It's research that makes the Gator chemistry major

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The situation at a comprehensive research university...

The University of Florida

- 49,785 Students in fall 2015
- $706.8M Sponsored research in 2015
- 16 Colleges
- >200 Research centers and institutes

UF Chemistry

- 45,000 Student credit hours taught by Chemistry annually
- 625 Chemistry majors (beginning of Fall 2016)
- 112 B.S. degree graduates in 2015-2016
Chemistry Personnel for Research Mentoring

38 Tenure-track faculty

- 5 Research Scientists – Mass Spectrometry, NMR, X-ray facilities
- 58 Postdocs and visiting scientists
- 264 Graduate students
- 9 Research support staff (machine shop, electronics shop, IT shop)

...and > 600 chemistry majors
Getting the right students into the available lab slots

• Inform the students about opportunities
  • Recruit informally in introductory courses (CHM 2047H, CHM 2212)
  • Leverage university-wide resources

• Inform the faculty about interested students
  • Aggregate and circulate CVs of interested students
  • Encourage students to contact faculty directly (formal advising, informal discussions)

• Maximize the resources available
  • Internally and externally funded sources of research funding for undergraduates
TO GET STARTED

- **Summer B:**
  Research@UF: 1 credit introduction to what researchers do in all disciplines. HUM 2930x4C22 or IDS 2935x4D40

- **Fall Semester**
  Science for Life Seminar: 1 credit: science and engineering faculty present their research, BCH 4905
Learn how people become researchers and find questions to study

- 1 Credit, during Summer B

Includes:

*Path to Practice:* panel discussions by guest faculty from a variety of disciplines

*Research Toolkit:* problem-solving skills, data types review, reading research papers, ethical conduct of research, library resources, and more.

For *all* disciplines

Contact Heather Spooner, hspooner@ufl.edu
SCIENCE FOR LIFE SEMINAR
BCH 4905

- http://sfl.aaufl.edu/seminar
- 1 credit course
- Three actively-recruiting STEM faculty present research every week
- Face-to-face interviews can lead to research opportunities
- Offered fall and spring semester
X-Lab (Cross-Disciplinary Lab)
X-Lab I (ISC 2400L) & X-Lab 2 (ISC 2401L)

- Two-semester laboratory course integrating science research skills with chemistry, physics, and biology concepts.
- Three credits per semester
- Equivalent to completing:
  - BSC 2010L & BSC 2011L
  - CHM 2045L & CHM 2046L
  - PHY 2053L & PHY 2054L
- Prerequisite for X-Lab I:
  - High school algebra (or higher)
REGISTERING FOR RESEARCH EXPERIENCE

- Mentored research
  - Register for mentored research credits with a specific faculty mentor in person with a department advisor
  - Credits can apply toward the major in some degree programs.
  - You may enroll for zero credit if it’s not your only course in a semester.

- Research support programs
  A number of UF programs provide awards to help students participate in research in a variety of fields and academic disciplines.
Aim
- To support undergraduate research across all disciplines, including arts, humanities, social sciences, and sciences

Eligibility
- Any undergraduate major
- Must be a freshman or first semester Sophomore with no previous research experience

Deadline
- November, check on CUR website

Duration
- 12-month research experience

Benefit Highlights
- $1000 stipend
- Enhances your résumé
University Scholars Program

http://scholars.ufl.edu

- **Aim**
  - To support undergraduate research at any stage across all disciplines, including arts, humanities, social sciences, and sciences

- **Eligibility**
  - Any undergraduate major
  - Apply any year

- **Deadline**
  - February, check with individual department

- **Duration**
  - 12-month research experience

- **Benefit Highlights**
  - $1750 stipend + $500 research supply funds
  - Enhances your résumé
Aim: To prepare undergraduate students for doctoral studies

Eligibility: Any major,
- Completed sophomore year (earned 60 or more credits)
- First-generation and low income, or minority in graduate education

Deadline
- Typically late January, check website

Duration
- 12 months, including intensive summer research and monthly seminars in the fall and spring

Benefits
- $2,800 award
- Intensive training and additional financial support to facilitate acceptance into graduate school
**BECKMAN/BSP SCHOLARS PROGRAMS**

- **Aim**
  - To support high achieving undergraduate researchers headed toward Ph.D. graduate programs and eventual research careers in the sciences

- **Eligibility**
  - Apply spring of sophomore year
  - Typical profile: UF GPA 3.8 or score of 5 on two STEM AP exams

- **Deadline**
  - March, check on CUR website

- **Duration**
  - Two summers + academic year between

- **Benefit Highlights**
  - $18,200 in stipend + $2,800 research supplies
  - Networking at Beckman Scholars or other professional conference
The US/France i-REU Programs

**EXCHANGE PROGRAM**

- **Domestic participants** spend at least 12 weeks in a world-class French laboratory.
  - 2 students in Université Paul Sabatier/CNRS
  - 2-4 students in Université Strasbourg
  - 2-4 students in Université Pierre & Marie Curie/Sorbonne

- **Foreign participants** spend 16 weeks and fully integrate into the research groups at the University of Florida

- Capstone activity presenting at the spring national ACS meeting

- DOMESTIC students funding provided by NSF-CHEM, host institutions
- FOREIGN students funding provided by home institutions and UNIVERSITY of FLORIDA

The exchange nature of the program provides a strong collaboration between members and a strong commitment to research success
And the Undergrads Do Research

The McElwee-White Group

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