

Up and Coming Tulane Science Professors Receive National Funding to Establish Labs

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Two professors in the Tulane University School of Science and Engineering have received prestigious National Science Foundation CAREER Awards, an acknowledgment of their accruing contributions and growing promise as teachers and researchers within their respective fields. The award includes sizable grant funding which will begin in July 2009 and last for five years, and will enable the professors, W.T. Godbey and James Donahue, to firmly establish their own independent research laboratories at Tulane.

Donahue, an assistant professor in Tulane's Department of Chemistry, will receive \$570,000 for his research into tungsten-mediated reduction of carbon dioxide to carbon monoxide, a gas that can be readily transformed into methanol and other commodity chemicals. Carbon dioxide is a greenhouse gas that, accumulating in the atmosphere, can induce climate change through global warming. Godbey, an assistant professor in Tulane's Department of Chemical and Biomolecular Engineering, will receive \$400,000 for furthering his research into expression-targeted gene delivery, the use of gene therapy for treatment of bladder cancer and the manipulation of cells at the genetic level.

Godbey and Donahue exemplify how CAREER awardees integrate their research with interdisciplinary teaching opportunities. Both professors partner with other schools and centers at Tulane, and serve as mentors to undergraduates, graduate students, and even kids in local high schools.

For example, Donahue offers research opportunities in his lab for students from local colleges and universities who otherwise do not have access to them, and he also teaches a course in conjunction with the Tulane Center for Public Service wherein Tulane undergraduates present chemistry demonstrations at McMain High School in New Orleans.

“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, whose experiments involve inserting genes codes for self-destructing proteins into cancer cells -- using mouse models of bladder cancer -- is a contributing member to the Signaling Research Program at the Tulane School of Medicine, providing cutting edge information to oncologists.

“What motivates me is making people's lives better,” says Godbey. “So, 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.”

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. For more information visit www.nsf.gov/career