



COLLEGE OF AGRICULTURE, HUMAN
AND NATURAL SCIENCES LINK
SPRING 2013



*Linking The College
To Its Alumni And Friends*



College of Agriculture, Human and Natural Sciences
3500 John A. Merritt Blvd.
Nashville, TN 37209



March 26th, 2013

Dear Alumni and Friends:

2013 is a historic year for Tennessee State University, as Chancellor John Morgan announced the appointment of the first permanent female president, Dr. Glenda Baskin Glover, effective January 1st. My colleagues and I welcome Dr. Glover and wish her great success at our beloved institution (see details about Dr. Glover, page 4). I have had the opportunity to speak with Dr. Glover a few times, and each time I came away with more respect and admiration for her diligence and commitment to the advancement of the university.

Recently, I was invited to share with a number of local and national organizations, including the University Foundation Board and the Alumni association, facts about the growth in our agricultural programs. After one presentation, the outgoing Foundation Board Chairman, Melvin Malone, commented that Agriculture has become the beacon for the University in recent years and that, during his tenure as Board Chair, he has always heard great things about the CAHNS. Other members of the Board quickly supported that view. Along those same lines the Thurgood Marshall College Fund invited me to present the growth of our agricultural programs and share with member institutions the policies and practices we have implemented to realize this growth. As I have been sharing with you through this newsletter, the College's agricultural programs have doubled the overall student enrollment and multiplied the graduate enrollment by more than 700%. We were proud to share our experiences to other institutions in some detail so that they can apply similar practices on their campuses!

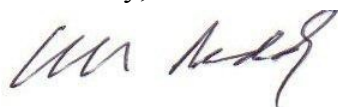
The other important news in our academic area is the restructuring of the Ph.D. program in Biological Sciences. It has been categorized as non-viable due to low graduation rate by the Tennessee Higher Education Commission and by the Academic program Prioritization Task Force of the University. An inter-departmental faculty committee, with the help of an outside consultant, has reviewed the program and recommended broadening its scope. In the new structure, students from chemistry and agricultural Sciences will be able to earn their Ph.D. degree in the broader Biological Sciences along with biology majors.

Additionally, our expansion of county extension operations continues to move forward; we are currently operating in 32 counties, a three-fold increase in five years. We employ 41 extension agents to conduct outreach activities in these counties in close collaboration with the University of Tennessee and the county governments. As we began to expand these programs, some agent employment issues became apparent, including our agent promotion system and compensation plan. In collaboration with the Office of Human Resources and the Tennessee Board of Regents, we established a formal agent promotion system in 2011. Effective January 2013, we also implemented a new salary structure to extension agents that takes market rates into account. The new compensation plan improved the salaries of several of our current employees and raised the starting salaries for incoming extension agents significantly; the new starting salaries are 20% higher than previous salaries and some of current employees' salaries were increased by more than \$7,000/year! We are thankful to all concerned in making this first ever major adjustment to extension agent salaries since the inception of the program in 1977.

The College's facilities improvement plans are also moving ahead at great speed. When you are in the Nashville area, please come and visit the new Agricultural Biotechnology Building under construction (see pictures, page 18). Lawson Hall and the CARP building have been remodeled and several new laboratories and teaching facilities have been added. The Main Campus Agricultural Research and Education Center has been improved with a number of new additions, including six new greenhouses and a Field Research Support Building, an Agricultural Education Building, an Equipment Shed, and a Chemical Storage and Washing Facility, all of which are under construction. In fact, all of our research facilities are going through a face lift.

All in all, the past six months have been very eventful for the College with a number of new faculty and staff additions. We have strengthened faculty support services by adding a new Technical Writer, a Grant Writer, and a Photo/videographer. For the first time, we have begun funding faculty in Biological Sciences and the Department of Chemistry who offer expertise in addressing the agricultural priorities of Tennessee and the nation. The integration of natural sciences with agriculture is helping to probe some serious research topics that were hitherto difficult for applied agricultural scientists to address.

Sincerely,



Chandra Reddy, Ph.D.
Dean and Director of Research/Administrator of Extension

Dr. Glenda Baskin Glover Assumes Leadership as New President of TSU



Saying, “I am glad to be home,” Dr. Glenda Baskin Glover has been named the 8th president of Tennessee State University effective January 1, 2013. “I am truly honored and excited about returning to my alma mater, Tennessee State University, in this monumental leadership role,” Glover said.

Formerly the dean of the College Business at Jackson State University in Jackson, Miss., Glover became the first full-time female president of TSU on January 2, 2013. She replaced Dr. Portia Holmes Shields who, as interim president for the last two years, was the first female to ever lead the University.

A 1974 graduate of Tennessee State University and a native of Memphis, Tenn., Dr. Glover earned her Bachelor of Science degree in mathematics, an MBA from Clark Atlanta University, a J.D. from Georgetown University Law Center, and a doctorate from George Washington University in business economics and policy. She has worked as a certified public accountant, attorney and professor before becoming a dean at Jackson State University.

Glover also has chaired the accounting department at Howard University and worked as an accountant with Arthur Anderson & Co. in Washington, D.C.

At Jackson State, Glover obtained the university’s first endowed chair, lead a successful \$5 million fundraising initiative, and spearheaded the implementation of online learning programs, developed a cost-reduction plan and implemented internal fiscal accountability measures.

Reddy Honored By Tennessee House of Representatives

Dr. Chandra Reddy, Dean and Director of Research/Administrator of Extension, College of Agriculture, Human and Natural Sciences, recently received a Resolution from the State of Tennessee House of Representatives commending him for his “honorable and astute service” to Tennessee State University and the greater Nashville community, noting his accomplishments in public service, professional achievement, and fundraising. House Joint Resolution No. 1084 was adopted April 27, 2012.

Since beginning his tenure at TSU in 2008, Dr. Reddy has spearheaded the continued development of the College of Agriculture, Human and Natural Sciences, including the expansion of the Extension Program into 32 counties (from only 12 in 2008), a 300% increase in faculty grant applications and external funding, the substantial expansion of facilities including six new greenhouses, a landscape studio, and the Agricultural Bio-Technology Research Building (currently under construction), and the continued cultivation of fundraising relationships including a gift of over \$400,000 and 200 acres of land for the establishment of a Center for Sustainable Agriculture.

TSU Hosts 6th National Small Farms Conference In Memphis



The College of Agriculture, Human and Natural Sciences at Tennessee State University along with the USDA/NIFA and the University of Tennessee, co-hosted the 6th National Small Farms Conference in Memphis,

Tenn., September 18 – 20, 2012.

Seven hundred and forty-six small farmers and small farm advocates attended the three-day conference. Representatives came from 48 states, three US territories, and two foreign countries to participate in training workshops that profiled a variety of best practices designed specifically for use in small farm settings.

Small farms are characterized as agricultural operations that generate less than \$250,000 dollars in annual gross income. The U.S. Census Office reports there are 1,921,058 small farms currently operating in the United States. This represents over 90% of all farm revenue generated in the country each year.

Since its inception in 1996, the National Small Farm Conference has served as an interactive forum where small farmers can engage with leaders in agricultural education and other specialty areas to learn about the latest technologies and farming practices that help improve farm production, efficiency, and profitability.

Attendees also had the opportunity to visit firsthand a variety of agriculture production centers in West Tennessee, including a stop to Memphis's *Agricenter International Expo Center*. Billed as the world's largest urban farm research test facility, the center houses numerous independent research labs, including *BioDimensions*, a leading investigator of bio-based products extracted from sugar beets, sugar cane, and other specialty crops. Finding ways to optimize non-tillable land was also profiled during a tour of the Agricenter's 4,160-panel solar energy farm.



