

Overview of Provost's Undergraduate Research Initiative

August 2009

We rarely have the opportunity to discuss how the colleges utilize and administer their undergraduate research (UR) funding. Just as the content and the type of research and creative activity varies by college, the programs also differ in their organization. Below is a brief overview of the structure and funding processes that are currently being used by most colleges.

This summary only refers to how the colleges utilize the Provost's UR dollars. Several additional programs support UR (e.g., Professorial Assistant Program, McNair-SROP program, research assistants funded by external grants). We're working to create a reference guide that outlines all UR opportunities available at MSU.

More Students Engaging in Research

With the Provost's money and some of their own funding, colleges provided support for 389 students. This number is an 18% increase from last year's effort. This figure, however, only represents a small percentage of MSU students who engage in research and creative activities. More students participate in research through the Professorial Assistant Program, coursework, or as paid research assistants. We're working to find ways to better document the experiences of all students who engage in UR.

Academic Year	Number of Students
2008-09	389
2007-08	331
2006-07	242

Program Organization

Over the past three years, the colleges have developed different structures to manage their UR programs. Two general approaches have been adopted:

Student-Driven Proposals	Faculty-Driven Proposals
Students write proposals and find faculty members who are willing to work with them if funded. The research is sometimes original but more often is related to a faculty member's research. A letter of support from the potential faculty mentor usually is included in the application. Proposals are submitted to a faculty committee that reviews requests and decides on funding.	Faculty apply for funding through the associate dean of undergraduate affairs, usually by submitting a brief proposal. The associate dean, sometimes in conjunction with a committee, reviews proposals and decides who receives funding. Faculty then hire students to work with them.

Some colleges have appointed a faculty member to serve as the coordinator of their undergraduate research activities. This person oversees the grant selection process, promotes the program among faculty, and organizes support activities (e.g. workshops, brown bag lunches) on topics pertinent to students in that college.

Funding

Most colleges understand the value of having undergraduate research and creative activity opportunities in their colleges and have allocated additional funds toward the UR initiative. For the 2008-09 fiscal year, the colleges collectively contributed an additional **\$238,000** towards UR initiatives in addition to the Provost's UR funds. Through this initiative, a total of **\$588,000** was distributed to students to support UR activities.

- **Student Funding**—Colleges took a variety of approaches in funding student UR opportunities. In some colleges, the associate dean's office provided the entire amount of the stipend. Other colleges split the cost with departments (i.e., Associate Dean's Office paid 75% of stipend; departments paid 25%). This latter approach encouraged departments to invest in UR opportunities and stretched dollars further so that more students could benefit from UR experiences.
- **Stipend Amounts**—Stipend amounts varied by college. Some colleges provided support for conference or research travel, while others used money exclusively for student employment as a research assistant. Sometimes colleges established a set amount for stipends for all students in their

college (i.e., students would receive \$1,500/semester). The average work stipend for the academic year was \$1,300 each semester. Summer stipends averaged around \$3,360. In response to budgetary constraints, one college has suggested decreasing the amount of individual student stipends in order to continue to fund as many students as possible.

Improvements & Changes for Upcoming Year

The UR initiative is beginning its fourth year on campus. Listed below are several of the improvements that various colleges are adopting for the upcoming year.

Curricular

- Introduce undergraduate research as a goal for curriculum review
- Provide a template for implementation of a formal independent research course for those departments that do not have such a course

Assessment

- Develop, with faculty, metrics for evaluating student learning in undergraduate research
- Adopt the SURE IIAY survey for students who have completed a research experience during the academic year (visit <http://www.grinnell.edu/academic/psychology/faculty/dl/sure&cure/> for more information)
- Add a student to the faculty advisory board to help the committee make decisions regarding UR grants

Technology

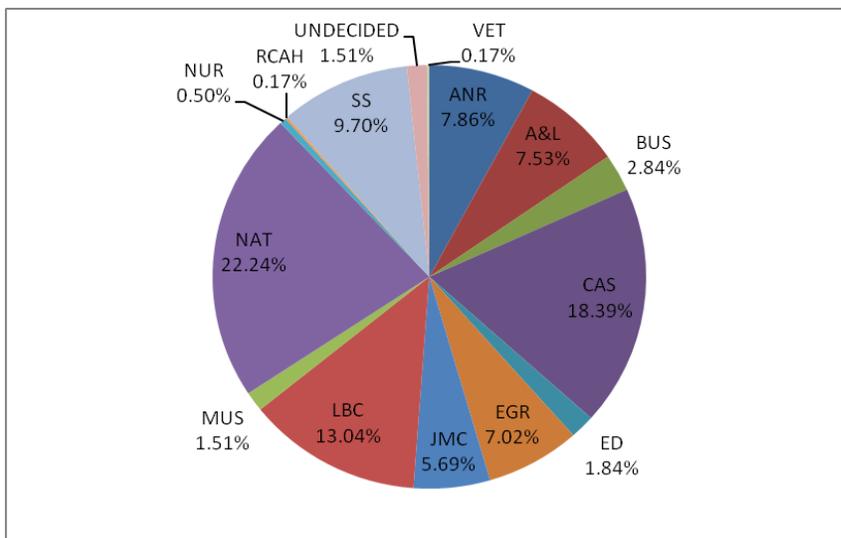
- Move application and follow-up evaluations to a web-accessible format
- Showcase their students' research on the college's website

University Undergraduate Research and Arts Forum (UURAF)

UR funding has affected student involvement in UURAF. Since 2006, student participation has increased by 300%. A record number of students and faculty mentors participated in this year's event.

UURAF Numbers

- 600 students from 14 colleges presented 381 programs
- Students presented 105 oral presentations, 271 poster presentations, and 5 performance demonstrations
- 285 faculty members from 15 colleges mentored student researchers
- 43 faculty judges evaluated the programs



2009 UURAF Participation by College

What's Next

The UR Initiative has made great strides during its early years. Undergraduate students from every college have opportunities to engage in some kind of research or creative activities. We're focusing on several areas in the next phase: documenting the impact of the research experience on student learning, supporting faculty who mentor undergraduate researchers, and improving how students learn about research opportunities.

Contact Korine Wawrzynski, Director of Undergraduate Research, with questions about this report.

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