Topics

Things to Remember When Hiring an Academic Specialist

Under the supervision of a full-time professional employee, Academic Specialists provide part-time, temporary and professional services to the University. Such functions are performed on an intermittent basis for fixed periods of a short duration, such as a semester-by-semester basis. Academic Specialists may be compensated on an hourly basis or by contract and may not work more than 15 hours per week.

Academic Specialists are normally paid $9.50 to $16 per hour, depending on the job description. See the Office of Human Resources website for Hiring Policies and Procedures and application forms.

Contact Brenda Dunlop bdunlop@kean.edu or ext. 73345 for questions and guidance relating to grant administration.

Deadlines & Reminders

- Friday, May 31: Final SpF12 reports due to ORSP
- Wednesday, June 5: IRB applications for June due
- Thursday, June 13: Final RTR and UFRI reports for AY13 due to ORSP
- Wednesday, July 10: IRB applications for July due
LSAMP Students Participate in Kean Research Days

The Garden State Louis Stokes Alliance for Minority Participation (GS-LSAMP) program, funded by the National Science Foundation, is an alliance of nine colleges and universities in central and northern New Jersey, including Kean University. The goal is to increase the number of underrepresented students who graduate with a degree in Science, Technology, Engineering or Mathematics. GS-LSAMP provided support for 26 students participating in Kean Research Days 2013. Kean LSAMP students presented research projects in Biology, Chemistry, Computer Science, Earth Science, Mathematics, and Nursing.

One of the seven LSAMP projects in Mathematics was a research project presented by Sarah Salter (faculty advisor Dr. Raymond Viglione), titled The Illumination Problem, an intriguing question of whether the light from a candle will reach every point of a mirrored room regardless of its shape or whether rooms exist that guarantee un-illuminable areas.

Several LSAMP research projects were health-related such as exploring the anti-inflammatory properties of certain plants; investigating inhibitors that could reverse antibiotics resistance; testing the effect of lactation on a specific cell junction protein; and, the incorporation of physical therapy treatment modalities for children with scoliosis.

Michael Rizzo (pictured left with Dr. Paul Croft, faculty advisor) and Nicole Peterson presented Cloud Observations and Morphology Physical and Operational Storm Environmental Chase Clues during the poster session. Mr. Rizzo, who is the Keancast Coordinator of the Earth Science Club, also gave an oral presentation in which he showed images of cloud photographs obtained during chases of severe thunderstorms and discussed characteristics that may provide observational clues of severe weather outbreaks as related to cap evolution.

One of the five LSAMP projects in Computer Science was the work of a research team of ten Kean students under the guidance of Dr. Patricia Morreale. The team conducted a comparative case study of mobile application design as part of their development of a mobile app to support a New Jersey historic site. One set of specifications was developed and two teams were deployed, side-by-side, to design and test the requested features and interactivity. Two operating systems, the Apple iOS system and the Google Android system, were selected for comparison. Results from the research include time estimates and “lessons learned” to guide future mobile application projects.

The Project Director for the Kean GS-LSAMP program is Dr. Wolde Woubneh of the Department of Mathematics.

Cara Santa Maria, this year’s keynote speaker, presented Beyond Academia: Communicating Research, Passion and Poetry to Improve Science Literacy.

Fifteen faculty research presentations and panels, and presentations of the awards for Undergraduate and Graduate research and Faculty Research Mentor of the year were also part of the events. You can view videos and photos of the events and download the complete 2013 Research Days program at the Research Days website.

Save the date! Research Days 2014 will be held on April 29 and 30, 2014.
Government Grant Opportunities

<table>
<thead>
<tr>
<th>Opportunity Title</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Science Foundation - Expeditions in Computing</td>
<td>3/10/14</td>
</tr>
<tr>
<td>National Science Foundation - Social Psychology</td>
<td>7/15/13</td>
</tr>
<tr>
<td>National Endowment for the Humanities - Summer Stipends</td>
<td>9/26/13</td>
</tr>
<tr>
<td>National Science Foundation - Science, Technology, Engineering, and Mathematics Talent Expansion Program (STEP)</td>
<td>12/3/13</td>
</tr>
</tbody>
</table>

Foundations and Corporations

<table>
<thead>
<tr>
<th>Opportunity Title</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Film Preservation Foundation - Basic Preservation Grants</td>
<td>6/7/13</td>
</tr>
<tr>
<td>Point of View - American Documentary - Call for Entries</td>
<td>6/28/13</td>
</tr>
<tr>
<td>American Educational Research Association - Research Grants</td>
<td>8/31/13</td>
</tr>
</tbody>
</table>