Florida A&M University’s College of Agriculture and Food Sciences (CAFS) hosted an unveiling of its new Gallery of Distinction during an induction and re-dedication ceremony on October 30, 2014. Such a ceremony had not been held by the college since 2002. A reception followed immediately after the program. The event was one of the highlights for university alumni during the week of FAMU’s 2014 Homecoming Celebration. FAMU President Elmira Mangum, PhD, was the keynote speaker. Six former FAMU graduates were inducted into the gallery and celebrated for their contributions to the college:

- **Billie L. Dean**, M.S., Apopka City Commissioner
- **Chester Alton Gipson**, D.V.M., Deputy Administrator of Animal Care for the United States Department of Agriculture’s Animal Plant Health Inspection Service
- **Gwenuel Mingo**, Ph.D., Retired Cooperative Extension Agent
- **Ray Mobley**, D.V.M., FAMU Cooperative Extension Program Director of Veterinary Services
- **Henry G. Wall**, Ph.D., Owner and President of Wall Pathology, LLC
- **John Lewis Williams**, D.V.M., President of WJ Lewis & Associates, Inc.

“As the university moves ahead into a new season of leadership, we wanted to re-dedicate the Gallery of Distinction and provide a unique opportunity for our alumni and supporters to be permanently written into the history of Florida A&M University,” said Mrs. Gilda S. Phills, Director of FAMU CAFS’ Office of Student Support Services, Alumni Affairs and Retention, and Gallery of Distinction Committee Chair. Each year, CAFS will encourage new nominations for induction into the Gallery of Distinction from the following:

- Former graduates who: (1) earned an undergraduate degree or higher from one of the academic disciplines within the college under its current or former structures and names and (2) have demonstrated significant contributions and achievements to the college and to society – locally, statewide, nationally, and/or internationally.
- Non-graduates, former deans, research directors, extension administrators, division directors and strong supporters of the college.

(See Gallery on page 6)
2014 Gallery of Distinction Induction and Rededication Ceremony
Solís Receives Faculty Research Award

Daniel Solís, Ph.D., Assistant Professor for the College of Agriculture and Food Sciences’ Agribusiness Program, recently received the 2014 - 2015 Faculty Research Award for his research project: "The Effect of IFQs on the Total Productivity of the U.S. Gulf of Mexico Red Snapper Industry"

This project strives to answer the following research question: What has been the real economic impact of the Individual Fishing Quota (IFQ) program on the US red snapper fishery? Red snapper is one of the most economically important food fish in the US Gulf of Mexico, with about 3.46 million pounds of red snapper, worth over $13 million dollars, landed in 2012.

According to Dr. Solís, the results from this study will be useful for both fishers and policymakers, as fishers could use the information to improve their performance, and the study could assist policymakers in identifying and targeting public interventions to improve productivity, resource conservation and income. One of the expected outcomes of this research project is to develop metrics for the evolution of productivity indexes with regards to technological progress, technical efficiency and stock change.

Research data will be collected from the National Marine Fisheries Service (NMFS) Southeast Coastal Fisheries Logbook Program in Miami, and the Permits Information Management Systems (PIMS) databases located in Jacksonville, Florida.

The outcome from this research will be presented to key stakeholders (fishery managers and the National Oceanic and Atmospheric Administration). A scientific paper summarizing the results will be published in a special issue of the journal Marine Resource Economics and presented at the 2015 Southern Agricultural Economic Association Annual Meeting in Atlanta, Georgia. For more information on this research project or the CAFS Agribusiness Program, please contact: Daniel Solís, Ph.D., at (850) 561-2924 or daniel.solis@famu.com.

Hsieh Creates New Tool to Solve Old Problem

Agricultural air quality is an emerging research topic in the national agenda, and FAMU’s College of Agriculture and Food Sciences (CAFS) is taking a lead in this research area. The CAFS Center for Water and Air Quality has a head start in this area as its researchers have been awarded nationally significant, competitive grants by the National Science Foundation and the U.S. Department of Agriculture.

Leading the research in agricultural air quality projects at FAMU is Yuch-Ping Hsieh, Ph.D., who has developed the multi-element scanning thermal analysis (MESTA) technology, a novel tool for rapid and holistic analysis of aerosols and other environmental samples.

“We are using a new tool for an old problem,” said Hsieh. “We use MESTA to analyze the aerosol – a very tiny particulate matter (PM) in air.”