Both TSU and UT are leading land-grant institutions, dedicated to the promotion and advancement of agricultural research, and the dissemination of relevant findings through formal classroom and farm-based extension learning opportunities. A recap of the educational material can be found on TSU's website: (<http://www.tnstate.edu/smallfarmconference/>).





*Dr. Portia Shields (center), TSU President, along with Dr. Chandra Reddy (left), Dean of the College of Agriculture, Human and Natural Sciences, present the Tennessee Small Farmer of the Year Award to Daryl Whitaker. Whitaker is from Estill Springs and runs a 35-acre cattle farm.
(photo by John Cross, TSU Media Relations)*



*John Swendiman from Lebanon, Tenn., along with his wife Zena, received the Innovative Marketing Award.
(photo by John Cross, TSU Media Relations)*



*Lance and Cathy Lannon (black shirts) from Lebanon, Tenn., along with some of their family members, received the Alternative Enterprises Award.
(photo by John Cross, TSU Media Relations)*

Ex-Air Force Munitions Specialist Gets Top Farmer Award At TSU Small Farm Expo

Daryl Whitaker is a rare “breed...er,” in cattle, that is.

In just six years after taking over a declining, 22-acre family farm in Estill Springs in Franklin County, Tenn., Whitaker has employed new and innovative farm-improvement methods that have turned things around and earned him a statewide recognition.

At a packed 2012 Small Farm Expo and Small Farmer Recognition Program Thursday, the former Air Force munitions systems specialist turned cattle breeder was recognized as the Tennessee Small Farmer of the Year.

The Expo, hosted by the TSU College of Agriculture, Human and Natural Sciences Cooperative Extension Program, recognized Whitaker for “Best Management Practices” and for his attention to details.

He beat out two other farmers and farming families for the top award. Lannon Farms, represented by Lance and Cathy Lannon, of Lebanon, Tenn., received the “Alternative Enterprises Award,” while John R. Swendiman, owner of Tojo Creek Ranch, also in Lebanon, Tenn., received the award for “Innovative Marketing.”

“I was ecstatic, to say the least when I was informed that I had been selected as Farmer of the Year,” said Whitaker moments before the announcement at the Expo.

This is not Walker’s first good fortune with winning awards for his farming practices. In 2010 and 2011, respectively, Whitaker was recognized as the Top Forage Producer, and the Top Beef Producer of the Year by the Franklin County Livestock Association.

He attributes his success to his willingness to learn and his openness to new ideas.

“To be successful, one must have the attitude to learn something new everyday,” Whitaker said.

Whitaker’s farm, which he took over after his father, John, died in 2006, is now a sprawling 35-acre cattle breeding ground made possible after repairs, construction and rebuilding efforts. He thanked the Tennessee Ag Enhancement Program, which helped him to purchase new equipment; the Natural Resources Conservation Service, and the USDA Farms Service Agency for helping him purchase additional cattle to increase his breeding stock.

“I thank Tennessee State University, and the Franklin County USDA Farms Service Agency for their recognition and this award,” said Whitaker, who was accompanied by his mother Mary.

In presenting the awards, TSU President Portia Holmes Shields, thanked the organizers of the Expo. She lauded the partnership with the University of Tennessee and the cooperation of all of the federal and state agencies, especially Extension services for involving students in “these” activities.

“It is about saving America and it is about smart farming when we can involve these young people in the research activities,” Shields said. “You all are doing a wonderful job here through Extension and all of our agricultural programs. We are very grateful for your efforts.”

Earlier, Dr. Chandra Reddy, Dean of the College of Agriculture, Human and Natural Sciences, thanked Dr. Shields and the various institution and agency representatives for their cooperation in making the Expo a success.

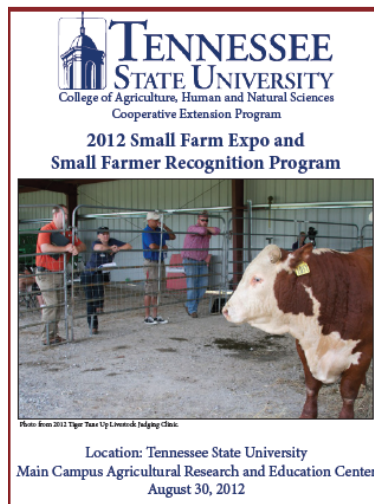
“This could not have been possible without your partnership and cooperation,” Reddy told the organizers, making special reference to Dr. Latif Lighari, Associate Dean for Extension, who has headed the organization of the Expo since its inception nine years ago. “You and your colleagues have always done a remarkable job as shown in this huge attendance.”

Before declaring the 2012 Expo closed, Dr. Lighari recognized his fellow organizers, the various farm managers and research leaders, exhibitors, small farmers, schools and students for their attendance.

“Your input, participation and visit made this Expo one of the most successful since we started,” Lighari said. “We thank you and especially the small farmers who are the lifeline to what we do.”

Other speakers and agricultural experts at the Expo were the Commissioner of the Tennessee Department of Agriculture, Julius Johnson; President of Tennessee Farm Bureau Federation, Lacy Upchurch; Dr. Larry Arrington, Chancellor of the Institute of Agriculture at the University of Tennessee; and Dr. Tim Cross, Dean of Extension at the University of Tennessee.

[Courtesy of Tennessee State University News Service]



Tennessee State University Hosts Association Of Extension Administrators Meeting

Administrators and staff of the Cooperative Extension programs at the historically black land-grant universities tackled the emerging issues of the nation's underserved communities at the 2012 meeting of the Association of Extension Administrators (AEA).

Hosted by the TSU College of Agriculture, Human and Natural Sciences, the meeting was held June 24-28 in Memphis, TN. at the Memphis Downtown Marriott, and attracted representation from the 18 1890 land-grant universities. Meeting participants examined problems that affect their clients, which include families, youth, businesses, agricultural producers and others who have little to no access to social and economic resources. The attendees explored funding opportunities to help them address issues such as obesity and overweight-related diseases, youth development, economic development, food safety, sustaining small and minority farmers, and managing and improving energy resources with new developments in energy conservation.

Land-grant universities share the mission of improving the quality of life for all persons through teaching, research and outreach or Extension. The schools provide research-based programs and services that are designed to improve the quality of life for their constituents.

The Association of Extension Administrators, which represents the leaders who are responsible for directing the Extension programs at 1890 universities, rotates its meetings at locations near member institutions. This year, Tennessee State University served as the host institution. AEA member institutions were established in 1890, 28 years after Congress first enacted the Morrill Act of 1862, which granted funding to states to establish land-grant colleges and universities. The Morrill Act of 1890 provided support for states to create institutions committed to educating minorities.

For more information on the Association of Extension Administrators, or TSU Extension, contact Dr. Latif Lighari, Associate Dean for Extension, at lighari@tnstate.edu or (615) 963- 5526.



Nashville Children Eating Well (CHEW) For Health

Conference Summary



The Center for Prevention Research (CPR), directed by Dr. Jan Emerson, organized and planned the second annual Nashville Children Eating Well (CHEW) for Health conference held on Friday, November 9, 2012. A total of 169 registered for the conference, and a total of 130 attended. The attendees included 42 students, 21 faculty, 18 health researchers, 8 public health advocates and healthcare providers, and 41 other community members (including representatives from non-profit organizations).

