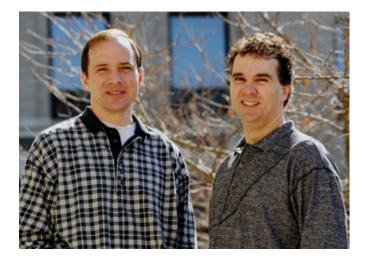
Professors Win Early Career Awards

April 01, 2009 2:15 AM Kathryn Hobgood khobgood@tulane.edu

Two professors in the School of Science and Engineering have received prestigious National Science Foundation CAREER Awards. The grants will allow W T. Godbey and James Donahue to firmly establish their own independent research laboratories at Tulane University.



National Science Foundation grants will allow assistant professors James Donahue, left, and W T. Godbey to establish their own laboratories at Tulane. Donahue is in chemistry and Godbey is in chemical and biomolecular engineering. (Photo by Paula Burch-Celentano)

The <u>CAREER awards</u> acknowledge the accruing contributions and growing promise of Godbey and Donahue as teachers and researchers within their respective fields. The awards include sizable grant funding that will begin in July 2009 and last for five years.

<u>Donahue</u>, an assistant professor in the Department of Chemistry, will receive \$570,000 for his <u>research</u> into tungsten-mediated reduction of carbon dioxide to

carbon monoxide. Carbon monoxide is a gas that can be readily transformed into methanol and other commodity chemicals. Carbon dioxide is a greenhouse gas accumulating in the atmosphere, which is linked to global warming and climate change.

<u>Godbey</u>, the Paul H. and Donna D. Flower Assistant Professor in Engineering, will receive \$400,000 to further his <u>research</u> into expression-targeted gene delivery, the use of gene therapy for treatment of bladder cancer and the manipulation of cells at the genetic level. He is in the Department of Chemical and Biomolecular Engineering.

The Faculty Early Career Development (CAREER) Award is considered one of the National Science Foundation's most prestigious awards for junior faculty members. It supports the early career-development activities of teacher-scholars who most effectively integrate research and education within the context of the mission of their organization.

Godbey and Donahue exemplify how CAREER awardees integrate their research with interdisciplinary teaching opportunities. Both professors have formed partnerships with other schools and centers at Tulane, and they serve as mentors to undergraduates, graduate students and New Orleans-area high school students.

Donahue, for example, offers research opportunities in his lab for students from local colleges and universities who otherwise do not have access to laboratory facilities. He also teaches a course to fulfill part of the Tulane public-service graduation requirement. In the course, coordinated by the Tulane <u>Center for Public Service</u>, undergraduates present chemistry demonstrations at McMain High School, a New Orleans public school.

"The objective is to show the students how closely chemistry is associated with some familiar things (like cold packs and hot packs used to treat swelling and soreness) and to give them a glimpse of the power of science to do wonderful things that can improve the human condition," says Donahue. "The hope is that students will be inspired and encouraged to take further courses in science and be better positioned later in life to opt for careers in scientific fields."

Godbey uses mouse models of bladder cancer in his experiments that involve inserting gene codes for self-destructing proteins into cancer cells. Godbey provides cutting-edge information to oncologists and is a contributing member to the Signaling Research Program at the Tulane School of Medicine.

"What motivates me is making people's lives better," says Godbey. "I've trained in such a way that for every project I undertake, it will have a clinical application associated with it in the long run."