“The reason we study these tiny particles in the air is because they are easily transported over a very long distance and can remain airborne for a very long time.” said Hsieh.

“Now we understand that the atmospheric transportation of those particles is much more significant than what we previously thought. For example some desert storms happen in Africa and Asia, and we receive the (particulate matter) in precipitation... thousands of miles away.”

Hsieh’s research on PM pollution uses MESTA techniques to analyze them and calculate their emission factors. This process allows him to differentiate biomass burning generated aerosols from fossil fuel burning generated aerosols.

Hsieh is using MESTA technology to research the effects prescribed burning has on the air quality in nearby forests. Because smoke (particulate matter) has a tendency to travel, its particles can appear many miles away from the original source of the fire.

The effects of fire-emitted particles on air quality can have a global impact on the atmosphere, and for this reason Hsieh believes his research will help estimate the effects forest fires on environmental and climate conditions.

In 2011, USDA Secretary Vilsack established the National Agricultural Air Quality Task Force and appointed Hsieh as a member of the Task Force through 2013. Hsieh, who over the past ten years has developed an outstanding agricultural air quality research program for the college, also serves on various subcommittees for Climate Variability and BioEnergy and Emission Quantitation, Mitigation and Variation.

For more information on research conducted at the FAMU CAFS Center for Water and Air Quality, contact Hsieh at yuch.hsieh@famu.edu.
Thalika Saintil, a graduating senior from Haiti, is an agricultural sciences major with a concentration in agronomy who earned a paid internship this summer at the United States Department of Agriculture’s (USDA) National Soil Erosion Research Laboratory in conjunction with Purdue University. She participated in the internship from May 19 – August 15, 2014.

Saintil was assigned to conduct a Tile Riser Study at the USDA National Soil Erosion Research Laboratory located in Indiana. Originally from Haiti, Saintil has also conducted research at Florida A&M University’s Center for Water and Air Quality located in the College of Agriculture and Food Sciences. According to Saintil, algal blooms in the Lake Erie Basin are caused by an accumulation of sediments and nutrients from agricultural fields. This in turn depletes the shallow waters of oxygen during the summer. Blind inlets and tile risers connected to subsurface drainage systems have been proven to act like direct channels into water bodies.

“Our study focused on identifying a cost-efficient way to prevent sediment from entering the drainage system by using a silt sock on the tile riser,” said Saintil. Remediation agents (slag and charcoal) were added to the socks to remove some of the nutrients. The main goal was to implement silts socks on tile risers to remove some of the nutrients and sediment that otherwise would later pollute water bodies.

Congratulations to the College of Agriculture and Food Sciences (CAFS) Center for Water and Air Quality for winning First Place in the inaugural recycling bin decorating competition held at Florida A&M University in October 2014. The CAFS Animal Science Club received the Second Place award. CAFS’ recycling bin “completely embodied the spirit of this competition,” the judges said. Awards included a $200 cash prize, pizza party sponsored by Metz, Sustainability Institute Recycling Bin Beautification Certificate, and selection of the on-campus location for the bin. Winners of the competition were announced at the Florida A&M University Homecoming football game held Saturday, November 1.
Seniors Land Paid Research Internships at University of Delaware

Three College of Agriculture and Food Sciences (CAFS) students landed significant, paid internships and employment this last summer as a result of their work and research as students at Florida A&M University (FAMU).

Prian Esquivel, an agronomy major who has worked at FAMU’s Center for Water Quality for nearly two years, secured an internship through the University of Delaware’s (UD) Delaware EPSCor Summer Scholars program. Quincy Hardy, a food science senior, also participated in a summer internship at UD at the invitation of the Delaware Environmental Institute (DENIN). Walter Hawkins, an agronomy major, successfully obtained a hydrology field technician position with the United States Geological Survey in Tallahassee, Fla.

Esquivel worked in the laboratory of Donald L. Sparks, S. Hallock DuPont Chair in Soil and Environmental Chemistry and Director of DENIN. Under the mentorship of graduate student Josh LeMonte, Esquivel studied the potential effects of ocean water intrusion on contaminants in soils. He is in the process of establishing his own project pumping ocean water through soil samples to study the effects on arsenic mobility.

“[Dr. Sparks and my lab mates] have shown me what goes into research — the discipline, the effort, the determination that you need in order to go through each day and complete what you need to complete. It’s a process,” said Esquivel. “This has been a great opportunity.”

