Dr. Andrew Hugine, Jr. defends his credentials in a statement before the Board of Trustees minutes before his selection as president of Alabama A&M University on June 18, 2009. He is impressed by the kinds of research going on at the University.

"In reading about Alabama A&M I was really touched by the level of cutting-edge research going on at this university," he said. "Your research to remove allergenic proteins from peanuts, your work in cancer research, and many more are just outstanding."

This level of interest bodes well for a research institution like ours, says Dr. Teresa Merriweather Orok, vice president of Institutional Research, Planning and Sponsored Programs. "We are fortunate to be getting someone who is not only interested in research but someone with the level of understanding and appreciation needed to keep us on the cutting edge of discovery."

Dr. Hugine, who becomes the 11th president of AAMU, holds B.S. and M.Ed. degrees in mathematics from South Carolina State University in Orangeburg. He also holds a Ph.D. in higher education and institutional research from Michigan State University.

Dr. Hugine comes with a wealth of experience in higher education. He is former president of South Carolina State University, where he also served in various capacities over a 30-year period.

IRPSP launches 2 major research marketing tools

AAMUresearch, Innovation give new faces to science and technology at AAMU

Alabama A&M University has a great reputation with a research climate that keeps the university not just above the average HBCU but above the average institution, says Interim President Beverly Edmond.

Speaking at the official launching of two major research publications on campus recently, Edmond said she was inspired by the level of research capability at the institution. "In my years of higher education I have not been among so many qualified, capable, innovative, sharp, dedicated and committed researchers as we have here at A&M,"

The publications, AAMUresearch, a magazine, and Innovation, the Innovation magazine were unveiled on June 11. The publication of these two periodicals is going to do nothing but to capitalize on what is already here."

AAMU site of new AMRDEC center

Giving added impetus to its already well established scientific and research pursuits, Alabama A&M University (AAMU) has received a second "Center of Excellence" designation in less than a year.

On June 8, Alabama Congressman Parker Griffith joined University, government and elected officials to announce the establishment of the Center of Excellence in Integrated Sensor Systems to be housed in the School of Engineering and Technology on the AAMU campus.

The Center, intended to boost the number of top-notch engineers in North Alabama as well as assist with homeland security, is the result of a partnership among government and industry entities—namely, the U.S. Aviation and Missile
Recognizing his career contribution to research and teaching, the National Association for Equal Opportunity in Higher Education (NAFEO) has awarded Dr. Matthew Edwards the “2009 Noble Prize,” the organization’s highest honor for individual achievement.

Dr. Edwards, professor of physics and dean of the School of Arts and Sciences, received the coveted award at NAFEO’s 40th Anniversary Gala and Awards Program in Atlanta. The Noble Prize was created by NAFEO in 2006 to honor distinguished historically black college and university (HBCU) faculty members who are “tirelessly fulfilling” the missions of their respective institutions.

Edwards was one of seven distinguished educators to receive NAFEO’s highest distinction. He joined Dr. Linda Hayden, Elizabeth City State University; Dr. James Ervin Glover, Fort Valley State University; Dr. Loretta Jaggers, Grambling State University; Dr. Gaston M. N’Guerekata, Morgan State University; Dr. Doris J. Ward, Voorhees College; and Dr. Gemma Douglas Beckley, Rust College.

“It is quite an honor to be recognized among such a distinguished group of people for this prestigious award,” Edwards said. “This is not just an honor for me, but also for my colleagues, those I work with everyday, and those at this institution who found me capable enough to recommend me for this award.”

“Dr. Edward’s commitment and passion to educating young minds is demonstrated by his willingness to mentor students, as well as junior faculty, in their quest for excellence,” says Dr. Beverly Edmond, AAMU’s interim president, who nominated Edwards for the honor. “He is a dedicated scientist with nearly 100 research publications in various areas related to nonlinear optics and other aspects of physics.”

University researchers continue to fill gap for funding

Ag School receives agricultural, business experts from Azerbaijan

As “Mo’ Money!” continues it crusade to recognize scientists, researchers and others who undertake scholarly endeavors that bring funding to the institution, here are three who have earned their place in the coveted column for recognition in the current reporting cycle: Dr. Mary Spor, $500,000, School of Education – “Provide Additional Textbooks and Materials to Ethiopia” – U.S. Agency for International Development; Dr. Khairy M. Soliman, $80,000 – “Center for Environmental Signal Transduction” – Auburn University (Sub.); and Dr. Edward Jones, $75,000 – “A Plan to Prepare In-service STEM Teachers for Certification and Leadership” – National Science Foundation.

