

www.fsunews.com

Funding encourages FSU researchers to ‘improve the human condition’

Four FSU projects tackle ADHD, tumor mapping, fuel cell research

Chay D. Baxley
Staff Writer

As the fall 2012 semester concludes, research at Florida State University is at an all time high.

It’s so high, in fact, that four research projects from the Tallahassee community have recently been granted a total of \$106,000 by the Florida State University Research Foundation to further pursue their individual area’s of expertise, which range from non-addictive drugs to treat attention deficit hyperactivity disorder to new fuel cells.

The funds, allocated through FSU’s Grant Assistance Program (GAP), are offered to projects on campus that show particularly high promise and potential commercial viability, but need more monetary assistance to develop their theories further.

Leading one of the winning projects is Professor Pradeep Bhide, the Jim and Betty Ann Rodgers Eminent Scholar Chair of Developmental Neuroscience and director of the Center for Brain Repair in the College of Medicine.

Bhide and his associates, who received \$12,000 of the total funds awarded, are creating a non-addictive drug to treat ADHD.

In contrast to the medications currently on the market for ADHD, such as Ritalin, Bhide’s research could produce a pill without the potential for abuse—an alternative that may prove attractive to future patients.

It’s a possibility that Bhide said is certainly worth exploring.

“I think there is a need for a non-abusable drug for ADHD,” said Bhide. “What it would do is, one, it would be more acceptable; patients and physician’s will probably find it safe to use and prescribe a non-stimulant. Second, a lot of people don’t take these current medications because of the stigma. It’s estimated, actually, that only about 50 percent probably receive treatment. We don’t know why, but one of the reasons may be that they don’t want to take something that could potentially be addictive. With the new drug, if it indeed works the way we hope it would, we could reach a world wide market.”

Also being funded by GAP is breaking research for the production of new antibodies.

Headed by Professor Myra Hurt, senior associate dean for research and graduate programs at the FSU College of Medicine, and Research Associate Raed Rizkallah, this particular project concerns developing a way to grow a never-ending supply of an important antibody used in many different forms of disease research, including tumor mapping.

According to Hurt, it’s area of study well worth her time—and the University’s funding.

“It’s not only valuable to use and our particular area of research, but it’s of interest to a very large number of people within the scientific community that are studying various regulators involved in cancer, involved in development, involved in stem cell research, etc.,” said Hurt.

Hurt’s project brought in \$18,000 from GAP.

Other projects include engineering better ways to produce stem cells, which received \$26,000 and is led by Teng Ma, a professor of chemical and biomedical engineering at the Florida A&M University-Florida State University College

Receiving the most GAP funding, \$50,000, was Professor Jim Zheng's project on the latest in fuel cell research.

Zheng, a professor of electrical engineering at the College of Engineering, and his team are working with the next generation of supercapacitor fuel cell technology that can deliver the bursts of increased energy needed for specific applications as well as be able to recharge and recycle in a very short amount of time.

The final goal is of course to bring all four of these projects from the laboratory to the marketplace. But FSU's Vice President of Research Gary K. Ostrander has higher hopes than just making a sale.

"If these projects are successful, they have the potential to improve the human condition," said Ostrander.