

Creating Undergraduate Research Opportunities

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fsimon@tulane.edu

The Center for Research-Education Activities at Tulane (CREATe) has been launched to connect faculty members with undergraduate students who want to become a part of research projects.



Undergraduate students (from left) Theodore Nathan and Lea Kaminstein discuss their research project with Gary Talarchek, along with student Shelby Farmer, right. Talarchek is senior program manager in the Center for Research-Education Activities at Tulane (CREATe). (Photo by Paula Burch-Celentano)

The center was established with a Tulane Research Enhancement Award last year that went to Brian Mitchell, associate provost for graduate studies and research, and Henry Bart, professor of ecology and evolutionary biology. Also on the CREATe team is Gary Talarchek, who joined Tulane as senior program manager of the new center last March and has been developing a number of activities to engage students in undergraduate research opportunities.

“We have finished the startup phase of the center and are now entering an active phase with proposal submissions, conducting workshops and providing student services,” says Mitchell, who also is a professor of chemical and biomolecular engineering.

The research teamwork is under way as well. With a grant that Talarchek secured from the Educational Development Center, an international nonprofit organization, he is working with three undergraduate student interns on a project to evaluate the use of enhanced teaching technology in three Jefferson Parish, La., public schools.

This academic year, undergraduate students Lea Kaminstein, Shelby Farmer and Theodore Nathan are observing classrooms to collect information about how teachers and their students are using computers, networking, PDAs, interactive white boards and two-way interactive data streaming. Linda McKee, director of the Tulane Teacher Preparation and Certification Program, is an adviser to the project.

In the future, Talarchek plans to connect many more undergraduate students with research opportunities not only in the sciences and engineering but also in the social sciences, humanities and the arts. On the [CREATE website](#), students can search a database of research positions and faculty members can post open positions.

The website also provides guidance to students on seeking out and applying for research positions, getting credit for research, publishing and presenting research, and finding funding for research opportunities off campus. Opportunities for research fellowships and grants will continue to be added to the website as an ongoing project.

“We want to serve as a resource to provide information and support to foster team projects,” Talarchek says. “A research team, which includes faculty, graduate students and undergraduate students working together, is an effective way to mentor students, provide practical research training beyond the classroom, and advance the course of research.”

The award that launched CREATE came from the university's Research Enhancement Fund of \$20 million that was created by Tulane in April 2006. Plans call for the funds to be distributed in support of faculty initiatives in research, scholarship and creative endeavor universitywide. Objectives of the new fund include expanding the base of nationally competitive research activity to increase extramural support of research at Tulane, and building collaboration and synergy among the university's schools

and campuses.

Tulane has a depth and diversity of faculty research to engage every student's interest, Talarchek says.

“Currently, elite research universities like Tulane are seeking to engage more undergraduate students in research with faculty early in their academic careers,” Talarchek says. “It has been found that early undergraduate research experiences tend to encourage more students to go on to graduate and professional schools and to become national leaders in their chosen field of research.”

The Carnegie Foundation for the Advancement of Teaching ranks Tulane as a university with “very high research activity.” Of more than 4,300 higher educational institutions rated by the foundation, Tulane remains in a prestigious category that includes only 2 percent of universities nationwide.