Dr. Jan Emerson, the TSU CHEW Co-PI, moderated the program. Dr. Chandra Reddy and Dr. Baqar Husaini welcomed the attendees on behalf of Tennessee State University, The College of Agriculture, Human, and Natural Sciences, and the Center for Prevention Research. Dr. Reddy welcomed and spoke on the growing concern for childhood obesity rates both in the U.S. and in other countries, such as China, which he recently visited. Dr. Husaini, CHEW Principal Investigator, enumerated the reasons for the concern with childhood and adult obesity by sharing the growing prevalence in the U.S. of obesity-related illnesses and resulting mortality.

Next, Dr. Emerson presented an overview of the CHEW project followed by reports on the progress and findings of each CHEW component. Dr. Robert Levine (Meharry CHEW Co-PI) presented that the CHEW Education component team has spent 1,757 hours training 1,079 students and medical personnel (i.e., TSU nutrition undergraduates; Meharry physicians in training; practicing physicians and nurses; and Meharry medical students) in childhood obesity prevention. Further, the education component has provided access to their educational curriculum online at several sites, including Sharepoint and Blackboard. Ms. Rita Fleming reported that the CHEW Extension component team has signed up five WIC vendors and completed the Nutrition Environment Measurement Survey (NEMS) of these stores, as well as conducted two community outreach events to promote the goals of CHEW. Finally, Dr. Pamela Hull (Vanderbilt CHEW Co-PI) highlighted that the CHEW Research component team completed the Phase One data collection on 150 (50 each African American, Hispanic and White) families in the Women, Infants, and Children's (WIC) supplemental food program who had at least one child 2-4 years old currently enrolled in the program. Selected preliminary analysis of this survey data was presented, which will be used to develop the culturally tailored nutritional counseling materials to be tested in years 4-5 of the grant. Depending on the outcomes, these materials may be adopted by the Tennessee WIC program.

Following CHEW updates, there were nine presentations, two by directors of programs from the Metro Nashville Public Health Department and the Tennessee Obesity Task Force and seven by researchers from TSU, Vanderbilt University, University of Connecticut, University of Colorado, New Mexico State University and Meharry Medical College. Speakers presented on the following topics: changing habits academically, mentally and physically with gardens; empowering youth to choose a healthier diet and more physical activity (TSU YEP summer camp project); issues in reducing sugar-sweetened beverage consumption; family-based community centered childhood obesity prevention; encouraging young children to be super tasters and mighty movers; exergame guidelines, research and recommendations; and preventing overweight in African American infants through breastfeeding. Time was allowed, when possible, for questions and answers after each presentation.

The program committee added a poster session to the conference agenda this year. There were a total of 14 posters presented on a variety of topics related to preventing childhood obesity, including two presented by CPR staff and students using the CHEW research phase one data. Topics included: cultural tailoring of childhood obesity prevention for Hispanic families; empowering youth to be active and media savvy; how summer programs can work together to feed and teach youth; report on progress of “Eat Well-Play More Tennessee;” the need for health literacy; how soybean fiber can help prevent childhood obesity; how TV in child’s bedroom is associated with risk of obesity; and several posters on advantages of breastfeeding in preventing early childhood obesity.

Additionally, to evaluate the impact of the conference, CPR had attendees fill out a pre and post survey to determine whether the attendees increased their knowledge of the topics presented. A total of 69 completed both the pre and post ten-question survey. Analysis revealed statistically significant improvement in knowledge on five topics ($p < 0.01$) and substantial increases of 20-30% on the other topics. The third annual CHEW conference will be planned for the fall of 2013.



2012 Agriculture And Home Economics Hall Of Fame

The *Sixteenth Annual* Agriculture and Home Economics Hall of Fame Banquet and Induction Celebration was held at the Gaylord Opryland Hotel in Presidential Ballroom A on Friday, September 28, 2012 at 7:00 p.m.

This year, Tennessee State University celebrates 100 years of being in existence, therefore the Hall of Fame Committee decided to host our Induction Celebration as part of the many activities centered around the Centennial Homecoming Celebrations.

The following persons were inducted into the 2012 Class of the Agriculture and Home Economics Hall of Fame.

- * Clyde Chesney, Ph.D., *Post-humously*, Former Associate Dean for Extension at Tennessee State University.
- * Ms. Ruth McDowell, *Post-humously*, Former Director of Early Learning Center and Coordinator of Child Development and Family Relations in the Department of Family and Consumer Sciences at Tennessee State University.
- * Mr. Leonard Jordan, '77, Interim Associate Chief, Natural Resources Conservation Service-United States Department of Agriculture, Washington, DC.
- * Mack T. Scott, DVM, '58, Retired Professor of Animal Physiology and Director of Animal Care Facility of Meharry Medical College.
- * Mr. Sammy Comer, '72 & '74 Assistant Professor in the Department of Agricultural and Environmental Sciences and Director of International Programs at Tennessee State University.

The recipients were recognized for their many years of exemplary services to the University, community, state, nation, and the world. We can truthfully say that they embody the Centennial theme: "Sustaining the Legacy through Excellence, Resilience, and Unity".



Dr. Chesney



Ms. McDowell



Mr. Jordan



Dr. Scott



Mr. Comer

TSU Scientists Lead National Study On Food Safety Knowledge Among Older Adults



A recent study by researchers at TSU, in collaboration with RTI International, a worldwide research and development firm, suggests that the elderly

and their caregivers may not be getting the food safety education they need to implement safe cooking and eating practices.

As a result, the study shows older adults, along with pregnant women, young children and immune-compromised individuals, face a higher risk of severe illness from foodborne pathogens than the rest of the population.

The study, headed by TSU's Professor of Family and Consumer Sciences, Dr. Sandria L. Godwin (sgodwin@tnstate.edu), was conducted using focus groups with 55 people who work with older adults, including doctors, nurses, home healthcare providers and relative caregivers. It found that most participants lacked training and knowledge regarding safe food practices for the elderly.

The results of the study, published recently in *"Educational Gerontology,"* also suggest that some healthcare providers may not be equipped to educate older adults about how to avoid foodborne illness.

While physicians and physicians' assistants had received training in diagnosis and treatment of foodborne illness, they were not trained in preventative measures for older adults, the study found. Registered nurses and nurse practitioners received no foodborne illness training. Some home health providers had received formal instruction in safe cooking and food preparation, while others had not.

"In instances where caregivers were trained and

knowledgeable, we found a lack of seriousness in some to be fully engaged in providing the necessary care," said Dr. Godwin, a leading expert on consumer food safety, food security, emergency preparedness and dietary assessment. "We found this to be a major handicap in being able to ensure that older adults are adequately served."

In previous projects by Dr. Godwin and her associates at TSU, they examined older adults' food-handling knowledge and practices and developed targeted educational materials, since it was determined that seniors were more likely to read printed materials. The group developed and distributed entertaining educational booklets, as well as designed an interactive website to accommodate seniors accessing the information by way of the Internet.

"The interest in these materials was immediate," Godwin said, citing a pre- and post-evaluation scheme that showed the effectiveness of the educational materials. "For those who reported reading the materials, there was an increased awareness of recommended food-safety practices."

Materials developed by Godwin and her group include educational programs for older adults and their caregivers, as well as a cookbook, "Tasty and Safe," with recipes on how to prepare food for seniors. The materials can be accessed at [www.tnstate.edu/agriculture/documents/Seniors Food Safety Booklet-1.pdf](http://www.tnstate.edu/agriculture/documents/Seniors_Food_Safety_Booklet-1.pdf).

The TSU/RTI study also provided a list of leading food safety recommendations for older adults. They asked older adults to avoid eating raw or undercooked seafood, raw sprouts, soft cheeses, cold smoked fish, and cold deli salads, as well as hot dogs and deli meats that have not been reheated to steaming hot or 165 degrees F.

