We Are Whitaker

September 23, 2011
Research Grants

- for Faculty (in STEM Education)

- for Graduate Students and Undergraduates (in STEM disciplines)

- $500 max. (reimbursement grant)

- Nov 1 and Mar 1 submission deadlines
Travel Grants

• for Faculty (in STEM Education)
• Graduate Students and Undergraduates (in STEM disciplines)

• $500 max. (reimbursement grant)
• Nov 1 and Mar 1 submission deadlines
We Are Whitaker!

Do you enjoy our Whitaker Center Social events?

We need your monetary support to continue them.

Consider a Planned Giving donation through payroll deduction.

Contact Susan Fohs for more information
sfohs@fgcu.edu   590-7444
Upcoming conference:

Economic Benefits of Conservation Lands
In the Estero Bay Watershed

Nov 2, 2011
FGCU Student Union Ballroom
8:00-5:00

All are welcome
Calling all Science Passionate Educators, Presenters, Publishers and Vendors...

Super Science Saturday III!!

- When: Saturday, November 5, 2011
- 8:00 to 3:30
- Where: Hosted at Oak Hammock Middle School
  - 5321 Tice Street
  - Fort Myers, Florida 33905
- What: A mini conference with a gargantuan spectrum of awesome science theme related presentations (and people!)
- Who: ALL Educators PreK-12 in Lee and surrounding counties are invited!
- Presenters include: FGCU professors, local agency staff and science professionals, elementary and secondary educators; we have numerous concurrent sessions already planned.

For more information contact Susan Cooper (COE) at sjcooper@fgcu.edu (ext. 7789) or Anji McStravic, Lee County Schools at AnjiNM@leeschools.net
We Are Whitaker!

Florida Gulf Coast University is offering a second annual workshop on Environmental Service Learning on Monday, 24 October, from 9:00 a.m. to 4:00 p.m. The focus is on incorporating Service Learning into sequences of STEM courses. The goal is to develop authentic partnerships with regional environmental organizations and schools that will involve faculty and students in community based research projects, build undergraduate research skills, promote student engagement and leadership, and facilitate the changes needed to institutionalize these activities. Participation is recommended for faculty and administrators at FGCU and at local colleges and schools. Science teachers and non-formal environmental educators are especially welcome. Students are encouraged to participate to learn more about service learning in community based research projects.

<table>
<thead>
<tr>
<th>Sunday, 23 October</th>
<th>Monday, 24 October</th>
<th>Morning Session I</th>
<th>Morning Session II</th>
<th>Lunch</th>
<th>Afternoon Session I</th>
<th>Afternoon Session II</th>
<th>Afternoon Session I</th>
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</thead>
<tbody>
<tr>
<td>Times TBD</td>
<td>Morning Session I</td>
<td>9:00-10:30 a.m.</td>
<td>11:00-12:00 Noon</td>
<td>12:00</td>
<td>1:00 - 2:30 p.m.</td>
<td>2:30-3:00 p.m.</td>
<td>3:00 - 4:00 p.m.</td>
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<tr>
<td>Field Trip to Bonita Springs Nature Place</td>
<td>Refreshments Provided</td>
<td>Authentic Partnerships</td>
<td>Lunch Provided</td>
<td>Student Engagement and Leadership</td>
<td>Refreshments Provided</td>
<td>Institutionalization</td>
<td></td>
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Refreshments and lunch will be free for the first 40 participants to register. Others will be charged $15 to cover these expenses. Please contact Marguerite Forest at (239) 590-7412 or mforest@fgcu.edu.
Environmental Service Learning on Monday, 24 October, from 9:00 a.m. to 4:00 p.m.

We Are Whitaker!

Service Learning Plus disciplinary tracks at Kapiolani CC: a possible model for FGCU to follow?

Workshop sponsored by College of Arts and Sciences, Office of Service Learning and Civic Engagement and Whitaker Center for STEM Education
Environmental Service Learning
on Monday, 24 October,
from 9:00 a.m. to 4:00 p.m.

