Florida Agricultural and Mechanical University’s (FAMU’s) mission is to provide a high-quality, affordable education to students from diverse backgrounds. With 13 patents, FAMU has the only college of pharmacy nationwide that offers nationally accredited Master of Public Health and Doctor of Public Health degree programs. The U.S. News and World Report lists FAMU as the top public historically black college university in the nation for 2015. [http://www.famu.edu/](http://www.famu.edu/)
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Historic Lee Hall at dusk stands symbolic in the background of FAMU’s Eternal Flame in the quadrangle.
Florida A&M University Mission Statement

Florida Agricultural and Mechanical University (FAMU) is an 1890 land-grant, doctoral/research institution dedicated to the advancement of knowledge, resolution of complex issues and the empowerment of citizens and communities. Our faculty are committed to educating students at the undergraduate, graduate, doctoral and professional levels, by preparing our graduates to apply their knowledge, critical thinking skills and creativity in their service to society. The University remains fully committed to its historic mission of educating African Americans, while embracing persons of all races, ethnic origins and nationalities.

Some participants at a Student Research Forum (SRF) held in the FAMU School of Architecture and Engineering Technology; the SRF included faculty mentors and student presenters primarily from the STEM disciplines.

Where will your ideas take you from FAMU?
FAMU Division of Research Overview

The Florida A&M University (FAMU) Division of Research (DoR) is comprised of the offices of the vice president for research; sponsored programs; contracts and grants; technology transfer; animal welfare and research integrity; sustainability institute, export control and Title III programs.

The annual research funding for fiscal year (FY) 2013-2014 exceeded $42.4 million, with proposals submitted totaling over $83 million for the same period. Research at FAMU receives funding from a number of agencies such as: the National Science Foundation, Agency for International Development, National Aeronautics and Space Administration, National Oceanic and Atmospheric Administration, National Institutes of Health, U.S. Departments of Agriculture, Commerce, Defense, Education, Energy, Health and Human Services, Transportation, and private funds. The DoR supports our Principal Investigators (PIs) through the application of full life-cycle programmatic management to ensure Federal Acquisition Regulation (FAR) compliance, cost of schedule conformance, as well as final deliverables and project close out. The net effect is to ensure that FAMU is a good steward of our research funding.
FAMU’s 14 Colleges and Schools

FAMU was founded on October 3, 1887, as the State Normal College for Colored Students. Today, FAMU offers a total of 98 degree programs. The university offers 54 bachelor's degrees, 29 master's degrees, 3 professional degrees and 12 doctoral degrees. The three professional degrees include the J.D., Pharm.D., and the Doctor of Physical Therapy. The 12 doctoral degree programs include 11 Ph.D. degrees and one Doctor of Public Health (DrPH). The Ph.D. degrees include the following: biomedical engineering, chemical engineering, civil engineering, electrical engineering, mechanical engineering, industrial engineering, pharmaceutical sciences, physics, educational leadership, environmental science, and entomology.

With an enrollment of nearly 11,000 students, Florida A&M University is a proud member of the State University System of Florida and is accredited by the Southern Association of Colleges and Schools Commission on Colleges.

The degrees are offered through the following academic units:

- College of Agriculture and Food Sciences
- College of Engineering (FAMU-FSU)
- College of Pharmacy and Pharmaceutical Sciences
- College of Science and Technology
- School of Architecture and Engineering Technology
- School of the Environment
- School of Journalism and Graphic Communication
- College of Education
- College of Law
- College of Social Sciences, Arts and Humanities
- School of Allied Health Sciences
- School of Business and Industry
- School of Graduate Studies and Research
- School of Nursing

Transformative research is continual at FAMU!
Center for Biological Control (CBC) was formally established in 1999 as one of the Research Centers within the College of Agriculture and Food Sciences (CAFS). However, biological control research had been ongoing in the CAFS since 1976 with significant contributions being made to the taxonomy of weed biological agents and other areas. [http://www.famu.edu/cesta/main/index.cfm/research/center-for-biological-control/](http://www.famu.edu/cesta/main/index.cfm/research/center-for-biological-control/)