Four agricultural and business professionals from the former Soviet republic of Azerbaijan held discussion on mutual interests with scientists and officials of the School of Agricultural and Environmental Sciences (SAES) at AAMU on June 17. The visitors, on a three-week tour of the United States as guests of the Department of State, are established foreign opinion makers in international financial affairs and agriculture in their country.

They were welcomed to the University by Vice President for Institutional Research, Planning and Sponsored Programs, Dr. Teresa Merriweather Orok.

According to Ismail Djalilov and Valerity Volozov, interpreters for the group, the visitors are in the country to study ways of providing low cost, high quality, and safe food products for both domestic consumption and international export; study sustainable agricultural practices in the U.S., including organic farming techniques; learn production animal husbandry; and how to procure credit.

Saying that they were also looking to develop partnerships and exchange programs
provost Stewart, left, and editor Freeman, right, and Mr. Gilmore watch. interim President Edmond and IRPSP VP Orok unveil Faculty and staff witness the launching ceremony in Foster Multipurpose Room.

provenance Stewart, interim provost and vice president for academic affairs. she called on scientists and researchers to include more students in their work. "by doing so, you show them by your example how scholarly endeavors are pursued at the university," she says.

The Vice President for Institutional Research, Planning and Sponsored Programs (IRPSP), Dr. Teresa Merriweather Orok, called the launching of the publications, "a long time coming." "In the three years I have been here we have been able to turn the corner in so many areas of our research," she said. "These two publications are just a few of the things we have accomplished in being able to tell the world what Alabama A&M University is capable of in terms of research and teaching."

Among other marketing efforts, Dr. Orok pointed to a revamped website, revision of the Principal Investigator Guide, launching of The Essence, a bi-weekly online newsletter on spot-developments in research, and a wider community and national awareness of cutting-edge research endeavors at the university.

"As I go across the nation to market the work that you (researchers) are doing, people are just amazed at the kinds of research endeavors that stem forth from this great institution. These publications will help to further spread the word about our work," she said. "We have been able to increase our research dollars and our funding agencies want to know how we are spending those dollars and the kinds of impact we are making. So this (publication) is but one of the ways that we can show the kind of innovation that is going on at the institution."

Editor Emmanuel Freeman said among its many objectives, AAMUresearch helps to facilitate collaboration between researchers through easy exchange of information. He said the magazine, which includes articles on actual research projects and profiles of faculty and staff achievement, will be published twice a year in the spring and fall.

He said Innovation, a revamped and revised compilation of the university’s capabilities statement, highlights the research strengths in the five schools of the University. "Our goal was to put a face on the kinds of innovations at this institution," Freeman said. "I think we accomplished that goal by not only ensuring that it represented all areas of our institution, but that it was very informative and packaged for instant attraction."

"IRPSP launches” ...continued from page 1

"IRPSP launches” ...continued from page 2

As dean of the School of Arts and Sciences, Edwards has been credited for enhancing the quality of teaching and research among the faculty in the natural and social sciences.

"Dr. Edwards is a scholar, consummate professional and role model."  
Dr. Juarine Stewart

He has continued to teach while in his administrative capacity and has been the force behind the implementation of several initiatives, according to a release from the AAMU Office of Information and Public Relations. It was Edwards who introduced the major AAMU academic component he heads to the use of Bloom’s taxonomy in the teaching methodology as a means of developing critical thinking skills for students, the release stated.

Edwards initiated the popular Sciences, Technology, Engineering and Mathematics (STEM) Day at AAMU; introduced newly emerging nanotechnology concepts for freshman students in physics, chemistry, mathematics and engineering; and helped to establish the Center for Learning, Teaching and Research in Nanoscale Science and Engineering.

"Dr. Edwards is a scholar, consummate professional and role model," added Dr. Juarine Stewart, interim provost and vice president for Academic Affairs.  "He deserves the recognition that a prestigious award such as the Nobel Prize will bestow."