We Are Whitaker!

The second annual Environmental Service Learning workshop will be led by Dr. Robert Franco, Professor of Anthropology and Director of the Office for Institutional Effectiveness, at the Kapiolani Community College campus of the University of Hawaii.

He is a Senior Faculty Fellow for Community Colleges at Campus Compact, and a Faculty Fellow for the NSF’s Science and Civic Engagement initiative (SENCER.net). He is an international expert on Service Learning and Civic Engagement in the STEM disciplines, the Co-Principal Investigator on a National Science Foundation grant to integrate and institutionalize STEM innovations, and the Principal Investigator on two HUD Office for University Partnership projects and one Corporation for National and Community Service project.

Dr. Franco provides community college, university, and conference audiences with research-based training designed to improve student engagement, success, learning, degree completion, and transfer through service-learning, undergraduate research, industry internships, and authentic partnerships. He puts a strong emphasis on the institutional support and infrastructure necessary for building sustainable service learning and COMMUNITY ENGAGEMENT programs.
Whitaker Center supports luncheon for GEMS PACE Event

Girls in Engineering, Math, and Science (GEMS) is a hands-on program dedicated to science education for regional middle-school girls by enthusiastic professionals and undergraduates as facilitators and role models in a girls-only environment.

GEMS led by Terry Dubetz and Jo Ann Wilson hosted the PACE Center for Girls on April 15, 2011 engaging them in STEM activities of human systems, calorimetry, and protein analysis.
Whitaker Center supports luncheon for GEMS PACE Event

• PACE Center for Girls of Lee County offers year round counseling and academic services for girls, ages 12-18, who are facing challenges such as foster care, domestic violence, abuse and neglect, death of a parent, substance abuse, and/or family history of incarceration.
THE USE OF INTEGRATED TECHNOLOGY TO IMPROVE CLASSROOM PARTICIPATION AND ENHANCE STUDENT LEARNING OUTCOMES ACROSS THE STEM DISCIPLINES

Presented at the AACU and PKAL: Engaged STEM Learning: From Promising to Pervasive Practices: Network for Academic Renewal Conference
March 24-26, 2011, Miami, Florida

Dr. Rob Erdman, Dr. Michael Fauerbach and Dr. Joseph Kakareka
3-D water model for investigating/assessing fundamental and powerful concepts in the sciences

DATA ANALYSIS

Nora Egan Demers
Joanna Salapska-Gelleri
Manuel J. Mon
Angela Osterman Meyer

The Lunar Phases Project

• Presented to the American Association of Physics Teachers Winter 2011 meeting
• Further external funding applied for from the NSF Transforming Undergraduate Education in STEM program
Tanya Kunberger, Assistant Professor Civil Engineering

Conference Travel Support

- American Society for Engineering Education 2011 Annual Conference and Exposition (4 days)
  - All engineering disciplines
  - ~3500 attendees
  - 400 technical sessions
  - All papers peer reviewed

- 2 papers / presentations
  - 21st Century Civil Engineering Workforce (by me)
  - Reworking Class Worksheets in Camtasia (by my co-author)

Picture of Tanya (left) with Kristy Csavina (Bioengineering, paper co-author, right) at the conference venue
Poster presented at 2010 Biomedical Engineering Society Annual Meeting in Austin, TX

Study highlighted teaming objectives, student research projects, assessment of student survey

Studies Included:
- Yoga
- Karate Kick
- Fly-fishing
- Volleyball
Neil Wilkinson, College of Arts and Sciences
Department of Marine and Ecological Sciences
Environmental Education Liaison and Instructor Level II
Senior Faculty Associate, Center for Environmental & Sustainability Education
Whitaker Center Leadership Team

• Oversee the Mosquito Education Outreach Program in Lee County Public Schools
• Teach undergraduate classes at FGCU
• Campus and Community Service

