

Grants Make Research a Reality

By Marga H. Row

IN THE LAST FEW DECADES, RESEARCH GRANTS AT PENN STATE BERKS HAVE INCREASED EXPONENTIALLY.

Sixty percent of the 115 full-time faculty members conduct research in addition to their teaching duties, and much of this research is funded through grants from external agencies. In the 2010/11 academic year, Penn State Berks had twenty-five active grants that totaled \$1,007,672 in funding over the period of five years, from July 2006–June 2011.

A total of twenty-two proposals were submitted between July 1, 2010 and June 30, 2011, requesting a total of \$10,584,234. Of the twenty-two proposals submitted, eleven are pending.

Four new grants were awarded in the fiscal year 2010/2011. These grants include:



Walter Fullam (left) and Dr. Hassan Gourama (right), The Berks County Industrial Development Authority (BCIDA) awarded Walter Fullam, Director Continuing Education, and Dr. Hassan Gourama, Associate Professor of Food Science, \$50,000 as a grant match for the \$50,000 Department of Community and Economic Development (DCED) grant that they received in April 2010 for a project to create a Center for Agriculture and Food Innovation (CAFI) in Berks County. CAFI's mission would be to help the existing food and agricultural industry become more efficient, competitive, and responsive to ever-changing food trends and agricultural practices, as well as to focus on research, development, and processing of foods for the future—namely organic and natural foods, nutraceuticals, health and wellness foods, ethnic foods, and specialty foods. The project would help develop a more efficient means of transferring technology from university and government labs to food manufacturers.

Walter Fullam, The Greater Reading Keystone Innovation Zone (GRKIZ) awarded Walter Fullam \$7,991 for the project titled "A partnership between Penn State University Berks and Reading Electric Renewables to Explore the Feasibility of Solar Power Applications for Electric Vehicles." The purpose of this project is to design and install a

fully functional electric vehicle charging station. Penn State Berks has developed a plan to install a photovoltaic array behind the new Gaige Technology and Business Innovation Building. The array will be connected to equipment in the electrical engineering lab in order to provide students with the ability to monitor, measure, and perform experiments using power/electricity from an alternative energy source.

Dr. Hassan Gourama, The Greater Reading Keystone Innovation Zone (GRKIZ) awarded Dr. Hassan Gourama \$5,970 for the project titled "Determination of the Microbiological Guideline Levels to Monitor the Shelf Life of Mushrooms." The project is a collaboration between Penn State Berks and Giorgio Fresh Company. The objective is to determine the microbiological level criteria to monitor the shelf life of mushrooms at different storage temperatures. In addition to quality evaluation of mushrooms, this project will estimate the levels and types of spoilage and microorganisms occurring over time. This type of work will be relevant to mushroom producers who will be able to deliver to their customers a high quality product that is safe and has an extended shelf life.

Dr. Hassan Gourama, The Pennsylvania Department of Agriculture has awarded Dr. Hassan Gourama (Co-PI); Dr. Luke LaBorde (PI), Associate Professor of Food Science, University Park; Dr. Stephanie Doores (Co-PI), Associate Professor of Food Science, University Park; and Dr. Bhushan Jayarao (Co-PI), Professor, Department of Veterinary and Biomedical Sciences, University Park; \$33,862 for their project, "Microbial Survey of Pennsylvania Surface Water Used for Specialty Crop Irrigation and Development of Sampling and Handling Procedures for Surface Water Testing." The purpose of this project is to conduct an evaluation of microbial food safety risks associated with the use of surface water intended for irrigation of specialty crops in southeast Pennsylvania and to develop and validate the accuracy of procedures that farmers can use to test their water. This grant is effective from October 1, 2010 through June 30, 2011.