Hardy worked in the laboratory of Rolf Joerger, a professor in the Department of Animal and Food Sciences at UD. His summer research focused on the food-borne pathogenic bacterium Salmonella and the genetic basis for its tolerance of antibiotics and the acidic environment of the stomach. This basic research potentially lays the foundation for developing medication against food poisoning. Hardy stated this was the first time he had worked in a real research laboratory, and the work he did there complemented courses he took at FAMU. He said this experience is preparation for graduate school.

“We are extremely grateful to Christy Crandall, senior hydrologist in the Center, who has mentored our students, during their time as undergraduate researchers – helping them become proficient with hydrologic field sampling methods, including making flow and discharge measurements, collecting field parameters using a number of different types of instrumentation, and surveying,” said Katherine Milla, Ph.D., Assistant Professor, at FAMU CAFS.

Delaware’s EPSCoR program provides paid research internships for about 30 students each summer, as well as a weekly seminar series, career information and other resources for students in STEM fields — science, technology, engineering, and mathematics.

FAMU’s Center for Water and Air Quality supports undergraduate and graduate teaching programs in soil and water sciences and provides research opportunities for experiential learning that address water and air quality and the sustainability of natural resources and the environment.

The Delaware Environmental Institute (DENIN), founded at UD in 2009, is an interdisciplinary incubator of research, knowledge and solutions specifically dedicated to safeguarding the environment and addressing environmental issues. DENIN provides academic, government and industrial partners with broad access to experts from multiple disciplines in a collaborative effort to advance environmental science, promote environmental education and devise innovative, multidimensional strategies for environmental sustainability.

EPSCoR, the Experimental Program to Stimulate Competitive Research, is a federal grant program led by the National Science Foundation (NSF) to help states develop their research capabilities and institutions. NSF has the largest EPSCoR initiative and is the lead agency for this program. Five other agencies participate in EPSCoR (the Department of Energy, the Department of Defense, the Environmental Protection Agency, NASA, and the Department of Agriculture).

Editors Note: This article contains portions written by Sean Krepski, University of Delaware.
Kevin L. Farmer, a 2001 graduate of the Biological and Agricultural Systems Engineering (BASE) program within the College of Agriculture and Food Sciences, was recently selected to serve as the new National Watershed Rehabilitation Program Coordinator for the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) located in Washington, D.C., within the NRCS Conservation Engineering Division.

Farmer’s primary responsibility is to work closely with states to coordinate, manage and ensure successful operation of the Program and provide leadership for the Rehabilitation of aging Flood Retention Structures constructed under USDA Watershed Programs. Farmer, who is also a registered Professional Civil Engineer, states several reasons for choosing to attend FAMU.

“I wanted to attend a university with a good engineering program. I wanted to attend a university where I would be able to learn in a nurturing environment and gain access to diverse career development resources,” he said.

“One of my desires was to attend a Historically Black College/University. FAMU offered me all of that.”

He adds that his area of study was instrumental in preparing him for his successful career, as the BASE curriculum covered much of the subject matter that was relevant to the work that he performed as an Agricultural Engineer when he initially began working for NRCS.

“I received a BASE scholarship and the opportunity to participate in summer internships working with NRCS. This really gave me practical work experience and a substantial advantage when applying for permanent employment,” said Farmer.

“My FAMU degree afforded me the ability to obtain my professional engineering licensure. Once I became a licensed Professional Engineer, I was eligible to move up into an engineering management position.”

Farmer advises aspiring FAMU graduates to start gaining practical professional experience early in their academic journey.

“Take every opportunity to participate in internship opportunities with organizations that you would want to work for. Seek challenging work assignments that offer unique developmental experiences that will build your career,” he said.

Farmer was first introduced to NRCS in 1995 when he worked as a summer intern for the Arkansas Land and Farm Development Cooperation’s Youth Enterprise in Agriculture Program.

“Upon graduation, be open to relocating and working in locations that may be outside of your comfort zone. Often, these work experiences provide exceptional enrichment opportunities for your professional career and personal life.”

In August of 2012, Farmer traveled to Haiti with the Office of International Programs for the FAMU USAID’s Farmer-to-Farmer program where he volunteered with the composting training program to promote food security.