NAFEO has served as a major advocate for HBCUs for decades. Founded in 1969, NAFEO is the only membership association of its kind, representing the presidents and chancellors of the diverse black colleges and universities.

"Edwards” ...continued from page 2
Research, Development and Engineering Center (AMRDEC) and the Alabama A&M University Research Institute (AAMURI).

“Because of global competitiveness and the technological advances of other countries, we must attract more students with some inclination for math and sciences,” said Congressman Griffith, as he and AMRDEC officials presented a check for $700,000 to university officials for the establishment of the Center.

“The Center will advance the state of knowledge in areas of sensor and data fusion, contextual detection and classification, future sensor systems and architectures for missile defense, and other homeland security applications,” said Dr. Kaveh Heidary, professor and chair of the Department of Electrical Engineering and principal investigator of the project.

Dr. William C. McCorkle, director of AMRDEC, and Interim President Beverly Edmond, referring to the AAMU School of Engineering as “first-rate,” said they were very optimistic about the success of the Center. “This University has the ability to provide a great foundation in mathematics, science and engineering,” added Edmond.

The establishment of this center comes on the heels of another landmark agreement in late January when AAMU became the first historically black college and university to be designated a federal “Center of Excellence” in watershed management. In that agreement, signed with the U.S. Environmental Protection Agency and the Alabama Department of Environmental Management, the University is working with state and local residents to find ways to improve the water quality along Alabama’s 77,000 miles of rivers and streams in the region.

Dr. Teresa Merriweather Orok, vice president of Institutional Research, Planning and Sponsored Programs, sees the Centers of Excellence designations as opportunities “to let others know the caliber of expertise and research going on” at AAMU.

Dr. V. Trent Montgomery, dean of the School of Engineering and Technology, added that the Center will support national missile defense efforts, create synergies between academic institutions, industrial partners, and government agencies, and potentially boost the number of exceptional engineers and scientists in North Alabama.

Among other University and AMRDEC officials at the signing ceremony were Dr. Daryush Ilia, director, AAMURI; Dr. Steve Cornelius, AMRDEC director for Missile Development; Dr. Paul B. Ruffin, CEISS program manager; Patricia T. Martin, AMRDEC director for Systems Engineering and Support; and Richard C. Kretzschmar, AMRDEC acting deputy director.
When you hear AAMU is going places the thoughts that usually come to mind are that our students are excelling, our researchers have made a new scientific breakthrough, or that our graduates are sought after in all areas of industry, among others. But what about our students endeavoring to defy gravity and land “AAMU” on the outer limits of space?

That’s exactly what two Alabama A&M University engineering Senior Design projects accomplished recently when they launched BalloonSat from the National Space Science and Technology Center (NSSTC) site in Huntsville. The historic launch, using weather balloons, took the AAMU name and logo to the outer edges of space.

“The purpose of using weather balloons was to allow the students to design a system that could go up and measure various things related to the atmosphere,” says Dr. Koy Cook, associate professor of electrical engineering and faculty mentor, who wrote and received funding from the Alabama Space Grant Consortium (ASGC) for the projects. “This also allowed AAMU to get more involved in the work going on with the space grant.”

Technical assistance for the two projects was provided by Dr. John Piccirillo of the Huntsville-based Radiance Technologies, without whose help, Dr. Cook says, the launchings would not have been possible. “He volunteered his time and came over here two times a week in the afternoons or evenings to help.”

AAMU BalloonSat (Senior Design Teams ’E-Boys’ and ‘ACES’) was launched about 10:34 a.m. April 4, from the NSSTC site, and it was allowed “to go to burst,” after achieving an altitude greater than 89,000 feet, according to Piccirillo, who is referred to as “an avid senior design volunteer at AAMU and UAHuntsville.”

The Team E-Boys’ project measured the payload spin rate with an MEMS gyroscope, the ambient light intensity with a light-to-frequency sensor, and internal and external temperature sensors. A solar panel atop the payload was used in parallel with battery power to provide power for the electronics. Both still and video cameras were used to collect imagery.

Piacirillo says the payload of the second AAMU group, Team ACES, measured the payload tilt as it swung below the balloon with an MEMS accelerometer, the speed-of-sound with a small sonar sensor, and the atmospheric pressure and internal and external temperature.