Alumna Promotes Family Excellence through TSU Tie



Since the early 1960's, the Jolley family has maintained a strong presence on the TSU campus beginning with Elease Wright Jolley (second from left). Elease's children along with various family members followed her footsteps and attended the University. Pictured are her children, Everett (left), Khalisha and Cornelius Vanderbilt Jolley IV. (photo by John Cross, University Relations)

For someone who did not see college as a valuable option after high school, Elease Wright Jolley (ejolley@tnstate.edu) has surely steered a good number of people in TSU's way.

"All that mattered to me then was my (high school) sweetheart," said Jolley. "I was in love. Going to college was the last thing on my mind, much less helping others to do so."

But thanks to her high school guidance counselor, a cousin and a TSU graduate, along with her "unwavering" mother who saw education as the only option for success, Jolley entered TSU in 1966 earning a bachelor's degree in Business Education and a master's in Agricultural Sciences.

And then the floodgate opened. What followed, at Elease's urging, was a long line of Wright and Jolley family members.

"First it was my brother, my uncle's children, my aunt's daughter, my sister's son, my children and then my brother's daughter," Elease said. In all, more than 20 siblings, closed and extended family members of Elease have entered and graduated from TSU over the years.

"They came because of me. I would go home and boast about how great TSU was. I encouraged them to come, and when they came I looked after them," she said. "TSU was like a family and they loved it."

Elease's family members did not just come to TSU, they excelled. Her younger brother, Donald Wright, earned an electrical engineering degree from TSU in 1975. He is the owner of Wright's Engineering in Houston, Texas.

Donald's daughter, Xandelyn Wright, became president of the TSU Student Government Association (2007-2008) and graduated with a B.A. in 2008.

Elise's three children, Everett, Khalisha and Cornelius Vanderbilt Jolley IV, are TSU graduates. Everett works for TSU in the Office of Admission; Khalisha, the first of Elise's children to enter TSU (January 1997), earned her bachelor's in Criminal Justice and now works with the Metropolitan Nashville Police Department; and Cornelius graduated with bachelor's and master's degrees. He worked as a teacher and coach in Metro Davidson County for four years. He is currently employed in banking.

"All of my relatives earned their undergraduate degrees, some of them completed graduate and post-graduate work, and they are doing very well as educators, engineers, bankers and business owners. One is a medical doctor and another a lawyer," she said.

Elise's long tie to TSU and her love for the institution are not limited to steering her family members into the University's direction. TSU has also been her employer for more than 39 years. Since 1979 she has been working in the College of Agriculture, Human and Natural Sciences, where she currently serves as Manager of Office Operations and Events.

Elise credits her mother with helping her see the light, which she said, laid the foundation for her to be able to help family members to see the value in not just coming to TSU, but going to college.

"My mother did not even have a high school education, but she understood the need for me to get an education as the only way out. She made sure I did my homework, and when I graduated high school and thought that was it, my mother said, 'No, you're going to college,'" Elise said.

Once at TSU, Elise immediately fell in love with the University. "It was like a big family. People cared for each other; teachers were concerned about your wellbeing, and students were exceptionally friendly," Elise said, rekindling a "special" moment as a new college student.

"I was walking from the Women's Resident Center (Wilson Hall) going to the Student Center (Sub) when this big guy, Claude Humphries (football player later with the NFL Eagles – about 6 feet 10 inches tall, weighing about 275 pounds) came to me and suddenly picked me up, looked in my face and asked me, 'What is your name?' Scared, I said Elise.

"After he put me down I was not afraid any more. I felt the football players were just having fun. But that's how it was on campus. People were approachable. The camaraderie made you feel at home. And that's the message I passed on about TSU to relatives and others with the potential for college."

The Coordinator of the Children and Youth Ministry at Nashville's Temple Baptist Church for 16 years, and more than 25 years as a Graduate Advisor (a volunteer position through her Alpha Kappa Alpha sorority) at Fisk University, Elise has also used her connections with children and adolescents to help recruit many other students for her alma mater.

About her plan to ensure that the new generation of Jolleys and Wrights continue to see the benefit of a TSU education as she did, Elise said, "I will continue to spread the word as long as I am alive. This is a great institution and I believe in the quality of a Tennessee State University education.

"For my (high school) sweetheart, my mother had other plans for me, and it did not include him. He went in another direction, and I came to TSU and never looked back. My blood will run BLUE forever." [Courtesy of Tennessee State University News Service].

BBC Visits Fire Ant Experts At TSU Research Center



They look very much like ordinary ants. They are between a tenth and a fourth of an inch but are very aggressive when disturbed and cause a powerful sting that can kill domestic animals and wildlife as well as destroy crops.

Fire ants clamp their jaws on their prey and sting repeatedly, leaving blotchy, burning, itching sores and tiny blisters. Scratching just makes it worse.

But wait, there's an avenger — the fire-ant decapitating fly. Almost a decade ago, the U.S. Department of Agriculture launched a program introducing phorid flies, a native predator. The fly has snatched more than a few heads off while turning a few.

The BBC became aware of the research on these ant invaders taking place at TSU's Otis L. Floyd Nursery Research Center in McMinnville and recently sent a film crew to document what is going on in this area known as the "Nursery Capital of the World."



The segment featuring the fire ants will air on BBC's "*Nature's Weirdest*," a program that examines some of the strangest natural events on the planet. The production crew selected the Center because of the groundbreaking research-taking place.

"We have been traveling the world documenting odd and spectacular events in the natural world," said Luke Hollands, producer and researcher with the network. "One of the segments we wanted to document while here in the states was the fire-ant invasion and the methods used to combat the advance of the ants across the southern states. TSU is leading the research in the Middle Tennessee while helping the local nursery industry."

According to Dr. Jason Oliver (joliver@tnstate.edu), research associate professor at the McMinnville research center, fire ants first came to the United States by accident in the 1930's via cargo ships from South America and have since colonized in the southern and southwestern U.S. by hitchhiking on nursery stock and sod.

"The research we're conducting is not so much to eradicate the fire ant population but to control it," said Dr. Oliver. "Research shows that the flies (phorids) disrupt ants from foraging for food and even better, shuts down mating swarms."

While the ants are originally from South America, so too are their natural predator, the parasitic phorid flies. The flies can detect a chemical fire ants use to communicate called pheromones. The flies use the ant alarm or trail pheromones to find their host and lay their eggs on the ant's body. Fly larvae develop inside the ant's head, which falls off when the adult fly emerges.

"It truly is one of the strangest events in nature to control an invasive species," added Hollands.

The program will air in Great Britain on the BBC network later this fall, but is not yet on the lineup for BBC America. [Courtesy of Tennessee State University News Service].

TSU Task Force Offers Help In Elderly Care, Food Safety As Drought Hits

As drought and other disasters impact farmers and agricultural production across the nation, experts at Tennessee State University are looking for ways to help individuals cope with the resulting threat to human life and food safety.

Working with Extension agents in its 32-county service area, the College of Agriculture, Human and Natural Sciences has set up a Disaster Education Response Team (DERT), to educate residents on the care of senior citizens, keeping children safe, and how to preserve food during the intense heat and other disasters.

“Certainly the drought is greatly affecting crop production and the economic impact will be felt a for a long time, but the effect of the extreme heat on humans, especially the elderly and children is another area that needs great attention,” said Dr. Chandra Reddy, Dean of the College of Agriculture, Human and Natural Sciences.

He said DERT is targeting rural and urban communities with leaflets, brochures and holding meetings with parents, senior citizen centers and homeowners on subjects such as how to prevent heat stroke, keeping food safe during power outages, and how to avoid food “danger zones” when it is hot outside.