Center for Disability Access and Resources (CeDAR) provides comprehensive services and accommodations to FAMU students with disabilities. As an advocate for students with disabilities, the CeDAR collaborates with faculty, staff, and community partners to provide accommodations for the unique needs of students both in and out of the classroom. [http://www.famu.edu/index.cfm?cedar](http://www.famu.edu/index.cfm?cedar)

Center for Environmental Equity and Justice (CEEJ) is an information resource center to increase the community, faith-based organizations, state and local government and any other interested parties’ awareness of environmental justice issues primarily in the state of Florida and throughout the country. The CEEJ assists, trains, and educates people about environmental justice. [http://www.famu.edu/index.cfm?environmentalscience&CEEJ](http://www.famu.edu/index.cfm?environmentalscience&CEEJ)

Center for Ethnic Psychological Research and Application (CEPRA) has as its mission to promote mental wellness, enhance mental health literacy, and improve overall behavioral/mental health for all individuals with special emphasis on African American and other underserved populations. The mission is accomplished through research, education, and training. [www.famu.edu/cepra](http://www.famu.edu/cepra)

Center for Health Equity (CHE) was developed by the College of Pharmacy and Pharmaceutical Sciences to evaluate and provide solutions for the elimination of health disparities in underserved populations through research, education and building community linkages. [http://pharmacy.famu.edu/#](http://pharmacy.famu.edu/#)

Center for International Agricultural Trade, Development Research and Training (CIATDRT) has, over the past 43 years, through the College of Agriculture and Food Sciences (CAFS) established a successful record of accomplishment in the design and implementation of international projects in the developing world (Africa, Asia, the Caribbean, Latin America and South America) through international collaborative research and development assistance partnership initiatives through a variety of public and private donors. Website: [http://www.famu.edu/cesta/main/index.cfm/international-agriculture/research/](http://www.famu.edu/cesta/main/index.cfm/international-agriculture/research/)
Center for International Law and Justice (CILJ) seeks to develop scholarly, educational, and practice-orientated activities for students and faculty. The CILJ endeavors to be the nation’s leading center of excellence in research, training and advocacy in the international and comparative law of developing nations.
http://law.famu.edu/current-students/academic-programs/center-for-international-law-justice/

Center for Plasma Science and Technology (CePaST) housed in the Department of Physics at FAMU, is to become the premier center for the study of plasmas in the state of Florida. CePaST is home to a highly successful team of faculty, students and researchers dedicated to the new science and new applications of theoretical, experimental, and computational Plasma Physics. The center is the flagship of FAMU’s commitment to comprehensive research excellence with technological impact.
http://www.physics.famu.edu/cepast.php

Center for Secure Computing and Information Assistance (CSCIA) strives to promote, coordinate, and implement education, research and innovation in Information Assurance (IA). Participation in CSCIA research projects and educational endeavors is open to faculty, visiting scholars, undergraduate and graduate students, students from diverse disciplines and underrepresented populations.

Center for Viticulture Science and Small Fruit Research (CVSSFR) was established by the Florida legislature in 1978 in accordance with Senate Bill No. 898 identified as the "Florida Viticulture Policy Act" to provide leadership, undertake research, extension and development activities that will contribute to industry growth and development.
http://ucanr.edu/sites/NCPNGrapes/Grape_Centers/Florida_A-M_University/

Center for Water and Air Quality (CWAQ) supports undergraduate and graduate teaching programs in soil and water sciences and provides research opportunities for experiential learning in natural resources program areas.
http://www.famu.edu/cesta/main/index.cfm/research/center-for-water-and-air-quality/

Environmental Cooperative Sciences Center (ECSC) as part of the National Oceanic and Atmospheric Administration (NOAA) works to train a new generation of environmental scientists in NOAA-related sciences, and to develop the natural and social science tools for integrated assessments of ecosystem health in support of coastal environmental decision making.
http://www.ecsc.famu.edu/

