



GSU

Dr. Willie Larkin
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INSIDE THIS ISSUE:

Engineering Technology 2

Teacher Ed 2

Air Force Research Lab 3

Student Safety 3

Geospatial Sciences 3

Sponsored Programs 4

Cancer Research 4

Official Newsletter for **SPONSORED PROGRAMS**

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Biology Faculty Spends Summer at Colorado State University

Dr. Paul Kim, assistant professor of Biology, is conducting research this summer in the laboratory of his mentor at Colorado State University. This research focuses on animal studies using a multi-omics approach.

Dr. Kim's research interests include obesity-related diseases, specifically non-alcoholic fatty liver disease (NAFLD). NAFLD is becoming one of the most common liver diseases. In some cases,

NAFLD progresses to the more severe non-alcoholic



Dr. Kim

steatohepatitis, one of the leading causes of liver cirrhosis in the United States. Kim is collaborating with researchers at Colorado State University and the Pennington Bio-

medical Research Center in an effort to better understand the cellular mechanisms that lead to disease development and progression. He has presented his research at annual meetings of the Southeast IDeA Conference, American Society for Cell Biology, Emerging Researchers National Conference, Louisiana Biomedical Research Network, and Louisiana Academy of Sciences.

Endowed Professor's Research Supports Cameroon and Sub Saharan Africa

Dr. Martin Ayim, Kinesiology Professor, is helping to address the problem of low health literacy in Cameroon and Sub Saharan Africa. This is being done by including health education and health promotion in school curricula

beginning at the kindergarten level. Ayim has developed a Blue Print of an Africa Model-*Comprehensive School Health Education Curriculum*. This model is easily tailored to meet a country's cultural values and educational system.

Ayim has authored both an English and French version of a textbook on this topic.



Dr. Ayim



Engineering Technology Major

“This preparation supports the technical workforce needs of the state of Louisiana and the nation. “

Newsletter Editor

Dr. Connie Walton

Interim Director of Sponsored Programs

For additional information regarding this newsletter please contact **Dr. Walton** at waltoncr@gram.edu.

Engineering Technology Receives \$60,000 Grant

The Engineering Technology department recently received a \$60,000 grant award from Simio LLC. **Simio LLC** is a private company located in Pennsylvania that provides leading edge solutions for the design, emulation, and scheduling of complex systems. The grant provides 25 copies of the Simio Academic Edition for installation on the department’s computers. This software supports simulation of systems that include airport operation, manufacturing, healthcare, banking,

and transportation. Dr. Olusegun Adeyemi, Department Head of Engineering Technology, pursued this opportunity. Adeyemi stated “I am very grateful to Simio LLC for this grant which will permit the department to continue preparing students for successful careers.” This software will enhance the training that is provided to Engineering Technology students. Students will be able to explore solutions to strategic decision making

problems encountered in various types of industries. This preparation supports the technical workforce needs of the state of Louisiana and the nation. The Engineering Technology programs have been accredited by the Engineering Technology Accreditation Commission of ABET since 2001. To learn more about the Engineering Technology programs please contact Dr. Adeyemi at adeyemio@gram.edu.

Teacher Education Professor and Students Attend Institute at Stennis Space Center

Teacher education majors, and their faculty sponsor, Dr. Loretta Walton Jagers, participated in the NASA Minority University Research and Education Project (MUREP) Educator Institute. This Institute was held at NASA-Stennis Space Center, June 6-10th. MUREP has a teacher preparation component that

targets increasing the diversity of STEM (Science, Technology, Engineering, Mathematics) teachers. STEM Professional Development activities began each day at 8:00 in the morning and ended at 5:00 pm. Prior to the summer workshops the teacher candi-

dates and the faculty sponsor completed two online courses. These courses served as an introduction for the summer workshop. Student participants were Ginger Abney, Sha’Nel Davis, Terry Bowman, La Daddie Dixon, Asia Scott, and Danyelle Cober.