According to Rita Fleming, Assistant Professor of Health Education and a member of the DERT task force, 42 children died in the United States last year from heat stroke. While the number seems small, she said the reasons for most of those deaths were avoidable.

“Infants and children are sensitive to the effects of extreme heat and must rely on other people to keep them cool and dehydrated,” she said.

Just like children, Fleming said, senior citizens

are also vulnerable, adding that those aged 65 and older are 12-13 times more likely to suffer from heat stroke than any other demographic group. She named limited access to timely media about weather emergencies, poor ventilation, and lack of access to air-conditioning as some of the major factors that lead to older adults’ death in extreme heat.

Power outages, another concern of DERT, are frequent occurrences during extreme heat, and can have a harmful effect on the food we eat, according to Dr. Sandria L. Godwin, Professor of Family and Consumer Sciences; and Dr. Suping Zhou, Associate Research Professor of Agricultural Sciences, members of the task force.

Their focus is on how to preserve food by keeping it out of what they call the “food danger zone” (food stored in the temperature range of 40°F and 140°F), during extreme heat or when there is no electricity.

Other members of DERT are Dr. An Peischel, Small Ruminant Extension Specialist; Dr. Fur-Chi Chen, Associate Professor of Agricultural Sciences; and Richard Stone, Research Assistant.

Visit the DERT website at http://www.tnstate.edu/agriculture/disaster_education1.aspx.

[Courtesy of Tennessee State University News Service].



Exciting Changes Happening In CAHNS

Agricultural Biotechnology Building Construction

The parking lot between Lawson Hall and the Farrell-Westbrook Complex is now home to some big vehicles now as construction has begun on the new Agricultural Biotechnology Building. This \$8 million, 30,000 ft² building, funded by the USDA, will house and support primarily agricultural research and provide working space for more than 20 PhD level scientists. It will also include research space for graduate students, large classrooms, laboratories and a high-efficiency HVAC system.



New Concentration In Bioinformatics

Bioinformatics, a growing field of science that combines biology, computer science and information technology into a single discipline, is now being offered at Tennessee State University as joint effort between the departments of Biological Sciences and Computer Science.

TSU is playing a unique role in offering and exposing its students to bioinformatics on the undergraduate level. The University is part of a handful of institutions offering the discipline at this level, which is widely offered at the graduate level.

“We first started efforts to bring bioinformatics to TSU in 2008 when two faculty of my department and I participated in the PSC Bioinformatics workshop”, said Dr. Terrance Johnson (Head, Biological Sciences Department). “We have made excellent progress as we are now offering training in this area to our undergraduate students. In addition, several faculty in the College of Agriculture Human and Natural Sciences are conducting research utilizing bioinformatics techniques, and we recently conducted an on-campus Next Generation Sequencing DeNovo Synthesis workshop for our research faculty and students.”

Defined in some circles as the application of computer technology to the management of biological information, bioinformatics has played major roles in many scientific discoveries. It is a key factor in mining the numerous databases of biological knowledge on DNA sequences, protein structures, metabolic pathways, organisms, diseases, and providing clues to biological functions.

Students taking bioinformatics are expected to build a “solid” foundation in computer programming, databases, algorithms, discrete mathematics and in the biological sciences, genetics, genomics and molecular biology.

The program is made possible with funding from the National Science Foundation (NSF) and in partnerships with the Pittsburgh Supercomputing Center (PSC) and the Oak Ridge National Laboratory (ORNL). Through



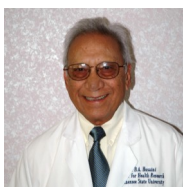
these efforts TSU has trained a number of professors from the Biological Sciences and Computer Science departments and the College of Agriculture, Human and Natural Sciences, as well as supported a number of students from these departments interested in bioinformatics.

In the last two years, six TSU professors and two students have participated in PSC’s Summer Institute in Pittsburgh. In addition, the University of Tennessee and ORNL provide training and mentorship for TSU students via the TN-SCORE program, which is also funded by the NSF.

The TSU bioinformatics program, developed by the Departments of Biological Sciences and Computer Science, started last spring semester. The Concentration requires completion of 21 credit hours in computer science and biology, as well as the completion of a senior project in bioinformatics before a student graduates. For additional information contact Dr. Terrance Johnson, Biological Sciences Department Head, at tjohnson@tnstate.edu.

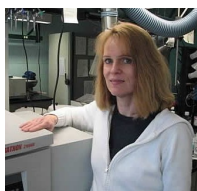
CAHNS Achieves Great Success In Getting Grants

Center For Prevention Research Gets \$3.9 Million Grant



Tennessee State University is cooperating with Vanderbilt University and Meharry Medical College in a multi-million dollar cancer research grant. Funded by the National Institutes of Health National Cancer Institute for 2011-2016, the CAHNS Center for Prevention Research will administer the \$3.9 million TSU portion of the grant. TSU Professor Emeritus Baqar Husaini is the principal investigator for TSU, and Dr. Margaret Whalen, TSU Professor of Chemistry, is the TSU co-PI. Dr. Whalen is a recognized expert on the immunology of human natural killer (NK) cells, which play a positive central role in immune defense including anti-cancer biological processes. The overall objectives of the partnership are to (1) increase and stabilize the competitive cancer research capability of Meharry Medical College and TSU, (2) create stable and long-term collaborative relationships between Meharry Medical College, TSU, and Vanderbilt Ingram Cancer Center in cancer research, training, career development, and cancer outreach, and (3) improve the effectiveness of the Cancer Partnership in cancer research, training, career development, education, and outreach activities specifically designed to benefit minority populations in the region served by the Partnership. For more information about the activities in this grant contact Dr. Margaret Whalen (mwhalen@tnstate.edu) or Dr. Jan Emerson, Acting Director, Center for Prevention Research (jemerson@tnstate.edu).

MARC*USTAR Program Funded



Faculty in the Departments of Chemistry and Biology have received a \$2,356,400 grant for the Minority Access to Research Careers Undergraduate Student Training in Academic Research (MARC*USTAR) Program, funding the program through May 31, 2017. Led by Program Director Dr. Margaret Whalen (Chemistry) and Associate Director Dr. Lewis Myles (Biology), this program provides undergraduate research training for minority students, preparing them to enter into biomedically-related Ph.D. programs and careers in biomedical research. Over the past 30 years, this program has trained 149 students and has a 100% graduation rate with an average GPA of 3.5. Of the 149 trainees, 80% have gone on to do post-baccalaureate training, 31 have received their Ph.D. and are now training the next generation of scientists as faculty members at institutions such as Spellman, Fisk, Harvard, and the University of Cincinnati. Our trainees participate in a rigorous program of workshops, research, and course work to prepare them to enter top-ranked graduate programs. In addition to their research and course work, our trainees attend weekly meetings during the academic year where they engage in lively discussions of their research and career goals. Over the past 20 years, our trainees have given over 300 presentations on their research at local, regional, and national scientific meetings. Our students have received a total of 57 awards for their research presentations over this time, with 11 regional awards and 5 national awards. Research conducted by our trainees has resulted in 13 peer-reviewed publications, including six with MARC*USTAR students as the first author.

TSU Agricultural Faculty Awarded \$1.7 million In New Research Grants

The College of Agriculture, Human and Natural Sciences at Tennessee State University has been awarded \$1.7 million in grants to strengthen teaching, research and extension programs in the food and agricultural sciences.

The College received the award from the U.S. Department of Agriculture through the National Institute of Food and Agriculture's 1890 Capacity Building Grants Program. This is the third time in as many years that the Agricultural College has received near the maximum funding from the USDA under this type of funding.

