University of Florida
Center for Precollegiate Education and Training (UF-CPET)

Research-Education Partnerships:
Research University – Secondary School Collaborations
UF CPET Mission

• partner with researchers to articulate and transfer current scientific knowledge and skills to teachers and motivated students;
• partner with educators to design and offer effective, enriching professional development and life-long learning opportunities;
• partner with teachers to improve science education and career exploration (pipelines, literacy, public awareness)
• partner with grad students to develop communication and other professional skills, to increase understanding of the impact scientists can have on society, and to prepare to be active in research outreach.
UF CPET Collaborations

- UF Researchers from STEM Departments, Centers and Institutes
  -- HSC, Emerging Pathogens, CTSI, and Biotechnology
- Other Universities, Regional Colleges, Bioscience Industries
- Professional Societies
- Education Consortia, School Districts, and Teachers
- Talented/Motivated Precollege Students
- UF “Science for Life” (funded by HHMI)
- >350 Faculty Collaborators per year
- >200 Graduate Student Volunteers per year
UF CPET Programs for Teachers

Summer Science Institutes: Biotechnology, Genetics/Evolution, Environmental Sciences, Physical Sciences, etc.
  2005- ; National Science Foundation and others

Aquatic Systems: Emerging Problems and Creative Solutions
  (Lastinger Center, School District: ~50 teachers)
  2010-17; Several Foundations

Interdisciplinary Center for Ongoing Research/Education (ICORE)
  Partnerships: Emerging Pathogens  (30 teachers/year)
  2007-13; Howard Hughes Medical Institute (HHMI)

Biomedical Explorations: Bench to Bedside  (30 teachers/year)
  2009- 2013; National Institutes of Health (NIH SEPA)

OUTBREAK: Mission Biotechnology, a video game
  2009-2012 National Science Foundation (NSF)

NSF Broader Impact Research Opportunities, 2005-
Florida Junior Science, Engineering and Humanities Symposium (Fl JSEHS), 1963-
High School Students and Teachers

Student Science Training Program (SSTP), 1959-
Talented High School Juniors/Seniors
*** 56 years***

Science Quest, 2002-
Rising 10th graders

Science Immersion, 2013-2015
High School: rural consortia

Dual-Credit Enrollment for University of Florida
Motivated High School Students

UF CPET Programs for Precollege Students
Benefits to UF

• Research Grants (NIH, NSF, HHMI, Foundations)

• Public awareness of the research that UF faculty members do, and how and why they do it

• Recruit and retain diverse and better-prepared future scientists and engineers (pipelines)

• Increase science literacy and knowledge about STEM jobs/academic paths/careers (public outreach)

• Improve teaching, mentoring, communication, and cross-disciplinary opportunities for graduate students

• Encourage and support an ongoing culture of school and community engagement for research faculty and students
NEFEC’s 2014 STEM Expo visits UF’s campus

Spring Break at UF this year saw 250 students and 75 teachers from the North East Florida Educational Consortium (NEFEC) visit Turlington Hall for their annual STEM Expo, hosted by […]
### STEM Pipeline Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Education Level</th>
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<tbody>
<tr>
<td>Equal Access Clinic Network</td>
<td>Community</td>
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<tr>
<td>Community Health REACH</td>
<td>Community</td>
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<tr>
<td>School Holiday Camps at the FLMNH</td>
<td>Elementary School</td>
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<tr>
<td>Spring Break Camps at the FLMNH</td>
<td>Elementary School</td>
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<tr>
<td>Florida 4-H SET</td>
<td>Elementary, Middle &amp; High School</td>
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<tr>
<td>Scout Explorations at the FLMNH</td>
<td>Elementary, Middle &amp; High School</td>
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<tr>
<td>FOCUS Summer Program</td>
<td>Elementary, Middle &amp; High School</td>
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<tr>
<td>Plant Camp</td>
<td>Elementary, Middle &amp; High School</td>
</tr>
<tr>
<td>GeoGators</td>
<td>Elementary, Middle &amp; High School</td>
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</tbody>
</table>

[www.cpet.ufl.edu/resources/stem-pipeline-resources](http://www.cpet.ufl.edu/resources/stem-pipeline-resources)
# Health Science Center Related Student Organizations

<table>
<thead>
<tr>
<th>Organization</th>
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<tbody>
<tr>
<td>Academy of Managed Care Pharmacy</td>
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<tr>
<td>American College of Clinical Pharmacy</td>
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<tr>
<td>American Holistic Veterinary Medical Association</td>
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<tr>
<td>American Medical Student Association</td>
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<td>American Medical Women's Association</td>
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<tr>
<td>American Pharmacists Association</td>
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<tr>
<td>American Student Dental Association</td>
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<tr>
<td>College of Medicine Graduate Student Organization</td>
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<tr>
<td>College of Pharmacy Student Council</td>
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<tr>
<td>College of Veterinary Medicine Canine Club</td>
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<tr>
<td>College of Veterinary Medicine Public Health and Service Club</td>
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<tr>
<td>Dental Ambassadors</td>
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</table>
Excursions in Science

Environmental Contaminants and Their Effects on Florida Alligators

Current Titles
Pollution and Florida Alligators
Careers in Biotechnology
Cell Culture
ELISA Testing
Mercury Pollution
Microarray Technology
Organochlorine Pesticides
Polymerase Chain Reaction

This project is part of the Excursions in Science Series from the Center for Precollegiate Education and Training (CPET) at the University of Florida

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Produced and Directed by Charles D. Lawrence, MPH, Ph.D.
Co-Produced by R. Heath Rauschenberger, Ph.D.
The Sifter's Guide to Everything (Science)

Report Broken Links to sift@cpet.ufl.edu
Best Viewed with I.E. 7 or Firefox
Updated 12-15-2009
UF CPET would be pleased to collaborate with you
to inspire and recruit future scholars
and/or
to engage and empower teachers
to translate
the content, impact, and excitement of your research
into classrooms and communities throughout Florida
<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
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</thead>
<tbody>
<tr>
<td>Director</td>
<td>Mary Jo Koroly, Ph.D.</td>
</tr>
<tr>
<td>Assistant Director</td>
<td>Julie Bokor, M.A.</td>
</tr>
<tr>
<td>Coordinator</td>
<td>Christy Rodkin</td>
</tr>
<tr>
<td>Education Designer</td>
<td>Charles Lawrence, MPH, Ph.D.</td>
</tr>
<tr>
<td>Teaching Lab Specialist</td>
<td>Houda Darwiche, Ph.D.</td>
</tr>
<tr>
<td>Teaching Lab Specialist</td>
<td>Drew Joseph, M.A.</td>
</tr>
<tr>
<td>Dual Credit Coordinator</td>
<td>Katie Meese, M.A.</td>
</tr>
<tr>
<td>Computer Specialist</td>
<td>Mike Anthony</td>
</tr>
<tr>
<td>Fiscal Manager</td>
<td>Harriet Ganious</td>
</tr>
</tbody>
</table>

Faculty Collaborators: Approximately 350 faculty members/year
Graduate Students: ~500 professional students volunteer/year