Institute for Building Sciences (IBS) endeavors to foster excellence in scholarly inquiry, research, and service activities that increase knowledge, enhance the environment, and serve mankind.
http://www.famu.edu/index.cfm?Architecture&ResearchandService

Institute of Public Health (IPH) specifically has the mission to develop and produce culturally competent public health practitioners and leaders through graduate training, research and service.
Website: http://www.pharmacy.famu.edu/iph/

Institute for Research in Music and Entertainment Industry Studies (IRMEIS) was created to assess the current and future state of popular music in America through the development of innovative student-centered programming and research.
http://www.famu.edu/index.cfm?DepartmentofMusic&AbouttheInstitute
Juvenile Justice Research Institute is committed to reducing the overrepresentation of minority youth entering, or at-risk of entering, the juvenile justice system by developing and advocating the use of research driven best practices in prevention, intervention, treatment, and aftercare/re-entry services.  http://www.famu.edu/index.cfm?jjri

Meek-Eaton Southeastern Regional Black Archives Research Center and Museum is located on the historic campus of FAMU in the Carnegie Library. Construction on the library started in 1907 and the facility officially opened to the public in 1908. It was the first Carnegie Library built on a black land-grant college campus. The library was also the institution's first brick veneer building. In 1976, Carnegie Library became the founding home of the Black Archives Research Center and Museum. In 1978, Carnegie Library was listed on the National Register of Historic Places.  http://www.famu.edu/index.cfm?blackarchives

Small Business Development Center (SBDC) has access to robust databases, business research resources, and knowledgeable experts who can help you successfully navigate the obstacles that come with innovating, launching, growing, renewing, and transitioning a business.  http://sbdcfamu.org/

Sustainability Institute at FAMU is about the teaching, research and application of environmental and resource stewardship so people and planet can prosper.  http://sustainability.famu.edu/ or https://www.facebook.com/sustainableFAMU
FAMU Hosts Cutting-Edge Nanotech Conference
By Tom Flanigan * May 21, 2015

The following includes excerpts from the above website.

Florida Agricultural and Mechanical University hosted the International Workshop on Biologically Enabled Self Assembly in collaboration with the University of California - Davis and the International Institute for Complex Adaptive Matter from May 20 to May 22, 2015. The keynote speaker was Ned Seeman of New York University, known as the father of DNA (Deoxyribonucleic acid) technology. The workshop showcased one of FAMU President Elmira Mangum’s priorities for the University she has led since last year: establishing collaborative relationships with leading scientists from around the world.

“The new administration wants to raise the research standard here at FAMU. And having very good research is also very helpful to teach students,” said FAMU physics Professor Mogus Mochena. He added the workshop focused on DNA’s potential as a blueprint for useful non-living structures… such as solar power or the cures for different diseases.

For instance, Dr. Mochena explained, DNA technology might be able to unlock the secrets of degenerative diseases, such as Alzheimer’s. “The cause for that is what are called amyloid fibrils, and these are protein structures. So if you understand how proteins assemble, how they come together, then you could have an answer for this important problem,” Mochena said.

Researchers have also used self-assembled proteins for tissue growth and healing. But FAMU’s chief sustainability officer, Abena Ojetayo said there’s another reason the university is excited about this topic. “It cuts across the disciplines. And the Sustainability Institute at FAMU was created to catalyze these kinds of interactions, to encourage the kind of interdisciplinary work that forces you out of your labs into connections, into conversations with others in different fields,” Ojetayo said.

Those conversations unfolded over three days, with 20 scientists giving presentations and meeting with FAMU students and faculty.
Collaborative research team flourishes with the right mentor

One visit to the National Magnetic Field Laboratory (MagLab) at Florida State University allowed a collaborative esprit de corps to blossom—the consortium of research attendees working with Subramanian Ramakrishnan, Ph.D., associate professor, Department of Chemical and Biomedical Engineering, FAMU-FSU College of Engineering, was in a word—amazing! When dean of the dyadic learning community, Yaw D. Yeboah, Sc.D. notes: “One college, two universities, twice the opportunity.”