The funding is spread among six specific projects:

- *Building Extension Capacity Using a Mobile Biodiesel Production Platform* -\$249,744; Principal Investigator: Jason de Koff (jdekoff@tnstate.edu) and team: Prabode Illukpitiya, John Ricketts and Alvin Wade
- *Geospatial Information Systems Training and Outreach for Extension and Research Professionals* -\$249,969; Principal Investigator: Solomon Haile (shaile@tnstate.edu); Roy Bullock
- *Enhancing Food Safety Knowledge of Small to Medium-sized Produce Growers in Tennessee and Illinois* -\$250,000; Principal Investigator: Agnes Kilonzo-Nthenge (akilonzontheng@tnstate.edu) and team: Fisseha Tegegne, Dharma Pitchay and Samuel Nahashon
- *Improving Enrollment and Retention of Minority Students in Pre-veterinary Medicine at TSU* -\$149,952; Principal Investigator: Makonnen Lema (mlema@tnstate.edu); Samuel Nahashon
- *An Economics Analysis of Local Food Environment and Demand for Fruits and Vegetables in a Food Desert Cluster* -\$299,196; Principal Investigator: Lan Li (lli@tnstate.edu) and team: Enefiok Ekanem, Prabode Illukpitiya, Surendra Singh and Fisseha Tegegne
- *Identification and Modulation of Functional Protein Association Networks for Drought Tolerance in Switchgrass* -\$499,995; Principal Investigator: Suping Zhou (zsuping@tnstate.edu), Jason de Koff, Dafeng Hui and Fur Chi Chen

The 1890 Institution Teaching, Research and Extension Capacity Building Grants Program is intended to strengthen teaching, research and extension programs in the food and agricultural sciences by building the institutional capacities of 1890 Land-Grant Institutions, and Tuskegee University. The CBG program supports projects that strengthen teaching programs in the food and agricultural sciences in specified need areas of curriculum design and materials development, faculty development, and others. CBG supports projects that strengthen research and extension programs in need areas of studies and experimentation, extension program development support systems, and others.

USDA Awards A \$2.44 Million Grant To TSU's College Of Agriculture, Human And Natural Sciences' Food Safety Team To Help Reduce Incidence Of Foodborne Illness



The U.S. Department of Agriculture (USDA) has awarded a research grant to Tennessee State University (TSU) to help reduce illnesses from *Salmonella* and *Campylobacter* by improving consumer storage, handling, and preparation of raw and ready-to-eat poultry, eggs, and poultry products.

According to new estimates from the Centers for Disease Control and Prevention (CDC), about 48 million people get sick, 128,000 are hospitalized, and 3,000 die each year as a result of foodborne diseases. Surveillance (FoodNet) data reported by CDC lists *Salmonella* infection as the most commonly reported foodborne infection, followed by *Campylobacter*. Infections from *Salmonella* and *Campylobacter* can cause long-term complications, and even death. Although consumers can acquire these bacteria from a variety of sources, most of the illnesses are associated with eating raw or undercooked poultry or eggs, or from cross-contamination of other foods by these items.

Dr. Sandria Godwin, a Professor in the Department of Family and Consumer Sciences, along with a multi-institutional team of researchers, educators and extension specialists, will use the \$2.4 million grant to accomplish the following objectives:

- Characterizing consumers' storage, handling and preparation of poultry, eggs, and poultry products, and their awareness and understanding of existing food safety messages.
- Assessing and prioritizing the risk of contamination from improper in-home storage, handling, and preparation of poultry, eggs, and poultry products,.
- Developing science-based and consumer-focused messages on safe storage, handling, and preparation of poultry, eggs, and poultry products, and evaluating their impact.

The expected long-term outcomes of the project include an increased consumer knowledge and use of recommended storage, handling and preparation practices for poultry products and eggs, which will ultimately result in a reduction in foodborne illness due to consumers' improved handling, storage, and preparation of poultry products and eggs.

Dean Chandra Reddy stated that “This award solidifies Tennessee State University’s leadership in Food Safety research and education. The College appreciates the leadership of Dr. Sandy Godwin in advancing this area of research.”

Godwin’s team includes Dr. Fur-Chi Chen and Dr. Agnes Kilonzo-Nthenge, also in the Department of Family and Consumer Sciences, along with Dr. John Ricketts and Dr. Samuel Nahashon from the Department of Agricultural and Environmental Sciences. They will be collaborating with faculty at Kansas State University (Dr. Edgar Chambers IV and Dr. Delores Chambers), and researchers and staff at RTI International who will be directed by Ms. Sheryl Cates.

The project grant is through USDA’s Agriculture and Food Research Initiative (AFRI) and administered through NIFA. AFRI food safety grants promote and enhance the scientific discipline of food safety, with an overall aim of protecting consumers from microbial, chemical, and physical hazards that may occur during all stages of the food chain, from production to consumption.



CAHNS And The Community

Insects Take Center Stage In Warren County

Third Graders Get Buggy

CAHNS scientists introduced approximately 300 third-grade students to the world of entomology at the annual Warren County Agriculture Day. Nadeer Youssef, Joseph Lampley and Debbie Eskandarnia met with students, about 15 at a time, throughout the day and used native and exotic insect specimens to explain the role of insects in agriculture and our daily lives.



Insect Collection Donation

The Nursery Research Center entomology program, led by Dr. Jason Oliver (joliver@tnstate.edu) donated a collection of Tennessee insects to the Bridgestone Environmental Education Classroom and Habitat, located in Warren County, Tenn. This science/environmental center features classroom learning stations about science and the environment, a 1.7-mile teaching trail, meadows, woods, and two ponds. Over 5,000 students participate in the program annually. “This collection is a wonderful addition to our program. We will use it every day,” said Diane Parton, instructional coordinator at the facility. “We welcome students from elementary all the way up to the college level. This collection will be used by everyone.”



Agriculture Takes Teaching To The Next Level Through CASE

Teachers perform an experiment as part of the Agricultural and Extension Education Program at Tennessee State University. Sponsored by CASE, more than 20- high school teachers took part in the nine-day developmental workshop. (Courtesy photo)

Thanks to Tennessee State University's Agricultural and Extension Education (AEE) Program, more than 20 high school agri-science education teachers started this school year confident that this year will be better than any other they have experienced thus far.

Teachers gathered from across the country July 26 through August 1 at Tennessee State University to participate in the Curriculum for Agricultural Science Education (CASE) Institute, held on the main campus in Nashville. The CASE Institute is a professional development workshop that provides teachers training in specific courses. Once a teacher has successfully completed the 80 hours of intense professional development at the CASE Institute, the teachers are certified to teach the specific courses to their students in their home schools.

"The CASE Institute is one of the more practical and purposeful professional development opportunities for teachers today," said Matthew Simpson, a CASE Lead Teachers. "Participants can immediately implement the knowledge they are gaining into their classrooms."

TSU's AEE Program Leader and Extension Associate Professor John Ricketts (jricket1@tnstate.edu) noted "This institute provides teachers with first-hand knowledge and experience with a curriculum that fosters the best of what is known about student-centered, inquiry-based instruction in an effort to effectively integrate core academics and STEM into participants' respective programs."

The nine-day workshop has brought together teachers from all across the nation including Oregon, New York, Tennessee, New Jersey, Delaware, West Virginia, Iowa, Ohio, and Kentucky. Together, they are specifically completing the Introduction to Agriculture, Food, and Natural Resources (AFNR) CASE certificate. AFNR is the introductory course in the CASE sequence of courses and is designed to introduce students to the four pathways that will be offered through CASE. In addition to a brief overview of animal science, plant science, natural resources, and agricultural technology and systems, students will explore FFA, leadership, and science in agriculture. [Courtesy of Tennessee State University News Service].



