

Friday, June 5, 2009

OU researchers awarded \$1.2 million for health, science research

By **Dave Groves**, staff writer

A group of Oakland University researchers has been awarded a total of nearly \$1.2 million to advance studies intended to help improve people's health and perhaps even save lives.

Shravan Chintala, an associate professor at Oakland University's Eye Research Institute, recently received a \$740,000 grant from the National Institutes of Health to investigate the mechanisms at work in glaucoma that lead to blindness. Glaucoma is a leading cause of blindness in the United States and around the world.

Chintala believes his research will not only establish a better understanding of these mechanisms, but may lead to development of therapeutic strategies to reduce the frequency of vision loss in glaucoma patients.

Several other Oakland University researchers will be using American Recovery and Reinvestment Act funding, also awarded through the National Institutes of Health, to advance their studies, as well as to hire exemplary undergraduate students interested in reaping the intellectual benefits of real-world research opportunities.

"In and of themselves, each of these investigative projects holds the potential to produce new and vital insights of interest to both the scientific and health care communities," said Virinder Moudgil, Oakland University's senior vice president and provost.

"The fact that we have distinguished faculty members giving undergraduate students a chance to learn from and contribute to the findings that will emerge from these projects underscores Oakland's strong commitment to offer students a truly distinctive educational experience."

Bradley Roth, director of the Center for Biomedical Research, said benefits of the recently announced federal grants will be both far reaching and broad in scope.

"The last few months have been a unique and unprecedented time in biomedical research," he explained. "This funding to support biomedical research is exactly what Michigan needs to move its economy from a manufacturing base to a knowledge base."

Roth noted that in light of the new commitment to advancing scientific knowledge, OU researchers have welcomed news of the awards with a great deal of enthusiasm. "The faculty have responded with vigor, and we are now seeing what hopefully will be just the start of a stream of stimulus money coming to Oakland."

As part of the stimulus package awards, biomedical science professor Barry Winkler will receive \$359,920 for research testing his hypothesis that the absence of the antioxidant molecule glutathione in photoreceptor cells of the eye may be responsible for damage to these cells when under stress.

The research has important implications relative to overall understanding of the eye and vision, as well as to how conditions such as macular degeneration might be prevented and treated in the future.

"I feel very fortunate that President (Barack) Obama has shown such great support to the National Institutes of Health, and I'm particularly appreciative of Sen. Arlen Specter's role in this," Winkler said.

"As far as what this will mean in terms of the research, we believe it will actually lead to a complete paradigm shift in the way people think about photoreceptor cells and the way therapeutic treatments are developed."

Other grants announced thus far include:

- \$28,937 to Eye Research Institute Director Frank Giblin for his investigation into metabolic and biochemical properties of the lens, as well as formation of maturity-onset human cataracts that can cause blindness.
- \$15,700 to Associate Professor of Biomedical Sciences Kenneth P. Mitton for his work exploring gene-based therapy for retinal degeneration.
- \$21,161 to Associate Professor of Biomedical Sciences Andrew F.X. Goldberg for his efforts to understand retinal degeneration at the molecular level by studying affected protein structure and function.
- \$15,700 to Roth for his study of bioelectric phenomena, such as the electrical activity of nerves and muscle.
- \$18,248 to Associate Professor of Analytical Chemistry Xiangqun Zeng for her work to develop biosensors and chemical sensors for rapid detection of biomarkers and pollutants in complex clinical and environmental samples.

To learn more about research at Oakland University, visit the [Center for Biomedical Research Web site](#) and the [Eye Research Institute Web site](#).

SUMMARY

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