Equipped with a state-of-the-moment lab in the MagLab, grants from the National Science Foundation, Department of Defense, and the National Aeronautics and Space Administration, to name a few, Dr. Ramakrishnan is about the business of training a new generation of research scientists to help solve a large number of world-wide problems. He’s also facilitated students’ research internships and fellowships through Argonne National Laboratories and Thurgood Marshall College Fund, Inc., respectively.
Overview: Holistic (in contrast to the partial solvent extraction) chemical analysis of heterogeneous samples in a complex matrix has been difficult due to the limited separation technology. The alternative would be the bulk elemental analysis but it gives little information about the chemical nature of the compounds in a sample. We developed the Multi-Element Scanning Thermal Analysis (MESTA) technology to fill this analytical gap and successfully applied it to the direct analysis of aerosols with sensitivity, precision, accuracy and cost-effectiveness. MESTA characterizes the thermochemical properties of the compounds, in terms of their quantitative C, N, S and H thermograms, in heterogeneous solid, liquid or mixed samples. We realized that MESTA is a powerful tool in the analysis of energetic materials such as petroleum, biofuels, coals and oil sands. For example, in a crude oil analysis MESTA can quickly determine the quantity of possible petroleum end products and their associated polluting impurities (contents and forms of Sand N compounds) in each end product. Similar analysis can be applied to oil sands, biofuels and coals. In academic research of geo, soil and environmental sciences, MESTA can be applied to many heterogeneous samples and reveal important chemical information that is not available previously. Researchers currently use sophisticated methods such as the solid-state NMR, X-ray photoelectron spectroscopy (XPS) and X-ray absorption near edge structure (XANES) to get comparable information but those sophisticated methods are costly and not available to most workers. MESTA is relatively simple and can be used in the routine inspection of products of food and pharmaceutical industries for quality control and assurance purposes. Government agencies can use the MESTA technology for routine inspection of heterogeneous substances for security and regulatory purposes.

Keywords: heterogeneous samples, multi-element, thermal analysis, energy substances, industrial product inspection, academic research

Intellectual Merit: The development of the MESTA technology fills a gap in the holistic (in contrast to the partial solvent extraction or the total bulk elemental) chemical analysis of heterogeneous samples of solids, liquids and their mixtures. It is an alternative to the sophisticated methods such as the solid state NMR, X-ray photoelectron spectroscopy (XPS) and X-ray absorption near edge structure (XANES), which are costly and not available to most workers. MESTA reveals the thermochemical property of compounds in a heterogeneous sample with sensitivity, precision, accuracy and cost-effectiveness. Application of the MESTA technology will fill the gap of the analytical needs of industry, academic research and government agencies.

Broader Impacts: Substance characterization and identification are keys to many security issues of our society. The cost and tediousness of some current analytical procedures often prevent us from sufficiently inspecting suspected substances. MESTA can provide a solution to many of such problems. For example, a port authority can quickly examine the chemical property of suspected substances for quality assurance of the goods and for security reasons. MESTA technology, therefore, can provide a simpler and cost-effective solution to improve public safety and quality assurance of the consumer goods.
FAMU Professor conducts Soybean Research in Turkey

*National Science Foundation (NSF) funded research has global impact*

FAMU biology professor Gokhan Hacisalihoglu, Ph.D., stands at the School of Engineering and Natural Sciences’ entrance at Sabanci University in Orhanli – Tuzia, Istanbul, Turkey.

FAMU professor in biological sciences is back in the classroom after researching an alternative food crop plant that may be needed to feed a world population estimated to reach nine million by 2050. Dr. Gokhan Hacisalihoglu researched soybeans (*Glycine max*) and phosphorus deficiency in Istanbul, Turkey during the 2014 fall semester at Sabanci University at a lab funded by the NSF and under the supervision of the FAMU biology professor studies genetic mechanisms that cause phosphorus and zinc deficiency stress in plants. His research and collaborative studies in soybeans focuses on the effects of phosphorus deficiency in seed composition and its ability to impede deficiency tolerance in soybeans.