The balloon launch endeavor was “the first ever by an AAMU team,” noted Stoney Massey, an AAMU professor of electrical engineering, who witnessed the launching of the AAMU BalloonSat. Massey also lauded the support of ASGC as a contributing factor to the success of the AAMU teams.

The AAMU payloads were recovered about 100 miles east of Huntsville, only about two miles from another payload from a balloon launched by a team at UAHuntsville, according to Piccirillo.

“We are excited about the balloon launch and what our students have accomplished,” says Dr. V. Trent Montgomery, dean of the School of Engineering and Technology at AAMU. “We are producing quality students who can interact and solve today’s problems. This is a tremendous growth experience that will re-enforce the pride the students have in their education and capabilities.”

One of the goals of the project was to test the efficiency of different solar cells as power sources for experiments. During the flight, the balloon traveled at speeds in excess of 160 miles per hour. Tracking of the payloads was performed by committed balloon trackers Jason Winningham, Shane Wilson and Bill Brown.
Space Grant announces new fellowship, scholarship recipients

Five AAMU undergraduate and two graduate students, including a Ph.D. candidate, are among this year’s winners of the Alabama Space Grant Consortium (ASGC) scholarship program. Under the program, each undergraduate recipient will receive $1,000 while the graduate students will receive a $24,000 fellowship each.

A significant goal of the National Space Grant College and Fellowship program is to encourage interdisciplinary training and research, to train professionals for careers in aerospace science, technology and allied fields, and to encourage individuals from underrepresented groups to consider careers in aerospace fields.

According to ASGC, a significant goal of the National Space Grant College and Fellowship program is to encourage interdisciplinary training and research, to train professionals for careers in aerospace science, technology and allied fields, and to encourage individuals from underrepresented groups to consider careers in aerospace fields.

Graduate students receiving the fellowships this year are two previous recipients. Timothy Baldwin, of Huntersville, N.C., is a Ph.D. student in the Department of Soil Sciences, with a concentration in GIS and remote sensing. Baldwin is expected to complete his studies in May 2012. Eugene Harris, of Amory, Miss., a physics major with a concentration in Electron Beam and Dynamical Polarization Created by LiNb03 Crystals, is expected to receive his M.S. degree Spring 2010.

Successful undergraduate students receiving ASGC’s award for this year are: Lacretia M. Conaway, of Huntsville, Ala., mathematics education major; Tamara D. Edwards, of Spanish Fort, Ala., a previous recipient, mechanical engineering major; Delores B. Parker, of Theodore, Ala., electrical engineering major; and Breon J. Williams, of Albany, Ga., mechanical engineering major.

As NASA Space Grant Fellows, graduate students Baldwin and Harris will do their field work at the NASA Marshall Space Flight Center.

The ASGC campus director of AAMU is Dr. V. Trent Montgomery, dean of the School of Engineering and Technology.
with U.S. entities like AAMU, the Azerbaijani said their government was heavily investing in modernizing the farming sector to replace the antiquated technology developed under the former Soviet Union.

AAMU Director of International Programs, Dr. B. Onuma Okezie, told the visitors about the University’s long and extensive experience in international relations dating back to the Soviet era, when AAMU experts traveled to and trained several agricultural experts in neighboring Kazakhstan.

“We established partnerships that yielded significant exchange programs,” Okezie said.

The Dean of the School of Agricultural and Environmental Sciences, Dr. Robert Taylor, acquainted the Azerbaijani with the capabilities and expertise of the School. He said the School is equipped with some of the most recent and cutting-edge technologies available anywhere, including collaborations with leading institutions in the United States and abroad. “We certainly look forward to working with you in your areas of need, including exchange programs,” Taylor said.

Dr. Teferi Tsegaye, professor and chair of the Department of Natural Resources and Environmental Sciences, joined Dr. Taylor in explaining areas of the University’s capabilities specific to the needs of the visitors, including irrigation and water resource management techniques. They were assisted by Dr. Martha Verghease, professor and interim chair of the Department of Food and Animal Sciences; and Dr. Zachary Senwo, director of research in the School of Agricultural and Environmental Sciences.

From left to right: Adeola Odutola; Alan Manning, Oyedeji Oluwoye; Dr. Cathy Qian; Steven Smith; Brandon Howard; Dean Dr. Trent Montgomery; Breon Williams; Delores Parker; Daniel Phillips; Lana Latimer; Kenneth Kirby; Melissa Porter; Quincy Heflin.

