Excellence, desire, commitment key to grant writing success

In spite of heavy teaching load and dwindling incentives such as release time and supplemental pay, some AAMU researchers have not slowed down in their search for grants and funding opportunities. Some are even ready to “burn the midnight oil” no matter the burden of their “day job” just to maintain an active portfolio of grantsmanship and research.

“In teaching one has to be driven by a passion for research and a commitment to institutional and personal growth,” says Dr. James Bukenya, agricultural and resource economist and professor of Agribusiness, who, in less than a year, has garnered nearly a million dollars in three successful proposals to federal agencies. “As a driving force, you must always remember that teaching goes hand-in-hand with research.”

Asked about the motivation behind his penchant for writing grants, Dr. Bukenya adds, “I believe in the power of research to make a difference in people’s lives, and I am committed to using my expertise to contribute to that end.”

Hugine welcomes Ethiopian government official

AAMU-USAID book project benefits millions in Ethiopia

Alabama A&M University (AAMU) is proud to be engaged in a project that helps to enhance the lives of millions of children in Ethiopia, especially in the area of education. AAMU President, Dr. Andrew Hugine made the statement recently at a reception when he and senior officials of the University welcomed Mr. Fuad Ibrahim, Minister of Education of Ethiopia.

Among senior AAMU officials on hand to welcome the Ethiopian dignitary were Dr. Daniel Wims, Provost and Vice President for Academic Affairs; Dr. Vann Newkirk, Associate Vice President for Graduate Studies; Dr. Curtis E. Martin, Dean of the College of Education, Humanities & Behavioral Sciences; and Dr. V. Trent Montgomery, Dean of the College of Engineering, Technology & Physical Sciences.

Mr. Ibrahim’s visit is a result of a project developed through a partnership between AAMU, the United States Agency for see Hugine welcomes Ethiopian government official...continued on page 2

Obesity, health disparities focus of Evans-Allen research projects

What is the reason for the high prevalence of obesity, and what can be done about it? These are obvious questions tugging at the heels of scientists in their effort to put a break on obesity, a leading cause of cardiovascular diseases, cancers and diabetes. Foremost in the scientists’ search are the apparent disparities in the spread and treatment of the disease, as well as the environmental implications.

Here at Alabama A&M University, researchers are using an interdisciplinary and, in some cases, multidisciplinary approach with variations of community participatory approaches to address these nagging health issues. Thanks to funding from the Evans-Allen Program of the U.S. Department of Agriculture, scientists have band together to see Obesity, health disparities focus of Evans-Allen research projects...continued on page 8
and his eagerness to always have a funded project, “excellence,” replied Bukenya, who has spearheaded or served as co-investigator for over $7 million in grant money in his nearly 10 years at AAMU. “The only way to survive is to strive for excellence. It pays to always have a funded project. It takes away the worries about your next paycheck. No matter what changes if you have funding no one can touch you.”

Bukenya is not alone. AAMU is fortunate to have many others with the drive and penchant for excellence in research and for staying busy no matter the course or teaching load. Take Dr. Stephen Egariewe, for instance. In just two years after joining the faculty, the AAMU alum has written and received over $2.4 million in award money, with the latest, $2 million over five years, coming from the National Science Foundation (NSF) and the Department of Homeland Security (DHS).

“We applied for this (NSF/DHS) funding before and we did not get it, but we pressed on and tried again; and this time we were successful,” says Egariewe, associate professor and chair of the Department of Engineering, Construction Management and Industrial Technology. “You have to be persistent and eager to succeed.”

What can be done to motivate and get young faculty members interested in research and seeking funding opportunities? Bukenya and Egariewe named mentoring, persistence, collaboration, teamwork and the desire for professional growth and excellence as key factors for success. “I have benefitted from the outstretched and guiding hands of several exceptional academicians who invested immeasurable personal and professional resources into my training,” says Bukenya. “It is largely because of the mentoring of these scholars combined with institutional support afforded me that I have achieved the level of success I have.”