  • The University Colloquium IDS 3920
  • Environmental Biology BSC 1051C
  • Senior Internship EVR 4940
  • Current Topics EVR 4920
AQUATIC SYSTEMS MOSQUITO EDUCATION
LEE COUNTY MOSQUITO CONTROL DISTRICT

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Neil Wilkinson
David Green, College of Arts and Sciences
Department of Marine and Ecological Sciences
Instructor I

- Early Adopters Teaching Cell Founder
- SENCER Team Member and Course Designer

- SENCER Summer Institute participant (UNC-Asheville - Summer 2010)
- SENCER Summer Institute presenter (Butler University - Summer 2011)
- Summer Research Opportunity (SRO) 2011: “Sustain-o-sphere” - Co-leader

- Research Background: Everglades Foodweb Ecology
- Teaching Interests:
  - Sustainability and Coastal Watershed Ecology
  - Emerging Technology
  - Civic Engagement
Mark Simpson,  College of Education, Department of Curriculum, Instruction & Culture

Assistant Professor
National Writing Project FGCU Leadership Team, Technical Liaison
United Faculty of Florida @ FGCU, Communications Chair

• Taught Professional Development Technology Workshops @ Whitaker Center 2010

• Teach:
  • TSL 4340 Methods, Curriculum & Instructional Effectiveness (ESOL)
  • TSL 4520 Second Language Acquisition, Communication & Culture (ESOL)
  • EDF 2005 Introduction to the Teaching Profession
  • EDF 2085 Introduction to Diversity for Educators
  • EME 2040 Introduction to Technology in Education
Kristine Csavina
Bioengineering, U.A. Whitaker College of Engineering
Assistant Professor
Recruitment & Retention Committee, WCE
Whitaker Center Leadership Team

• Teach & create undergraduate classes in the growing engineering program
• Research in biomechanics & engineering education
• Campus and community service
  • Engineering Mechanics
  • Design for Manufacturing
  • Biomechanics
  • Bioengineering Product Design
  • Bioengineering Senior Design
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Kristy Csavina
STEM Research & Presentations

Summer 2010 GPSA HS Educational Program in Calhuitz, Guatemala*

* Travel supported by Whitaker Center Travel Grant

Fall 2010 BMES Conference Presentation*
Teaming Bioengineering Students & Graduate PT Students: A Case Study
Work It Baby, Work It!
Reworking the Worksheet in Camtasia

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STEM Research...
Whitaker Center
Inspired!

2011 ASEE Conference
Presentation

A Guatemalan Immersion for
Teaching Engineering Design
Principles to U.S. HS Students
Elspeth McCulloch
e-Learning Designer, Department of Web, e-Learning and Publications

Provides e-Learning guidance, support, and services to develop and deliver exemplary teaching and learning enhances Florida Gulf Coast University’s use of technology in education.
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Angela Osterman Meyer

College of Arts and Sciences, Department of Marine and Ecological Sciences
Assistant Professor of Physics and Astronomy
Whitaker Center member since 2007

• Pedagogical research in teaching of introductory astronomy
• Observational astronomy research in active galaxies
• General Education Teaching Cell
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Mary Kay Cassani, Ed. D.
College of Arts and Sciences
Department of Marine and Ecological Science
Instructor II

General Education Science Teaching Cell shepherd
Marine and Ecological Studies Senior Internship coordinator (IDS4940, EVR4940)
Project WET facilitator (Water Education for Teachers)
Edison Science and Engineering Fair Judge
Teach undergraduate classes at FGCU
• Environmental Biology BSC1051C
• Environmental Health EVR2264
• Current Topics EVR4920
• University Colloquium IDS3920
Susan Cooper, College of Education
Assistant Professor, Science & Math Methods
Whitaker Center Leadership Team

30+ years teaching science and math at LaBelle High School
Curricular Interests:
• Science Education
• Science and Literacy

Outreach to K-12 schools:
• Lee County Super Science Saturday
• Hendry and Glades Counties
• Heartland Educational Consortium
• Thomas Alva Edison Regional Science Fair

Alva Elementary School
Family Math & Science Night
Susan Cooper creates reading materials for ChemMatters, an ACS publication for high school students.