Twelve AAMU students from the School of Engineering and Technology, have received a $1,500 scholarship each, thanks to a Department of Energy (DoE) research grant directed by Dr. Cathy Qian, associated professor of Mechanical Engineering.

The grant, received as a result of Dr. Qian’s work on “Continuing High Performance Computing Research and Education,” has been ongoing for the last three years. Thirty students, referred to as “DOE Computational Science Scholars,” have benefitted from the program since its inception.

“The goal of the scholarship program is to attract talented students from science, mathematics and engineering to participate in computational science research and graduate education,” says Dr. Qian. She is being assisted in the DOE program by Dr. Zhengato Deng, professor of Mechanical Engineering, as co-investigator.

“The goal of the scholarship program is to attract talented students from science, mathematics and engineering to participate in computational science research and graduate education.”

Dr. Cathy Qian

The new DOE Computational Science Scholars are: Quincy Heflin, mechanical engineering; Steven Smith, construction management; Kenneth Kirby, mechanical engineering; Melissa Porter, biology; Allen Manning, mechanical engineering; Lana Latimer, electrical engineering; and Brandon Howard, mechanical engineering. Also receiving the DOE scholarships are: Daniel Phillips, civil engineering; Delores Parker, electrical engineering; Breon Williams, mechanical engineering; Oyedeji Oluwoye, computer science; and Adeola Odutola, electrical engineering.

At a presentation ceremony in the School of Engineering and Technology auditorium on April 30, Drs. Qian and Deng were joined by Dean V. Trent Montgomery, to congratulate the new DOE Computational Science Scholars.
Assessment, student learning outcomes focus of 3-day workshop

A three-day workshop intended to begin the process of helping Alabama A&M University develop the needed culture of assessment for the University’s fifth-year SACS report, ended on campus on June 17. Sponsored by the Center of Excellence in Teaching and Learning (CETL), the workshop gave participants an understanding of basic concepts of assessment, achieving measurable learning outcomes, and developing assessment plans.

Dr. Teresa Flateby, director of the Office of Assessment at the University of South Florida, facilitated the workshop, which was attended by faculty, administrators and staff involved in program development.

Dr. Juarine Stewart, interim provost and vice president of Academic Affairs, stressed the importance of the workshop, asking participants to take its outcome “very seriously.” She said what students are expected to learn, how well they learn what is expected, and how well those results are measured are the key elements of an institution’s effectiveness. “This assessment of continual quality enhancement is what we expect of ourselves and what is also expected of us by our accrediting agencies,” Dr. Stewart said.

The workshop included group activities and overnight assignments on such issues as creating program and subject rubrics to measure specific learning outcomes, and the difference between grading, evaluating and assessment. Topics such as where to collect summative and formative data; how and who to analyze those data; as well as when and how often to collect measures were also discussed in interactive settings.

Meantime, CETL was scheduled to hold a second assessment workshop on June 29-30. The workshop was to be facilitated by Dr. Uche Ohia, director of the Office of Assessment at Florida A&M University, who is known for her “F.A.M.O.U.S.” model of outcomes assessment of student learning, support services, and other areas concerned with institutional effectiveness.

Participants display their workshop completion certificates at the end of the three-day training program.

Thirty of the nation’s top soil scientists held a free, three-week intensive summer training institute at Alabama A&M University. The scientists, mostly drawn from the USDA-Natural Resources Conservation Service, conducted the training from an integrated earth science approach to soil science,” said Dr. Monday Mbila, an AAMU soil scientist and coordinator of the training program.

According to Mbila, in addition to lectures at AAMU’s Agricultural Research Center, group members also participated in six field trips throughout Alabama. He said to become a part of the institute, the soil scientists had to receive nominations by their respective state soil scientist or Major Land Resource Area office leader, as well as approval from the state conservationist. Some of the scientists are representing agencies from as far away as North Dakota.

The training program ended on June 25.

30 top national soil scientists hold intensive training at AAMU

The scientists study the types of soil at the AAMU Winfield Thomas Agricultural Research Station as part of the training program.

The scientists study the types of soil at the AAMU Winfield Thomas Agricultural Research Station as part of the training program.