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Mr. Ibrahim makes remarks at the luncheon in his honor at the Knight Center, with Dr. Daniel Wims, Provost and Vice President of Academic Affairs; Dr. Hugine; Dr. Mary Spor, TLMP director; and Dr. Vann Newkirk, Associate Vice President of Graduate Studies watching.

AAMU faculty and staff of Ethiopian origin meet with Mr. Ibrahim at a reception. From left are Dr. Wubishet Tadesse, Dr. Mezemir Wagaw, Prof. Teshome Gabre, Mr. Ibrahim, Dr. Spor, Dr. Fessha Gebremikael, Dr. Joseph Befecadu, Mr. Haile Lijam and Mr. Tilahun Mitike.

Mr. Ibrahim toured several classrooms at Riverton Elementary in Madison, Ala., where he observed early grades reading being taught using “traditional methods” and technology.

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Mr. Ibrahim toured several classrooms at Riverton Elementary in Madison, Ala., where he observed early grades reading being taught using “traditional methods” and technology.
and technology. He said the visit to Riverton "gave me a good idea about primary education in America."

According to USAID, the TLMP is in response to the dire need for textbooks, teaching aids, and other student learning materials in African schools. The goal of the TLMP, a component of USAID’s Africa Education Initiative (AEI), is to improve the quality of curricula materials available for schools in Sub-Saharan Africa. To accomplish this, the United States partnered with American Minority Serving Institutions (MSI) and African Ministries of Education. The other MSIs and their partners are the University of Texas at San Antonio and Malawi, Elizabeth City University and Senegal, Chicago State University and Ghana, and South Carolina State University and Tanzania. Total USAID funding so far for the Ethiopia project is $14.2 million, says Dr. Mary Spor, AAMU professor of Reading/Literacy and director of the TLMP, who described Mr. Ibrahim’s visit and involvement as having a positive impact on the project. "It was an honor to host Ato Fuad Ibrahim at Alabama A&M University," she said. "He is an outstanding high level leader who keeps abreast of research in education and was most interested in directly experiencing and learning about Alabama A&M and its programs and observing reading being taught in the public schools."

Spor said it was a "special pleasure" to work with an individual of Ibrahim’s caliber in the six years of the project. "He has helped to set the direction for the TLMP’s successful, collaborative textbook development and monitor its progress," she said.

Before ending his visit to Huntsville, Mr. Ibrahim had the opportunity to meet several other AAMU personnel at an evening reception in his honor, including several professors and staff of Ethiopian origin.

Dr. Hugine presents Mr. Ibrahim with a rendering of an Ethiopian oasis drawn by TLMP artist and project staff Mr. Haile Lijam.

AAMU Provost and Vice President of Academic Affairs, Dr. Daniel Wims, far right, talks with Mr. Ibrahim, left, Dr. V. Trent Montgomery, dean of the College of Engineering Technology & Physical Sciences; and Dr. Curtis E. Martin, dean of the College of Education, Humanities & Behavioral Sciences.

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that I am inspired to strive for excellence in research, service and teaching."

Egarievwe says young faculty must assume the role of “apprentice” and team up with people who have track records. “Begin by being a co-PI to get your name out there,” he says. “As a beginner, a project (or money) is never too small to go after. The idea is to get you started then you can begin to branch out for the big money. Do not be afraid to fail; success begins by trying.” He adds, “You must learn to put in the extra time to get that funding. There is no shortcut if you want to be successful.”

Bukenya’s admonishment to young faculty: “Don’t write a proposal for the sake of writing. You must first have an idea you believe in and look for the opportunity or RFP (request for proposal) and match it with your idea. Although what we do is in the name of the institution, but the reputation goes with you wherever you go.”

On the other hand, Bukenya and Egarievwe admonished “seasoned” faculty members to be an encouragement to their “younger” colleagues and help them along the way. “No matter how successful I may be today, I never forget the fact that it was to a great extent made possible through the hands and guidance of more experienced people who showed interest in my training,” says Bukenya. “Let us not forget to pass on that goodwill.”