4-H National Youth Science Day



On November 30, 70 5th and 6th grade 4-H girls from Smithson-Craighead Academy visited TSU to join millions of young people across the nation to become scientists for the day to celebrate the fifth annual *4-H National Youth Science Day* (NYSD). This annual event seeks to spark an early youth interest in science and future science careers, and to reclaim the nation's position of leadership in scientific exploration. As part of 4-H NYSD, youth will participate in the *4-H Eco-Bot Challenge: the 2012 National Science Experiment*.

At the event hosted by the TSU College of Agriculture, Human and Natural Sciences, 4-H'ers enhanced their engineering skills by assembling their own Eco-Bots and surface controls to manage an environmental clean-up. Youth then tested the interaction between the Eco-Bot's design features and various surface control configurations to determine the most effective clean-up solution for the simulated spill.

"Our nation is falling behind other countries in the fields of science, technology, engineering and math," says Dr. Tyrone Miller, Cooperative Extension Leadership Specialist. "However, participation in high-quality positive youth development programs like 4-H NYSD offers youth and adults the opportunity to engage in scientific exploration and work together to build the next generation of our nation's scientists, engineers and mathematicians."

To combat a national shortage of young people pursuing science college majors and occupations, and to enhance the nation's contribution to the sciences, *4-H National Youth Science Day* demonstrates that science, engineering, math and technology are fun and attainable options for college degrees and future careers. Currently, more than five million young people across the nation participate in 4-H science, engineering, technology and applied math year-long programming. Contact Dr. Tyrone Miller, 615.963.1843, tmiller11@tnstate.edu for additional information about 4-H and National Youth Science Day.

Plant Disease and Pest Workshop

A plant pest and disease workshop was held Wednesday September 12, 2012 at the Otis L. Floyd Nursery Research Center, McMinnville, TN. Attendees from across the state received up to the minute information about new invasive pest and disease threats to the Tennessee nursery industry, new powdery mildew resistant cultivars; flowering cherry leaf spot disease management, Ambrosia beetles, Imported fire ants, calibrating sprayers to deliver pesticides accurately and reducing accidental exposure to pesticides. Speakers were Mr. Gray Haun (Tennessee Department of Agriculture), Dr. Chris Ranger (USDA/ARS Wooster OH), and Dr. Margaret Mmbaga, Dr. Jason Oliver, Dr. Karla Adesso and Dr. Alicia Bray from Tennessee State University. Approximately 50 producers and other agricultural professionals attended the session.





Fun In The Sun



Successful Summer Student Season

The College of Agriculture, Human and Natural Sciences offers summer programs for pre-college aged students from diverse backgrounds, ages and socio-economic groups. Student participants range from 5th grade to entering freshman in college. Approximately 250 youth participated in CAHNS pre-college summer programs in the summer of 2012.

- ◆ The Developing Future Scientists Program
Dr. Arvazena Clardy, (aclardy@tnstate.edu) Program Director

The Developing Future Scientists Program is a summer program for students in the 5th through the 11th grades. The goal of this summer program is to expose, educate and provide hands-on experiences for students in the areas of agriculture, biology and chemistry within in the CAHNS. We had 30 students participating in the week-long camp.



- ◆ The Summer Apprenticeship Program
Mr. William F. Hayslett, Sr. (whayslett@tnstate.edu), Program Director

The Summer Apprenticeship Program, sponsored by the College of Agriculture, Human and Natural Sciences, is a four-week residential program for high school rising seniors and high school recent graduates that have applied and been admitted to Tennessee State University. Sixteen students participated in the summer of 2012.

Continued on the next page

- ◆ YEP Summer Camp 2012 Nutrition and Physical Activity Project
Dr. Janice Emerson (jemerson@tnstate.edu), Program Director

TSU's Youth Empowerment Program (YEP) directed by the department of Service Learning began in summer 2010 and serves 50 at-risk African American tenth graders and 50 TSU students who are trained as college mentors. Long-term goals of YEP are to increase academic achievement, motivation, retention, and college access, while reducing the incidence of risky behaviors that threaten health, well being, and quality of life.

- ◆ Nursery Research Center Summer Intern Program
Dr. Nick Gawel (ngawel@tnstate.edu), Program Director

The purpose of the Nursery Research Center Summer Intern Program is to increase the exposure of high school students in Warren County to the science-based careers and educational opportunities offered in the College of Agriculture, Human and Natural Sciences at Tennessee State University. This summer five students learned research skills by participating in hands-on laboratory and field research in the entomology, horticulture and pathology research programs.

- ◆ Youth Active and Media Savvy (YAMS) Summer Camp
Dr. Veronica Oates (voates@tnstate.edu), Program Director

YAMS serves to launch a legacy of health empowerment for African American youth, ages 8-14 in Middle Tennessee. This transformative interactive program aims to promote self-confidence and healthy living as the participating youth learn and engage in activities that explore media influence on dietary behaviors and sedentary lifestyles. Emphasis is placed on providing nutrition lessons and physical activities to promote healthy weight management. Sixty-one youth participated in the summer of 2012.

- ◆ The REAP and Engineering Apprenticeship Program
Dr. Benny Washington (bwashington@tnstate.edu), Program Director

The Research and Engineering Apprenticeship Program (REAP) provides opportunities for high school students, including underrepresented groups, to gain hands-on work experience in scientific research and development programs on a university level. REAP students are exposed to real-world scientific research and are able to see themselves making a living as scientists and researchers. Selected students are awarded a stipend for their summer research experience in a university lab.



Youth Empowerment Program Summer Camp 2012

A summer camp was held four days a week for five weeks by Tennessee State University's Youth Empowerment Program (YEP) in June and July 2012. The purpose of the camp was to encourage better nutrition and physical activity choices through education and exposure.

TSU's Youth Empowerment Program began in summer 2010 and serves 50 at risk African American tenth graders and 50 TSU students who are trained as college mentors. Long-term goals of YEP are to increase academic achievement, motivation, retention, and college access, while reducing the incidence of risky behaviors that threaten health, well being, and quality of life.

Highlights of significantly increased knowledge include reasons why eating fewer processed foods is recommended and that popcorn is part of a whole grain diet. A significant increase in reporting the use of low fat dressing ($p \leq .05$) and significantly more students chose water as a beverage over soft drinks at lunch ($p \leq .05$). Other substantial but not statistically significant increases were in low-fat yogurt and green salad consumption.

The project followed USDA's "10 Tips Nutrition Education Series" guidelines and includes pre, interim, and post-tests of knowledge and behavior. Dr. Emerson (jemerson@tnstate.edu) had students work on a healthy rap video as a means of engaging them and to extend the benefits of the camp to youth viewing the video on Youtube http://www.youtube.com/watch?v=wTfA9rh_dYI.



2012 Building Capacity To Promote Youth – Active And Media Savvy (YAMS)

Youth Active and Media and Savvy (YAMS), serves to launch a legacy of health empowerment for African American youth, ages 8-14 in Middle Tennessee. This transformative research intervention is delivered as an interactive summer camp program. The aims of the project include promoting self-confidence and healthy living as the participating youth learn and engage in activities that explore media influence on dietary behaviors and sedentary lifestyles, as well as nutrition, physical activity/exercise, and weight maintenance.