“Higher nutrient efficiency means the plant can use limited phosphorus resources more efficiently, which in return contributes to more environmentally friendly and sustainable agriculture,” said Hacisalihoglu. “Phosphorus deficiency stress can cause purple or brown leaf coloration, especially in acidic soils,” he added. VP for Research, Timothy E. Moore, Ph.D., noted: “The value of Dr. Hacisalihoglu’s work is invaluable as we’re now able to better understand ways to overcome nutrient deficiency in food crops, in order to better grow soybeans. By 2050, two billion more people will inhabit the Earth; work like that of Dr. Hacisalihoglu will help to feed mankind. We’re so glad that the National Science Foundation (NSF) sees the value of this type work and we are appreciative of their ongoing support of research at FAMU.”

Currently, significant research that documents the intersection of physiological plant biology, genetics, and seed science is underway. After completing a doctorate and post doctorate studies at Cornell University, Hacisalihoglu joined the FAMU faculty in 2003 as a professor of biology and plant biology. He has authored over 30 publications. Most recent publications include *Development of X-Ray Micro Computer Tomography (MicroCT) for Seed Density and Volume Phenotyping of Soybeans (Glycine max)* in 2015 and a presentation at the 5th Annual FSU Life Sciences Symposium.
The National Science Foundation (NSF) Division of Materials Research awarded FAMU a $100,000 grant to fund a project entitled “Early-concept Grants for Explanatory Research (EAGER): Magnetic Interrogation of Mesoscale Materials.”

EAGER is a materials research program that brings together the disciplines of physics, chemistry and engineering. The grant dollars will fund a pilot program housed at the National High Magnetic Field Laboratory (NHMFL), in Tallahassee, FL, which is the world’s highest-powered magnet laboratory.

The research will focus on: the development of sustainable energy systems that take advantage of catalytic water splitting using magnetic nanoparticles; novel hard/soft magnets that present the potential to substantially decrease the country’s dependency on the imported rare-earth metals; and novel nuclear magnetic resonance techniques to characterize the self-assembly mechanisms in peptides.

“This will be the beginning of great research collaboration between FAMU and the NHMFL and will have a huge impact on research capacity of FAMU,” said physics Professor Mogus Mochena, Ph.D., the project’s principal investigator. The grant proposal was a collaborative effort between Dr. Mochena, chemistry Professor Nelly Mateeva, Ph.D., and FAMU-FSU College of Engineering Professor Subramanian Ramakrishnan, Ph.D. The project will also enlist the research talents of faculty members from FAMU’s Departments of Physics and Chemistry, the FAMU-FSU College of Engineering and faculty members from Florida State University’s Departments of Physics and Chemistry.
Dr. Mochena says the research will focus on multiple components, including sustainable energy production systems that take advantage of water splitting, which is the separation of water into oxygen and hydrogen with the intent of extracting hydrogen. Hydrogen is a clean source of energy and is the basis for what is known as the hydrogen economy, a system of delivering or storing energy using hydrogen. Researchers will study magnetic molecules as facilitators to speed up the releasing of oxygen during the splitting process.

The project will also explore ways of synthesizing novel hard and soft magnets that have the potential to substantially decrease the United States’ dependence on imported rare-earth metals. In addition, researchers plan to study a select series of peptides (shorter versions of proteins that consist of two or more amino acids), which self-assemble in water solutions to form nano-structured hydrogels. This research should result in a number of technological applications, such as drug delivery, tissue scaffolds for stem cell regeneration and antimicrobial/ biodegradable packing.

Dr. Mochena believes the successful completion of the program will provide FAMU researchers with opportunities to acquire millions of dollars in additional grant funding from the NSF Partnership for Research and Education in Materials, as well as further the University’s efforts to help strengthen the nation’s science, technology, engineering and mathematics (STEM) workforce.