Susan is also working to revise the old ACS Guidelines and Recommendations for the Teaching of High School Chemistry.

Member of FGCU’s SENCER team in 2010 and 2011 working to:

• Incorporate service learning & civic engagement in FGCU STEM courses.
• Implement SENCER SALG Survey in classes.
Dr. Peter Blaze Corcoran,
College of Arts and Sciences
Department of Marine and Ecological Sciences
Professor, Environmental Studies and Environmental Education
Director of the Center for Environmental and Sustainability Education

• Teaches undergraduate and graduate classes at FGCU


• Adjunct Professor at University of the South Pacific (USP) in Suva, Fiji and Visiting Professor at Universiti Sains Malaysia (Science University of Malaysia) in Pulau Penang, Malaysia.

• Speech on “STEM Education and Coastal Environments: Both Damaged by Oil and Dispersants” at The School Science and Mathematics Convention on November 6, 2010.
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The Center for Environmental and Sustainability Education

E-Waste & Ethics: Where Do BlackBerries Decompose?

Terry Tempest Williams Student Dialogue

Thursday, November 4, 2010
at 7:00 pm, YUCB Student Union Ballroom

Panelists Include:
Jim Puckett
Rod Johnson
Catoe & Co. Partners

Young people, education, and sustainable development
by Peter Simon Poger
sustainable.earth character

THE EARTH CHARTER IN ACTION
TOWARD A SUSTAINABLE WORLD
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Scott Michael, PhD
College of Arts and Sciences
Professor, Department of Biological Sciences

- Teach Introductory Biology, Cell Biology, Virology, Independent Study
- Mentor students in a research lab focusing on dengue virus
- Local and international professional service
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Jamie MacDonald,
College of Arts and Sciences
Department of Marine and Ecological Sciences
Assistant Professor of Geology
Whitaker Center Faculty Member
Coordinator of Shenanigans and Tomfoolery

- Physical and Historical Geology GLY 1000C
- Environmental Geology GLY 2030C
- Tectonics and Marine Geology GLY 3420C
Jo Ann Wilson, College of Arts and Sciences
Department of Biological Sciences
Professor
Director, Professional Programs

• Direct the Accelerated Medical Education Programs at FGCU
• Serve as faculty advisor for student organizations:
  • CHAD (Community Health Aid Development)
  • PATCH (Project Art Therapy for Children’s Health)
• Co-Direct GEMS (Girls in Engineering, Math and Science)
• Teach undergraduate classes at FGCU
  • BSC 1930L, 2930L, 3930L Seminars in Medicine I, II, III
  • PCB 2336 Human Genetics
  • BSC 4910 Senior Research in Biology
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GEMS
Girls in Engineering, Math & Science

Jo Ann Wilson

CHAD in Dominican Republic

Accelerated program students
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Jamie MacDonald
Research

Tectonics and Geochemistry

Earth Science Education

Whitaker Center
for STEM Education

SCIENCE • TECHNOLOGY • ENGINEERING • MATHEMATICS
I am proposing the creation of the FGCU Metric Board in order to:

a) “…seek out ways to increase the understanding of the Metric System…” as in Section 3 – (3) of the Metric Conversion Act of 1975.

b) Confirm Section (3) – (1) of the Metric Conversion Act of 1975 in which the metric system is the “…preferred system of weights and measures for United States…”

c) Protect Public Law 94-168 from violation and to protect Executive Order 12770 from disobedience, or to propose the total elimination of such Law and the revocation of Executive Order 12770.
Amy K. Benvie, M.A.
College of Arts and Sciences
Department of Chemistry and Mathematics
Mathematics Instructor II

• I teach undergraduate mathematics courses at FGCU.
• I coordinate all sections of College Algebra.
• I teach the Math Workshop for the summer Step Ahead program.
• I help organize the annual FGCU Mathematics Competition.
• I am a member of the Whitaker Center Leadership Team.
• I am the faculty advisor for Circle K International (CKI).
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FGCU Invitational Mathematics Competition

• Thirty-seven schools from as far away as Gainesville competed in last year’s competition!

