



IGERT Brings New Bioinnovation Program to Tulane & New Orleans

For only the third time since its 1997 inception, the National Science Foundation's (NSF) Integrative Graduate Education and Research Traineeship (IGERT) award has been granted to a Louisiana higher education institution. Tulane University, a first-time recipient of this grant, is one of 18 schools across the country to receive the award this year. IGERT is NSF's flagship interdisciplinary training program educating U.S. PhD scientists and engineers by building on their disciplinary foundations.

The awards give universities an opportunity to develop programs with a focus on national priority research areas that require interdisciplinary approaches and collaboration across multiple disciplines to solve the world's toughest research problems.

Donald P. Gaver, Tulane's chair of biomedical engineering, created the school's Bioinnovation PhD program

with the grant. The program's goal is to develop graduates who can foster the design and development of innovative biomedical technologies and products through a balanced educa-

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- Dr. Michael Khonsari, EPSCoR Project Director

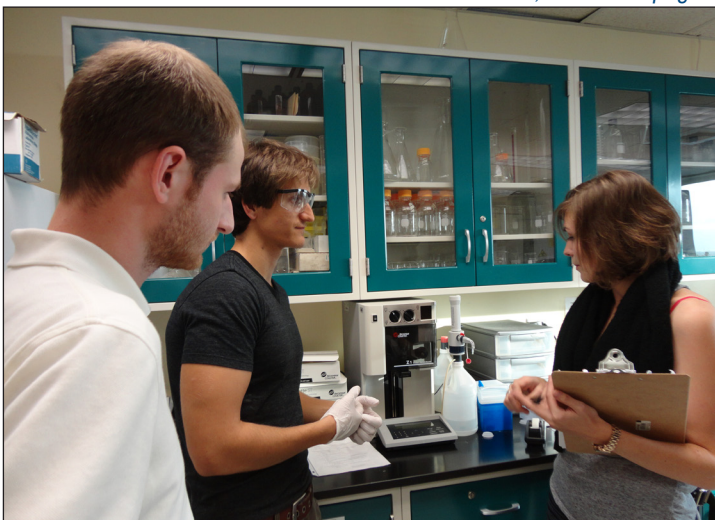
tional approach that combines strong foundations in science and engineering and direct collaboration with healthcare professionals and business and regulatory partners.

Derek Dashti, California native and current Bioinnovation student, said he is most interested in the pathway of getting novel research ideas into a biomedical market. "This program allows me to further study biomedical entrepreneurship while still being a relevant scientist with a PhD in biological science," Dashti said.

In order to help students become relevant scientists and entrepreneurs, the curriculum includes courses in entrepreneurship, marketing and intellectual property, along with quantitative fundamentals, biological systems, and model and transport phenomena. All of these classes are coordinated by over 30 faculty members in Tulane's Schools of Science and Engineering, Public Health and Tropical Medicine, Law and Business and the Institute for Entrepreneurship. Students will take advantage of partnerships with the law and business schools to develop their entrepreneurial skills and prepare for the New Orleans Business Plan Competition. The competition had over 140 entries from 14 states last year and awarded \$200,000 to the winning entrepreneur.

Students will also be given the opportunity to participate in a summer internship with the United States Food

Bioinnovation, Continued page 2



Tulane's Bioinnovation PhD students engage in discussions and lab work while meeting with one of their professors, Dr. Gaver (not pictured). Above-R, students are from L-R: Nicholas Pashos, Derek Dashti, and Karolina Kosakowska.

and Drug Administration in Silver Springs, MD, which will give them experience in the regulatory approval process.

"This program is appealing to me because of the focus on useful and well-rounded training," said Bioin-

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novation student Karolina Kosakowska. "Rather than devoting time and resources to one field, the coursework is designed to give us a background not only in a single science, but a translational view of a subject, as well as the business behind funding research and products," she said. Kosakowska received her bachelor's degree in Chemistry from Smith College in Northampton, MA. She was already accepted to Tulane's graduate program in Chemistry, but because of her strong background in organic synthesis with a focus on medicinal chemistry, she was encouraged to apply to the Bioinnovation program. "As we are the first batch of participants, we got very lucky!" she said.

The opportunity to offer this Bioin-

novation program to students stems from past EPSCoR-funded research in the area of biosensor design that Dr. Gaver previously conducted at Tulane and is important to the biological delivery theme of his current IGERT project. "This major education and research training grant from NSF is an outcome of our sustainability effort from our NSF-EPSCoR Research Infrastructure Improvement (RII) Grant in which Dr. Gaver played a key role,"

said Associate Commissioner for Sponsored Programs and LA EPSCoR Project Director, Michael Khonsari.

The research and development opportunities that result from EPSCoR-funded programs continue to gain international recognition and attract qualified students to the State. As a result, Tulane is directly involved in the burgeoning development of New Orleans' science and research efforts. Preeminent among these efforts is Bio District New Orleans, a State-enabled economic development district that takes up 1500 acres across Downtown and Mid City and focuses on the biosciences industry in New Orleans. The goal for the next ten years is to provide world-class biosciences research and development; local, re-

gional and global healthcare delivery; and stable, high-paying jobs. Partnerships with major educational and research institutions are key in making this industry successful in New Orleans and Louisiana.

"The Bioinnovation Program also benefits from and contributes to the resurgence of biosciences in New Orleans," says Dr. Gaver. "Our program is well-positioned within the cornerstone developments of the new healthcare facilities that make up Bio District New Orleans." The program serves to further Tulane's strong relationship with the New Orleans community, which can benefit from our graduate students and the devices and technologies they develop."

The Tulane IGERT Award start date was July 1, 2012, and will expire on June 30, 2017. Any student with a Bachelor's degree in the sciences or engineering and an interest in transformative biomedical technology development is welcome to apply. More information can be found on the program's website: www.tulane.edu/bioinnovation-IGERT.