Dr. Ramakrishnan (seated) works on a National Science Foundation funded project with undergraduates Jason Madinya and Danica Thomas on the interpretation of the rheology of colloidal gels, which is currently being measured on the rheometer.
High-Performance Simulation of the Quantum Control of Laser-Plasma Coupling

Scattering Processes in Astrophysical Plasmas and the Geocorona

Spheromak Turbulence Physics Experiment (STPX)

Particle Physics in High-Temperature Plasmas
Charles A. Weatherford, Ph.D.
FAMU Division of Research, CePaST
Charles.weatherford@famu.edu
850-599-3767

Ronald Williams, Ph.D.
FAMU Physics
Ronald.williams@famu.edu


Collaborators--Earl Scime, West Virginia University
Ed Thomas, Auburn University
Simon Woodruff, Woodruff Scientific

The FAMU-STPX stands approximately 4 meters high and 2 meters wide at the vacuum vessel.
- The STPX achieves plasma temperatures of 300 eV,
- plasma currents of approx 600 kA
- with a pulse duration of 5ms.
- Elec den $10^{19}/m^3$

Measurements of electron and ion temperature and magnetic field fluctuations.
Manipulation of the stable Taylor state with pulsed RF and TeraWatt femtosec laser pulses.
Controlling impurity content including the physics of microparticle transport in fusion plasmas.

- The primary goal was to build the world’s largest spheromak reactor.
- The research studies the scaling (both in space and time) of turbulent processes which influence the loss of particles from the core to the edge of the spheromak plasma.

- The Spheromak was successfully constructed and first plasma was achieved July 17, 2012.
- The STPX is the world’s largest Spheromak reactor.
Second Annual STEM Day Succeeds Its Mission

Historically Black Colleges and Universities – Undergraduate Program (HBCU-UP)

On March 28, 2015, the College of Science and Technology (CST) hosted the Second Annual Science Technology Engineering Mathematics (STEM) Day. This is an outreach event for middle and high school students intended to increase their interest in pursuing STEM careers. STEM Day is one of the signature initiatives in the college’s National Science Foundation (NSF) Historically Black Colleges and Universities – Undergraduate Program (HBCU-UP) project. Over 350 participants attended this year’s event; including parents, faculty, staff and 200 middle and high school students. The theme of STEM Day 2015 was FAMU CSI “Crime Scene Investigation,” which involved the use of various “crime scenes” to provide students with hands-on problem solving experience in STEM disciplines.

During the day, there were speakers from all walks of life conducting different concurrent sessions. One such speaker was Rashad Sullivan, M.D., a FAMU graduate and currently a resident physician, training in Orthopedic surgery at Wake Forest Baptist Medical Center. Dr. Sullivan shared his personal journey on becoming a physician along with the obstacles he overcame to bring his dream into fruition. Other speakers included: Mr. Mark Branch (aka DJ Scientific), an Aerospace Engineer from NASA; Clifford Stokes, Jr., an Information Technology Consultant; and Desmond Stephens, Ph.D., FAMU Associate Professor of Mathematics. Dr. Stephens’ workshop showed students how mathematics and the basic interest principle can help them avoid debt, finance college, and save.

A portion of the day also exposed the parents and students to the various programs offered at FAMU. CST partnered with 13 University departments for the Science Expo during STEM Day. The students and their parents had an opportunity to talk with representatives of programs such as the College of Pharmacy and Pharmaceutical Sciences, the FAMU-FSU College of Engineering, and the School of Nursing. The success of STEM Day 2015 was made possible due to the involvement of the FAMU Industry Cluster and on-campus support. Pamela Zachery and the Office of University Advancement acquired funding and supplies from several Industry Cluster members, including Lockheed Martin, Coca Cola, Allstate, 3M, HP and Chicago Bridge and Iron. Our on campus support came from the College’s NSF HBCU-UP grant, the Division of Research, the Office of Student Activities, and the NSF-partnered Florida Georgia Louis Stokes Alliance for Minority Participation (FGLSAMP). Overall, the day was met with excitement and great success and we hope next year will be an even bigger event both for the College of Science and Technology and Florida A&M University.
Florida A&M University and the National Science Foundation

Creating Opportunities in STEM: Graduate Research Fellowship Program (GRFP)

An NSF supported Research Experience for Undergraduates (REU) at FAMU continues to provide research training for up to eight students for 10 weeks, during the summers, since 2012-2015. FAMU’s REU offers undergraduates from colleges and universities that have limited research opportunities a distinctive summer research experience in the biotechnology-related fields. Dr. Virginia Gottschalk, Principal Investigator (PI) has established a facility for genomics research and, bioinformatics in the Department of Biological Sciences and is supported by a multidisciplinary team of experienced faculty from the biological sciences, agricultural sciences and chemistry at FAMU, the University of Florida (Gainesville) and the Tallahassee Community College.