• This year’s competition will be held on Thursday, December 8th on the FGCU campus.

• Invited Speaker, Edward Burger, of “Calculus in 20 Minutes” fame, will be speaking at 2:00pm at Alico Arena.

Come out and witness hundreds of middle and high school students fired up about mathematics!
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Matt Palmtag, College of Arts and Sciences
Department of Biological Sciences
Instructor I

- Teach undergraduate classes at FGCU
  - Bio 1010C
- Campus and Community Service
- Research interests
  - Development of techniques to culture ornamental fish and shrimp in captivity
  - Larval fish and shrimp nutrition
Ada LaGier, College of Arts and Sciences
Department of Biological Sciences
Assistant Professor

- Research Program to develop whole-cell based biosensors to characterize the biological impact of emerging air pollutants on human health
- Teach undergraduate classes at FGCU

  - Cell Biology PCB3023C
  - Cell Membrane Physiology PCB4783C
  - General Biology I BSC1010C
Sheila Bolduc-Simpson, College of Arts and Sciences  Department of Language and Literature

Angel Coordinator, Department of Language and Literature  and  Instructor I

National Writing Project FGCU Leadership Team, Technology Committee Co-Leader

• Provide professional development workshops/presentations to Whitaker STEM Academy

• Teach undergraduate classes at FGCU: Composition (ENC 1101/1102), Professional Writing (ENC 3250)

• Campus and Community Service: National Writing Project Technology Workshops to K-12 teachers in Collier, Lee, Charlotte, Hendry, Glades counties and Mini NWP Summer Institutes
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Sheila Bolduc-Simpson
Lakshmi J. Gogate, Ph.D.
Associate Professor of Psychology
College of Arts and Sciences (CAS)
Department of Social & Behavioral Sciences

Director, Infant Development Laboratory (a research training facility est. in 2007), Psychology, Modular 1, Rm. 13-14.

Member, Whitaker Center

- Direct and train undergraduate students and post docs in developmental science and language development research.
- Alternate Member, Institutional Review Board, FGCU
- Member & Dept. Rep., CAS Research & Space Committee
- Editorial Board, Frontiers in Developmental Psychology
Some Recent Infant Lab Student* and Faculty Activities with Center Support:


- National Science Foundation Grant, Gogate, L. J. (PI), Multisensory underpinnings of lexical comprehension. $438,000.00, 2011-14.


**Present Collaborators**: George Hollich, Ph.D., Purdue University; Scott Johnson, Ph.D., UCLA; Mohamed Abdel-Mottaleb, Ph.D., University of Miami

**Sponsors**: National Science Foundation, March of Dimes, The Office of Research & Sponsored Programs, FGCU
Sharon Isern, PhD
College of Arts and Sciences
Department of Biological Sciences
Associate Professor

• Teach Cell Biology, Virology, Biology, Honors Readings
• Mentor undergraduates in research
• Run a dengue virus research laboratory
• Review grant proposals for NSF, NIH
• Serve on the Honors Executive Board
Nora Demers, College of Arts and Sciences
Department of Biological Sciences
Associate Professor of Biology and Interdisciplinary Studies
Whitaker Center Leadership Team

• Teach undergraduate classes at FGCU
• Campus and Community Service
• Research on Learning

• The University Colloquium IDS 3920
• Scientific Process ISC
• General Biology I
• Current Topics in Biology BSC 4920
• Issues in Science and Technology IDS 3143
Fundamental and Powerful Concepts in Biology

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Nora Demers

Habitat Restoration and Service Learning

Community Education

Economic Values of Conservation Lands

Mining Impacts on Human and Natural Environments