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Faculty achievements


Dr. Susan C. Brown (Visual, Performing, and Communication Arts) – Presented “An Examination of Anxiety and Stage Fright in the Performing Arts,” at the International Readers Theatre Conference in London, England; performed with the Readers Theatre Institute Company and co-authored a readers theatre piece on Queen Elizabeth I entitled “In Love With Elizabeth: The Legend Or The Lady”; and honored with a special certificate from the International Readers Theatre Institute certifying that she is a master teacher in the Adams/Cunningham Oral Interpretation and Readers Theatre methodologies.

Dr. Satilmis Budak (Electrical Engineering) - Received the FBI Director’s Community Leadership Award, Washington D.C., April 2011. The FBI Director, Robert Muller, personally presented Dr. Budak with the prestigious award.

Dr. James O. Bukenya (Agribusiness) - Received tenure and promotion to full Professor.

Dr. Joel Fu (Computer Science) – Published “Hyperspectral Image Analysis using Artificial Color,” Journal of Applied Remote Sensing, Vol. 4, 043514, 2010. This paper was rated as most widely read/download article in the Remote Sensing discipline.

AAMU applauds your research efforts . . .
congratulations!

Dr. Stephen Egarievwe, College of Engineering, Technology & Physical Sciences - $2 million - “Collaborative Research: ARI-MA Development of Improved CMT and CZT Nuclear Detectors for Homeland Security Applications” (National Science Foundation/Department of Homeland Security); $360,000 - “Project NERVE - Nuclear Education and Research Vertical Enhancement” (Nuclear Regulatory Commission)

Dr. Duncan M. Chembezi, College of Agricultural, Life & Natural Sciences - $400,000 - “Facilitating Equitable Access to USDA Programs, Resources and Market for Socially Disadvantaged Farmers and Ranchers in Alabama” (USDA); $175,000 - “Enhancing the Viability and Sustainability of Beginning Farmers and Ranchers through Collaboration, Mentoring and Whole Farm Planning” (USDA)

Dr. Mohan Aggarwal, College of Engineering, Technology & Physical Sciences - $300,000 - “Improved Mechanical Properties of COPV Composites and SGM Sensor Efficiency for Increased Safety and Reliability” (United Negro College Fund)

Dr. James Bukenya, College of Business and Public Affairs - $150,000 - “Enhancing Agribusiness Curriculum and Increasing Student Experiential Learning through Internships” (USDA)

Send your grant award information to essence@aamu.edu for inclusion in the next edition or call 256-372-5675.
The Essence is picking up from where AAMUresearch ended. Our “Rising Stars” column, which was first introduced in the research magazine (AAMUresearch), is being re-instituted – this time in our online newsletter (The Essence). The column recognizes the exceptional academic work by young faculty across all disciplines. With a lull in publication of our acclaimed magazine, we feel the effort to continue spotlighting the talent of our up-and-coming researchers must continue – on a not-so-lessor scale.

For a refresher, if you do not quite remember or if you are new on the block, “Rising Stars” recognizes faculty members who are early in their careers and who demonstrate the potential to establish nationally and internationally peer-acclaimed scholarship within their research fields. We see individuals in this column as examples of the opportune convergence of scientific training, with an acute appreciation of the research environment in which they find themselves. Some are part of or have been part of major grant proposals and/or awards, and several are award winning presenters at major professional conferences. To be sure, their work and examples impact a significant sector of the AAMU research and academic community.

Unlike in the past when selection was based on length of service – three years or less – current and future selections will be through recommendations from deans, chairs and peers. Also, due to space limitation, only two “Rising Stars” will be spotlighted per issue.

Previous “Rising Stars” who have been spotlighted are: Dr. Sudip Bhattacharjee, Dr. Kathryn Seidler Engberg, Dr. Yujian Fu, Dr. Malinda Wilson Gilmore, and Dr. Padmaja Gugilla.
Please congratulate our new group of “RISING STARS!”