The team will provide an intensive, stimulating research experience for 30 undergraduate students in cohorts of 10 participants per year from 2012-2014. The major goal of this project is to provide research experience in cutting-edge technology to young adults as part of their undergraduate education to stimulate their appetite for graduate studies and careers in the life sciences. This program will introduce the students to research methods and ethics, Responsible Conduct of Research (RCR), followed by problem-based research under the guidance of a Ph.D. level mentor. The program will also include visits to other laboratories at neighboring universities and university-hosted facilities, i.e., The National High Magnetic Field Laboratory, to broaden students’ exposure to main stream research. Sample projects include, but are not limited to: a) genetic engineering of plants to impart resistance to abiotic and biotic stresses, b) unraveling disease pathways in model organisms, c) molecular and cellular studies to understand the defenses against immune attack by pathogens and d) bioinformatics to predict and model the gene-gene interactions and networks.

This REU program involving students working with a multidisciplinary team of expert mentors will advance scientific discovery while at the same time promoting learning and retention of under-represented minorities in STEM field. Such a program will benefit society in several ways, 1) by promoting national food security, 2) safeguarding the environment and 3) advancing economic development as it generates a more diverse group of scientists for the future. Research results accruing from this program will be presented at conferences and disseminated in peer-reviewed publications as part of the assessment of the program’s success.

For more information, please contact:
The PI, Dr. Virginia Gottschalk,
(virginia.gottschalk@famu.edu, 850.561.2750).
The co-PI, Dr. Ramesh Katam
(ramesh.katam@famu.edu, 850.599.3908).

At right: Ramesh Katam, Ph.D., FAMU molecular and cellular plant biology professor (fourth from left), of the Department of Biological Sciences, visited the National Institute of Genetics, Mishima City, Japan and held discussions with Professor Nori Kurato (third from right) and her group on Applications of Proteomics Research in Agricultural Crops. Professor Kurato is a member of the Science Council of Japan. FAMU and the Japanese Institute collaborate with other institutes to conduct and discuss their diverse, yet related research topics.
### Highlights of the National Science Foundation Awards at FAMU

<table>
<thead>
<tr>
<th>Award Number</th>
<th>Award Date</th>
<th>End Date</th>
<th>PI Name</th>
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<td>DBI-1156900</td>
<td>3/1/2012</td>
<td>2/29/2016</td>
<td>Gottschalk, Virginia</td>
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<td>9/1/2012</td>
<td>8/31/2015</td>
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<td>9/30/2015</td>
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<td>6/15/2013</td>
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<td>7/31/2017</td>
<td>Edington, Maurice</td>
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<td>5/31/2016</td>
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<td>EAGER: Magnetic Interrogation Of Mesoscale Materials</td>
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<td>9/30/2015</td>
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<td>I-Corps: Multi-Element Scanning Thermal Analysis (MESTA) Technology for Industry, Academic Research and Other Applications</td>
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</table>

**TOTAL AMOUNT**: $7,022,297

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Pictured is Dr. Maurice Edington, Professor and Dean, FAMU College of Science and Technology and one of NSF’s award recipients.
Florida Agricultural and Mechanical University is an Equal Opportunity/Equal Access Employer, including minorities, women, veterans and individuals with disabilities. The successful candidate is subject to a pre-employment screening which includes a review of criminal records, reference checks and verification of education. Please call 850-599-3076 if accommodation due to a disability is needed to apply for this position. This search is being conducted under Florida law, including the Sunshine law and public records law.