FAMU receives a $14 Million National Institutes of Health Grant

TALLAHASSEE, Fla. – Florida A&M University (FAMU) College of Pharmacy and Pharmaceutical Sciences (COPPS) has been awarded a $14 million grant to enhance its infrastructure to continue its efforts to conduct cutting edge research.

“One of the main criteria used to determine the quality of a university is the amount of research taking place by outstanding faculty and the funding obtained for them to conduct research on a regular basis,” said FAMU President James H. Ammons. “With this in mind, this announcement proves that Florida A&M University is rising to the occasion and meeting the standards of excellence.”

The grant award will support research projects such as drug discovery, neurodegeneration, nanomedicine, biotechnology and pilot projects,” said Henry Lewis III, research principal investigator and dean of the COPPS. “We are elated to have been selected by NIH and NCRR to conduct new and ongoing cutting-edge research which gives credit to our cadre of faculty who are devoted to finding new and improved ways to treat patients everywhere.”

In the area of drug discovery, the grant will aid in developing new drugs that can be used for the treatment of neurodegenerative diseases such as Parkinson’s; stroke; cancer (breast, prostate and lung); and emerging infectious diseases to uncover targets for therapy and translational research.

The neurodegenerative core will provide FAMU researchers with an understanding of neurotoxicity, the tendency of some treatments to cause damage to the nervous system, and its possible influence on the increased risk of neurological disorders and diseases such as Alzheimer’s, stroke and Parkinson’s. In the area of nanomedicine research, the grant will provide resources and expertise in the area of nanoparticles technology, which could be applied to imaging of various degenerative diseases like Alzheimer’s and stroke, and also target various receptors in disease states like cancer and Chronic Fatigue Immune Dysfunction Syndrome.

“The goal of the Research Centers in Minority Institutions Program is to develop and enhance the institutional capacity for conducting biomedical research at minority colleges and universities that award doctorates in health sciences,” said Barbara Alving, Ph.D., NCRR Director. “Florida A&M University’s College of Pharmacy has a long history of conducting research in pharmacology and toxicology and this award will allow the institution to continue to recruit established and young...
researchers, acquire more advanced instrumentation, and staff core laboratories to support the university’s research and research training efforts.”

FAMU is one of 18 locations that host the NCRR-supported RCMI Program, whose mission is to expand the national capacity for research in the health sciences.

With concentrations in pharmacology/toxicology, medicinal chemistry, pharmaceutics and environmental toxicology, the College has graduated more than 60 percent of the African-American Ph.D. recipients in the pharmaceutical sciences nationally.

Since 1985, FAMU has received RCMI support continually in excess of $40 million including construction funding for the research wing on the New College of Pharmacy Building. RCMI also funded laboratory animal facility improvements that were instrumental in the COPPS-receiving national accreditation of its research animal facilities, making FAMU one of 500 accredited facilities from 3,500 colleges and universities. RCMI has provided critical infrastructure to enable the College to achieve national prominence and become a competitive biomedical research center nationally. Since the inception of the RCMI Program at FAMU, the College of Pharmacy and Pharmaceutical Sciences has implemented four Ph.D. tracks in pharmaceutical sciences.

Drs. Henry Lee and Ann Heiman, both professors of basic sciences and previously funded RCMI investigators are scheduled to retire this year. Their research efforts have had a tremendous impact in the area of pharmaceutical sciences across the globe as well as made significant contributions to the pharmaceutical sciences profession.

Lee, whose research has been published in national and international journals that span more than three decades, has received several patents. While at FAMU, in 1986, he received a patent for Anti-inflammatory Prednisolone Steroids (4588536) and in 1998 for Anti-inflammatory Cartosy Pregnane Derivatives (4762919).

In the arena of research, Lee has discovered safer, yet potent drugs based on his new concept called antedrugs now recognized internationally. (Science, 215, 989-991, 1982) His work involved the synthesis and evaluation of anti-inflammatory steroids, anti-AIDS, and anti-cancer agents.

Heiman’s research interests are in the treatment of airway inflammation in chronic airway diseases such as asthma. Some of her research efforts include the following:

- Develop an individual response to various allergies;
- Design novel drug targets for treatment of airway diseases such as asthma and chronic obstructive pulmonary disease (COPD); and
- Reduction of allergy rhinitis (runny nose)

Other key COPPS researchers in the FAMU basic sciences that will benefit from the grant include the following: Karam Soliman, RCMI program director, distinguished professor and assistant dean for research; Kinfe Redda, professor; Mandip Sachdeva, professor; John Cooperwood, associate professor; R. Renee Reams, associate professor; Carl Goodman, professor; Nazarius Lamango, associate professor; Seth Ablordeppey, professor and director, basic pharmaceutical sciences; Donald Palm, professor and assistant vice president for Academic Affairs; Selina Darling-Reed, assistant professor; Karunya Kandimalla, assistant professor; Shawn Spencer, assistant professor, and other FAMU investigators.

This 2008 fiscal year, NIH-NCRR has funded 28 RCMI Research Centers nation-wide, totaling $53,000,000.

The National Center for Research Resources (NCRR) provides clinical and translational researchers with the training and tools they need to understand, detect, treat, and prevent a wide range of diseases. This support enables discoveries that begin at a molecular and cellular level, move to animal-based studies, and then are translated to patient-oriented clinical research, resulting in cures and treatments for both common and rare diseases. NCRR connects researchers with one another, as well as with patients and communities across the nation, to harness the power of shared resources and research and is based in Bethesda, Maryland.