Air Force Research Laboratory Collaborative Program

Dr. Yenumula Reddy offered a one week Summer Robotics Program for middle school students during the week of June 13th. This was the first time this program targeted middle school students. The Robotics program was funded as a component of the Air Force Research Laboratory (AFRL) Collaborative Program. Students participating in this

program were required to build and program Vex Robots. Seven students participated in this summer program and each received a \$300 stipend. Also a part of the AFRL Collaborative, three Grambling State University students are completing summer internships at Wright Patterson Air Force Base in Dayton Ohio. One Grambling

State University student is completing a summer internship at the USAF Rome Laboratory in Syracuse New York.



Robotics Program Participants & Teachers

Family & Consumer Sciences Professor and GSU Chief of Police Partner on Project

National data shows that 1 in 5 girls on college campuses have encountered some form of sexual assault. There is a huge effort across universities to address the issues that lead to these assaults. Dr. Frankie Rabon and Chief Howard Caviness are working on a project that will engage GSU female

students regarding safety. These students will have the opportunity to share concerns in various settings. Three methods are being used to collect data: classroom discussions; survival and self-defense-awareness classes; and written assignments. The overall goal of this project is to identify concerns that female

students have regarding safety and to equip them with the skills that are needed to reduce the probability of becoming a victim of sexual assault. For more information please contact Dr. Rabon at rabonf@gram.edu.



Dr. Rabon



Chief Caviness

President Investigates Geospatial Sciences Opportunity

During the Spring 2016 semester, Dr. Larkin visited the National Geospatial-Intelligence Agency (NGA). The purpose of the visit was to begin the initial ground work for learning about the procedure that universities follow to be recognized as a Geospatial Sciences

Center of Excellence. In June 2016 the Interim Director of the Office of Sponsored Programs, Dr. Connie Walton, attended a meeting that was held at Oak Ridge National Laboratory. The meeting addressed the importance of Geospatial Sciences to NGA. At the meeting, Walton was able to

network with representatives from universities that were designated as Centers of Excellence during 2015. Centers of Excellence in Geospatial Sciences are expected to graduate students who meet national workforce needs. These Centers benefit from NGA resources.



Value of Research

President Larkin has identified eight top priorities for Grambling State University, each of which are impacted by the research environment. One priority is related to increasing student enrollment. Many students select a university based, not only on the academic degree program, but on the experiences provided. An institution that is able to publicize the fact that students at the undergraduate level have the ability to engage in research, present their research findings, co-author publications, and travel to conferences, has a strong recruitment tool. This selling point is likely to close the deal with perspective students.

President Larkin's Strategic Plan includes increasing grant and contract funds received by the University to support reducing dependence on state funds. Increased grant funding has the potential to significantly improve the infrastructure. Research funds received support the acquisition of equipment, scientific instrumentation, library holdings, and in some cases, renovation of existing structures.

Faculty who engage in research and other creative works infuse this knowledge into the curriculum. This ensures that curricula remain connected to advances being made in the field. This in turn supports students graduating with skills that prepare them for success in the workforce.



Ernest Everett Just Endowed Professor Conducts Cancer Research

Some forms of cancer may be caused by exposure to environmental contaminants. Dr. Waneene Dorsey's research uses a toxicogenomic approach to identify molecular targets that cause the onset of cancer. This methodology combines toxicology and genomics to understand how molecular events lead to cancer through exposure to chemicals.

Ras mutation through signal disruption is seen in many tumor types, including roughly half of all colon cancers and 90% of pancreatic carcinomas. Dr. Dorsey is the recipient of a grant, from the

Louisiana Biomedical Research Network, that is funding the investigation of the *Ras*/MAPK pathway. This pathway is a key signal transducing system that facilitates cancer in mammalian cells. Dorsey is identifying molecules that turn on cancer gene proteins in mouse liver cells when they are exposed to organochlorine compounds. Once the molecular targets have been identified, they can be blocked by various chemicals. These chemicals have the potential to provide a medicinal tool to help prevent the onset of cancer.

Dr. Dorsey is a full professor of

Biological Sciences. For more information, please contact Dr. Dorsey at dorseywc@gram.edu.



Dr. Waneene Dorsey