Dr. Vernessa M. Edwards, Assistant Professor of Physics, has emerged as a master teacher/advisor/recruiter and reputable researcher since returning to her alma mater in 2006 as a full-time faculty member. As Co-Investigator on “RISE: Research Infrastructure in Advanced Materials & Nanophotonics,” an NSF funded project, Dr. Edwards is investigating the capability for treatment of cancer by irradiation using cyto-toxic two-photon molecular probes. With a recent award from the UNCF Special Programs, she will serve as Co-Investigator overseeing the outreach arm of the project as she seeks to engage graduate, undergraduate, and even middle-school students in cutting-edge research in collaboration with NASA, with the specific goal of increasing the interest and number of academically talented students pursuing careers in STEM (science, technology, engineering and mathematics) disciplines. While physics is a complex-and demanding field of study, students’ formative and summative evaluations reveal that they find Dr. Edwards’ classes comprehensible, enjoyable and motivational. She spends many hours before and after class tutoring students to help them achieve and succeed in her classes. She is an active member of The American Physical Society, and the National Society of Black Physicists (NSBP). She serves actively on department, school and university committees, including the Bulldog Pride Committee, and Chair of STEM Day 2012.

Dr. Karnita Golson-Garner is a research assistant professor and extension environmental specialist in the College of Agricultural, Life and Natural Sciences at Alabama A&M University. The NASA EPSCoR and EPA Star Fellow joined the AAMU faculty in the fall of 2009, and has since developed the Urban Environmental Science Education Program (UESEP) under the auspices of the urban unit of the Alabama Cooperative Extension System (ACES). Her research involves assessing the impacts of traditional, as well as new and emerging contaminants on soil and water quality. Her most recent work has shown that pollutants like heavy metals and organochlorine compounds pose a significant ecotoxicological threat to aquatic and terrestrial organisms within the Tennessee River Basin. She has published a number of scientific and extension papers, and presented her research work at national and international conferences, including symposiums in Sydney, Australia and Toulouse, France. Dr. Golson-Garner is actively engaged in assisting students interested in learning more about natural resource conservation. She serves on several graduate committees and works closely with the AAMU Student Chapter of the Soil and Water Conservation Society. She has been an active volunteer in the community and strongly encourages students to explore volunteerism. She is a book reviewer for the American Water Resources Association (AWRA) and an Ad Hoc reviewer for the National Institute of Food and Agriculture (NIFA). Over the past two years, Dr. Golson-Garner has submitted a number of collaborative research proposals and was recently awarded funding from the Inter-disciplinary Center for Health Sciences & Health Disparities (IDC-HSHD) to investigate the impact of drinking water contaminants on human health and wellness in Triana, Alabama. Dr. Golson-Garner holds a B.S. in Environmental Science, an M.S. and a Ph.D. in Plant and Soil Science from Alabama A&M University.
Obesity, health disparities ...continued from page 1

under the direction of the Center for Health Sciences & Health Disparities (IDC-HSHD) to develop projects that support interdisciplinary research leading to scholarly contribution in the health sciences, especially understanding and reduction of health disparities in domestic populations.

“The objective is to generate a research program that embraces the concept of multiple levels of health sciences to examine factors operating at the social, environmental, behavioral, psychological and biological levels,” says Dr. Matthew Edwards, principal investigator of IDC-HSHD, part of the College of Engineering, Technology and Physical Sciences. He believes that taking on a problem such as the prevalence of obesity and health disparities can garner a better result if approached from multiple fronts. “Distinct disciplinary perspectives represent significant source of strength to the overall research enterprise, because each discipline has its own intellectual history, experimental and analytic approaches, and theoretical context that produce a unique way of thinking about a problem.”

With this in mind, says Edwards, the College of Agricultural, Life and Natural Science provided funding to IDC-HSHD about a year ago for eight sub-projects, under a pilot effort, to research issues of health, wellness and obesity, including an investigation of health disparities in the area. On August 29, 2011, principal investigators, key faculty personnel and students from various departments presented their research to the University community, including deans, chairs, other scientists, faculty, staff and students in the Clyde Foster Multipurpose Room.