Prior to his new position, Farmer served as the State Conservation Engineer for USDA NRCS in Warwick, Rhode Island. In this capacity, he lead the NRCS State Conservation Engineering Team’s efforts to accomplish technical engineering, hydrology and hydraulic project work, and he provided technical assistance and leadership in planning and application of engineering practices — including the formulation of state policies, procedures, guides, engineering criteria, standards, construction specifications, and adoption of new and developing professional engineering methods and techniques. Farmer has also worked for NRCS in Alabama, Arkansas, California, Georgia, and Minnesota.

In the 79-year history of the USDA NRCS, Farmer has been only the second African American selected to serve in the position of State Conservation Engineer nationwide. As well, at the age of thirty, Farmer was the youngest, active State Engineer to serve with the USDA NRCS.
CAFS Authors $1.3 Million In New Capacity Building Grants

Four outstanding Principal Investigators from the College of Agriculture and Food Sciences (CAFS) recently authored successful grants totaling over $1,365,780 for a period of three years (2014-2017), announced K. Ken Redda, Ph.D., Professor and Vice President for Research at Florida A&M University. The grants were awarded by the U.S. Department of Agriculture (USDA), National Institute of Food and Agriculture’s “Capacity Building Grants” Program. The following dedicated CAFS leaders were instrumental in generating these capacity building grants:

- **Glen Wright, Ph.D.**, Veterinary Technology Program – “Expanding Animal Systems with Emphasis on Veterinary Medicine and Veterinary Technology: Cultivating Pre-veterinary / Veterinary Technology Professionals to Address the Needs of the 21st Century” – $565,821.
- **Alejandro Bolques, Ph.D.**, Extension Crop Specialist – “Evaluation & Demonstration of Protective Structures for Year Round Production of Fresh-Market Vegetables in the Florida Panhandle” – $250,000
- **Sandra Thompson, Ph.D.**, Community Resource Development Program Leader – “FAMU- Agricultural-Education Mobile Delivery System in North Florida” – $250,000.

These four grants were among 12 projects submitted by FAMU’s Division of Research. According to Redda, the maximum amount of capacity building funds any of the nineteen 1890 Universities could receive is $1.8 million. FAMU received the second highest funding (76 percent success rate) after Delaware State University. For more information, please contact K. Ken Redda, Ph.D., at (850) 412-5102 or kinfe.redda@famu.edu.

Tallahassee Growers’ Market Features Local, Organic Produce

Tallahassee’s only organic growers’ market celebrates 12 years of providing delicious, organically grown produce to Tallahassee and surrounding communities this November. Open 3:00 pm – dusk every Wednesday, rain or shine, it is located at beautiful Lake Ella in Midtown Tallahassee at 229 Lake Ella Drive (behind the Black Dog Café). For information on this and other sustainable development efforts, contact: Jennifer Taylor, Ph.D., Coordinator Small Farm Programs, FAMU Cooperative Extension/College of Agriculture and Food Sciences, at 850.879.6895 or famu.register@gmail.com.

CAFS Seeks to Reconnect With Alumni

The College of Agriculture and Food Sciences is calling all alumni to reconnect as it updates its contact data to keep graduates “in the know” of CAFS’ latest happenings and celebrates the successes of alumni. If you are a CAFS graduate and want to receive future mailings or be highlighted in our newsletter, please complete the info box to the right and send it to:

**CAFS Alumni Affairs**
1740 S. Martin Luther King Jr. Blvd.
Perry Paige Bldg., Rm. 106-S
Tallahassee, FL 32307
Or email to: gilda.phills@famu.edu

Information collected will only be used for official university communications.
CALLING ALL STUDENTS!
CAFS FALL CONVOCATION

11:00 a.m., December 2, 2014
Perry-Paige Auditorium
1740 Martin Luther King Jr. Blvd.

Presenting FGSLAMP STEM Program Info
Recognition of Fall 2014
Prospective Graduates
& Outstanding Students

(Continued from page 1)
Nominations will also be accepted for individuals posthumously. A college-wide committee will be appointed to make the selections. Nominations may be submitted by CAFS administrators, alumni, faculty, staff, and students. More information on FAMU’s College of Agriculture And Food Sciences is available online at: www.famu.edu/cafs, www.facebook.com/famucafs, or follow CAFS on Twitter @cafsnews.

The CAFS Bites Newsletter is published monthly by the Office of the Dean, College of Agriculture and Food Sciences, at Florida A&M University. To submit calendar events or stories, please contact Cynthia Lamb, Editor, CAFS News Bites at cynthia.lamb@famu.edu.

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CAFS wishes you a very... Merry Christmas