

# FSU Grants Researchers Money To Pursue Promising Inventions

*By: Florida State University*

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## News Release: Florida State University

TALLAHASSEE, Fla. — Florida State University is giving some of its leading researchers a little extra cash to propel their cutting edge work closer to the marketplace.

Pradeep Bhide, Dr. James Olcese and Jinfeng Zhang all received the university's GAP award, financial support to help bridge the gap between a faculty member's research and the commercial sphere for product development.



Since 2005, FSU's Office of Commercialization has administered the highly competitive, twice-yearly GAP in support of researchers and their extraordinary findings, with a focus on those projects that are most likely to produce a new product, license or start-up company. Over the past eight years, GAP has doled out nearly \$8 million to help researchers develop products such as new cancer treatments, food contamination test kits and next generation wound dressings.

The winning projects are:

**A non-addictive drug for attention deficit hyperactivity disorder:** Pradeep Bhide, director of the Center for Brain Repair, received \$50,000 to further his research on a new drug to treat attention deficit hyperactivity disorder, more commonly known as ADHD. What makes Bhide's drug unique is that it won't carry negative side effects such as addiction, he said.

Most ADHD drugs are stimulants and some are even classified as a Schedule II controlled substance along with other highly addictive drugs such as Oxycontin and cocaine.

Bhide said that many people diagnosed with ADHD don't take drugs because they fear addiction. His drug would reach a broader market, he said.

"If we are successful, it will be the first safe ADHD drug on the market," he said.

The funding will allow Bhide to begin more advanced testing of the drug and further consideration of a start-up company Avekshan LLC.

**Glasses that could help prevent pre-term labor:** James Olcese, associate professor of biomedical sciences, received \$35,000 to help his work on a new product that could slow down and potentially prevent instances of pre-term labor.

Many women go into labor at night, when the birth-related hormone melatonin is at its peak. Olcese's research, conducted in partnership with pre-term labor patients from Tallahassee Memorial Hospital, found that when exposed to bright light overnight, the cells associated with contractions saw a drop in their melatonin levels, thus suppressing contractions and potentially delaying pre-term labor.

Based on these findings, Olcese and his team are now looking at constructing light-emitting glasses that women at risk for pre-term labor could wear as both a preventative and reactionary countermeasure.

The GAP funding will be used to begin testing how best to deliver flashes of light in these glasses without interrupting a woman's sleep patterns.

"We just have to figure out how much light and how often," he said.

**A design to personalize chemo treatments:** Jinfeng Zhang, assistant professor of statistics, will receive \$50,000 in two installments of \$25,000 to continue work on a new method to tailor chemotherapy treatments based on a person's genetic markers.

Chemotherapy has less than a 30 percent success rate and Zhang's preliminary studies projected a 42 percent success rate. Sometimes, failure can occur because the chemotherapy cocktail is too toxic for a patient's system and the side effects wind up causing additional health problems.

"A lot of patients are over treated," he said.

The money provided by GAP will help Zhang collect more data and do additional studies on the potential efficacy of his new system as well as develop his start-up company.

All GAP submissions are reviewed and selected by a committee of local business leaders. Winners report back to the committee nine months after receipt of the award to provide an update of their activity. Staff members from the Office of Commercialization and the GAP committee provide ongoing support to GAP participants through the pursuit of potential corporate partners, mentors and additional funding opportunities.

For more information about GAP, visit the FSU Research Foundation.