Following is a listing of the sub-projects, principal investigators, departments, and brief descriptions of each project:

“Obesity-Related Knowledge Among African American Young Adults” - Dr. Jeongah Kim & Dr. Tonya Perry - Explore the obesity-related knowledge of a convenience sample of AAMU graduate students along dimensions of statistics regarding prevalence and incidence; behavioral contributors; physical consequences; economic consequences; structural contributors; and cultural variables.

“Preventing Chronic Diseases and Maintaining Health and Well-being: A Psych-education Model for Weight and Obesity Reduction” - Dr. Annie M. Wells; Graduat Students Crystal McKnight and Denise Gaymon (Department of Psychology) - Use a psycho-education and cognitive-behavioral-change model to prevent the onset and maintenance of obesity leading to cardiovascular disorders and diabetes. The study highlights the importance of cognitive factors, which must occur prior to behavioral changes in eating and exercise.
“Contaminated Drinking Water in Triana, Ala.: Impacts on Human Health and Wellness” Dr. Paul Okweye and Dr. Karnita Golson-Garner (Department of Natural and Physical Sciences: Chemistry Unit; Department of Biological and Environmental Sciences & Alabama Cooperative Extension System) - Clarify concerns about the chemical quality of drinking water in the small town of Triana, Ala. Participatory action research was applied, using a combination of quantitative and qualitative investigative methods to assess water quality and the public’s perception of drinking water quality.

“Fitness the Bulldog Weigh” Dr. Lynne Edmondson and Dr. Josh Herring (Department of Health, Physical Education and Recreation; Department of Food and Animal Sciences) - Address obesity, including outreach to the university community, education of participants and service learning students. Research based on feedback from participants, weight lost, and blood work. The components include membership for participants at the Student Wellness Center on the AAMU campus, membership with Weight Watchers, bi-monthly newsletters, and guidance by service learning athletic trainers.

“Obesity Prevention and College Students” Dr. Jitendra M. Kapoor (Department of Social Work) - Educate college students about overweight/obesity and healthy living with an understanding that these students will transfer this knowledge to their younger generation. The study used the ‘exposure, understanding, involvement and practice’ model of healthy living.

“Development of Bio-Sensors based on Surface Enhancement Raman Scattering and TwoPhoton Fluorescence for Use in the Agri-Food Industry” Dr. Florence Okafor, Prof. Tatiana Kukhtareva, Dr. Michael Curley, Dr. Afef Janen (Department of Natural and Physical Sciences: Biology Unit; Department of Physics & Department of Food and Animal Science) - Surface enhancement Raman Spectroscopy (SERS) allows detecting the “fingerprint” of each individual molecule as it represents the vibrational frequencies of functional chemical bonds in molecules. For bio-sensing applications it is critical to create uniform, highly active and sensitive substrate for pathogen recognition.

“Agricultural Activities in Relation to Soil NOx Emissions on Ambient Air O3 and NOx Levels” Dr. Malinda Gilmore, Dr. Teferi Tsegaye, Dr. Jacob Oluwoye (Department of Natural and Physical Sciences: Chemistry Unit; Department of Natural Resources and Environmental Sciences; & Department of Community Planning and Urban Studies) - Quantify nitric oxide emissions in soils within Bragg Farms located in the Flint River Watershed of northern Alabama and investigate its role in regional ozone production and nitrogen oxides concentration in ambient air.

