



Undergraduate research opportunities

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Undergraduate research

Growing awareness of the value and the need

- National biology education initiatives: PULSE, Vision and Change
- Desire for engaged learning experiences to promote critical thinking and professional skill development
- Desire to maintain/grow research pipeline

Undergraduate research

Challenges

- Undergraduate research is often perceived as lower quality work
- Work with undergrads doesn't “count” for tenure/promotion
- Undergrads are unfamiliar with topics and protocols (they are untrained)
- Undergrads have a hard time finding labs to join (hard to make a connection)
- The undergraduate life cycle (semesters, classes, amount of time available is patchy, etc.)

Undergraduate research

Reality? (Or philosophy?)

Different is just different – not necessarily *worse*.

UF Summer Internships

Facts and positives

- Paid \$14/hr full time for 6 weeks to work in a lab
- Attention paid to ensuring a positive student experience
- High demand
 - Research interns: 50 spots statewide (200 applicants)
 - Extension interns: 10 spots (250 applicants)
- Involves 15 departments across IFAS

UF Summer Internships

For improvement

- Insufficient funds for the demand
- Summer only
- Late start (take them as juniors)
- Currently weak in the social sciences
- Students have biomedical interests and often just want resume padding
- Would like to do more with Extension (Extension may be a conduit to other research)

Improvement?

Goals

- Increase opportunities for students to engage in research and extension
- Start them younger/earlier
- Give faculty more “credit” for mentoring undergraduates
- Raise the profile of undergraduate work
- Build stronger relationships with both research and extension

Improvement?

How?

- Maintain support for Internships and seek additional funding
- Expand Honors program, broaden definition of “research” and allow for extension projects
- Embed research in new Challenge curriculum and encourage it in others
- Courses for “Entering Research”
- Launch Undergraduate Research Centers

Undergrad Research Centers

What is?

- Learning communities focused on broad topics such as Food Security, Urban gardening, Plant-microbe dynamics
- Similar to cross-disciplinary grad centers
 - Faculty affiliate with one
 - Undergrads work as part of one
 - Resources are associated with a Center
- Location/focal point for seminars and training in general lab techniques

Undergrad Research Centers

Advantages?

- Raises the profile of undergraduate research
- Increases “visibility” to undergraduates
- Formal affiliation with Centers increases visibility in tenure/promotion
- Supports interdisciplinary/cross unit collaboration
- Opportunities for graduate student professional development (mentoring, training)
- Institutional support increases funding opportunities (NSF is impressed)

Other?

Ideas? Thoughts? Comments?

Funding

Opportunities?

- NSF Broader Impacts
- REU Site and other
- Work with our Office of Sponsored Research to explore funding sources