“Synthesis, Spectral and Application (Bioactivity and Pesticides) Studies of 4-Hydroxomethyl-2-Thioxo-2 5\{1,3,2\}dioxophospholane-2-thiol” Dr. Adnan Elkhaldy (Department of Natural and Physical Sciences: Chemistry Unit) - 4-Hydroxomethyl-2-thioxo-2 5\{1,3,2\}dioxophospholane-2-thiol have been prepared by treating glycerol with chlorosilyl trimethyl as protecting group in 1:1 and 1:2 ratio. The dithiophosphate derivatives of glycerol have been prepared by the reactions of those glycerol silyl derivatives with P2S5 in 1:4 and 1:2 ratios.
Successful Aging Initiative Turns 10 – October 13

The elderly population is growing and is expected to double again in the next 50 years. A growing generation of elderly adults means a greater demand for policies, programs, and services to meet their needs. For the past ten years the Alabama Cooperative Extension System has implemented a program that does just that!

The Successful Aging Initiative will observe its tenth anniversary on Thursday, October 13 at the Union Chapel Missionary Baptist Church, 315 Winchester Drive in Huntsville from 7:30 a.m. to 2:30 p.m. Admission is free.

The objectives of the Successful Aging Initiative are to help seniors make informed decisions, maintain independence, continue to be active members in society, and improve the quality of life for themselves and their families. It is the ideal program for older adults and their caregivers to obtain up-to-date information on managing financial resources, health issues, and legal matters for the later years of life. Men are especially encouraged to attend.

AEFSN Conference – October 22

In January 2011, the Alabama Cooperative Extension System established the Alabama Ethnic Food Security Network (AEFSN). The objectives of the AEFSN are to educate small-scale farmers and food marketers about sustainable production and marketing of not just any food, but safe and culturally-appropriate free-range meats and vegetables such as chicken, beef, lamb, goat, rabbit, eggplant, pumpkin, cilantro, peppers, and tomatillos.

In support of this initiative, the AEFSN will hold its first conference at the Winfred Thomas Research Center in Hazel Green, Alabama on Saturday, October 22, 2011, from 9:30 a.m. to 2:00 p.m. The theme is “Grass-fed Beef, Specialty Vegetables, and Pastured Poultry: Opportunities for Farm Diversification in the Southeast.” Speakers will include Alabama A&M professor and researcher Dr. Rao Mentreddy, cattle rancher Miles Albright, as well as Extension researchers and staff from Alabama A&M University and Auburn University, including Dr. Ken Macklin, Dr. John Blake, Dr. Julio Correa, Mr. Robert Spencer, and Mr. Eddie Wheeler.

This is a great opportunity to learn more about the Alabama Ethnic Food Security Network and how to market food products to ethnically diverse audiences.
Disaster Preparedness Resource Fair – November 12

The Disaster Preparedness Resource Fair will be held on Saturday, November 12, 2011, from 11:00 a.m. to 2:00 p.m. at Alabama A&M University’s Agribition Center located at 4925 Moores Mill Road in Huntsville, Alabama.

The Disaster Preparedness Resource Fair is designed to provide timely information that helps to prepare participants on how to respond to natural and manmade disasters. Participants will receive information on proactive strategies to promote safety in and around the home and the community when disaster strikes. Information will be shared on the importance of a family emergency plan, and demonstrations will be provided on how to prepare an on-time disaster readiness kit to use during recovery. Attendees will also receive information on crisis management and have opportunities to interact with insurance representatives and other emergency service providers.

Donations of family clothing and household cleaning supplies will be provided to families that were impacted by the April 27 tornadoes.

The Disaster Preparedness Resource Fair is free to the public and refreshments will be served. For more information, please visit www.aces.edu/urban or contact Juanesta Green at 256-372-4976 or Marcus Garner at 256-541-0291.

Alabama Cooperative Extension System - Mission

The Alabama Cooperative Extension System collaborates with many partners to help people and communities improve their quality of life and economic well-being. We accomplish this mission by providing educational opportunities and information grounded in research-based science in the following program areas:

- Agriculture
- Economic and Community Development
- Urban Affairs and New Nontraditional Programs
- Family and Consumer Sciences
- 4-H and Youth Development
- Forestry, Wildlife, and Natural Resources
Office of Research, Economic Development and 1890 Programs

Send your ideas and event information to essence@aamu.edu for inclusion in the next edition or call 256-372-5675.