In the summer of 2012, Dr. Veronica Oates, Assistant Professor and Registered Dietitian in Family and Consumer Sciences, directed two 2-week long camps with Co-PI Rita Fleming (MS), Leadership Specialist Tyrone Miller (Ed.D), and Research Assistant Amber Franklin (BS). Eight high school students were hired to function as peer educators and four TSU undergraduate interns fulfilled their roles as camp facilitators. A total of 61 participants attended the camp sessions. Youth created and presented various forms of media and artistic expression (posters, songs, raps, poems, and videography) to their peers during camp about advertising, healthy habits, the YAMS summer camp, and positive self-esteem building through affirmations.

Participants prepared their own lunches and received food safety and preparation lessons beforehand. All meals provided were to be healthy, nutritious, vegetarian foods that contribute to at least five daily servings of fruits and vegetables, emphasize whole grains, increase calcium intake, limit added sugar, fats oils and salts, did not include trans-fats, and eliminated deep-frying. Campers were involved in 60 minutes of physical activity a day, engaged in cultural and self-esteem empowering activities in gender-specific social circles, and had field trips to Walmart, Clear Channel Media+Entertainment radio stations, and the Challenge/Ropes Course at the Agriculture Research and Education Center in Ashland City.

The dates for the 2013 YAMS Summer Camps are June 3-14, June 17-28, and July 15-26. Contact Amber Franklin at 963-5624 or Dr. Veronica Oates (voates@tnstate.edu) to learn more. Follow YAMS on Facebook at <http://www.facebook.com/YouthActiveMediaSavvy>.



CAHNS News

New Program Leaders Named

TSU College of Agriculture, Human and Natural Science has appointed three Extension Program Leaders to lead statewide Extension programs in Tennessee.

Dr. Roy Bullock will serve as Program Leader for Extension Agriculture and Natural Resources programs. As Tennessee's Program Leader in Agriculture and Natural Resources, Bullock will work with county-level planners to assess the specific needs of agricultural production areas in the state, and work to develop and disseminate educational programs and supporting materials that effectively respond to these challenges.

Ms. Leslie Speller-Henderson has been appointed as the Program Leader for Extension Family and Consumer Science programs. Speller-Henderson will provide leadership, program planning and training support for Family and Consumer Science practices. Program material will be disseminated through Tennessee's Agriculture Extension Network in collaboration with University of Tennessee.

Dr. Thomas Broyles will join the Extension program to serve as the Extension Program Leader for 4-H and Youth Development. Dr. Broyles comes to us from Virginia Tech, with a very rich experience in agricultural education and youth development. He will assume his new responsibilities effective February 16th, 2013.

Dr. Roy Bullock and Ms. Leslie Speller-Henderson have served the TSU Cooperative Extension program for many years in their program areas and are well connected with county agents, UT Extension system, the regional program leaders and the national Extension system. They started in their new roles in fall of 2012.

In addition to leading the statewide Extension program planning, implementation, evaluation and reporting, our new program leaders will also connect county agents with campus specialists, departments and colleges to create a well-defined university engagement and outreach service. They will also serve as TSU/CAHNS liaisons with the UT Extension Program Leaders, the Extension Program Leaders with 1890 Land grant system, the Southern Region Extension Program leaders as well as with the National Extension Program Leaders at USDA/NIFA.



Dr. Roy Bullock



Ms. Leslie Speller-Henderson



Dr. Thomas Broyles

TSU Professor Named To USDA Meat And Poultry Inspection Group



An associate professor at Tennessee State University has been named to the National Advisory Committee on Meat & Poultry Inspection.

Dr. Fur-Chi Chen (fchen@tnstate.edu), a food researcher in the Department of Family and Consumer Science at the College of Agriculture, Human and Natural Sciences, was named to the committee by the USDA and will serve a two-year term.

Established in 1971, the purpose of the committee is to provide advice to the Secretary of Agriculture concerning state and federal programs involving meat, poultry and processed eggs over inspection, food safety and other matters.

Its advice falls under the Federal Meat Inspection Act (FMIA) and the Poultry Products Inspection Act (PPIA).

The USDA's Food Safety and Inspection Service DSIS published notice in the Federal Register, saying the Meat and Poultry Inspection group will continue for two more years.

New CAHNS Faculty

Allan Roberts

Dr. Allen Roberts is an Assistant Professor of Applied Geospatial Information Systems in the Department of Agricultural and Environmental Sciences. With over 19 years of experience in agricultural, geospatial, and environmental research, Dr. Roberts has worked in academic, non-profit, federal government, and private settings. He has managed the completion of standard operating procedure manuals for water and wastewater utilities, developed GIS-based site water balances for an upstate New York golf community, and has experience teaching courses using ArcGIS software suites to students within the University of Maryland system and at TSU.

In December of 2009, Dr. Roberts completed his doctorate degree at the University of Maryland at College Park in Geography. Here, he examined the effects of changes in land cover/land use on total nitrogen and total phosphorus mass loadings to the Chesapeake Bay estuary via forecasts of future agricultural and urbanized areas. Through the USGS, USDA, and other supporting federal and private entities, he is expecting to continue this work by expanding his research to changing watersheds throughout the Southeast region.

Susan Speight

Dr. Susan Speight holds a Ph.D. in animal science from Virginia Polytechnic Institute and State University in Blacksburg, VA. She joined TSU in August 2012 as an assistant professor. She is teaching many of the animal science courses in the Department of Agricultural and Environmental Sciences and serves as the Pre-Veterinary Science advisor. Her research is in the fields of animal nutrition and reproductive physiology and will be establishing a companion animal research unit for the university. Particular interests include (i) the impact of feeding dogs raw diets on human health; and (ii) improving the reproductive efficiency of animals by supplementing diets with vitamin and trace minerals such as selenium.

Agricultural and Extension Education Expands



The Agricultural and Extension Education undergraduate and graduate programs at TSU have each grown by over 1000% in two years. The number of students and the energy that has been created by these students created a need to add a talented Adjunct Faculty member with expertise in agricultural education. Dr. Chaney Mosley joined the Department of Agricultural and Environmental Sciences as an Adjunct Faculty member this past fall. Dr. Mosley is the Director of the Academies of Nashville for Metro Public Schools. He has his PhD in Agricultural Education from Virginia Tech University, an Educational Specialist degree in Educational Leadership from University of West Georgia, a Bachelor of Science in Agribusiness from

MTSU, and an Associate in Health Science from George Washington University. He is teaching the graduate course, *AGSC 5010 Foundations in Agricultural and Extension Education*, and we are happy to have his valuable assistance here at TSU.

Award-Winning Paper Published

The American Society for Horticultural Science recently announced the most outstanding paper on vegetable crops published by the society was "Identification of Salt-induced Changes in Leaf and Root Proteomes of the Wild Tomato, *Solanum chilense*". This paper as authored by Suping Zhou, Roger Sauve, Zong Liu Saskitiran Reddy, Sarabjit Bhatti, Simon Hucko Tara Fish and Theodore Thannhauser. Congratulations to on this notable accomplishment! For more information contact Dr. Suping Zhou, zsuping@tnstate.edu.

TSU Ag Business/Ag Ed Student Is A Parli-Princess

Mr. Raynette Johnson, freshman student from Munford, TN and her team of parli-princesses, as they are affectionately known as back home, ripped through the competition to place 4th in the nation in the Parliamentary Procedure Career Development Event at National FFA Convention in Indianapolis, Ind. Dr. James Connors of the University of Idaho served as superintendent of this year's event. The National FFA Parliamentary Procedure CDE tests students' ability to effectively communicate ideas during a meeting. Components included a general knowledge exam of parliamentary law, a ten-minute demonstration of parliamentary procedure, oral questions, written minutes of the demonstration as well as a team problem solving activity. Each team competed on local and state levels to earn the privilege of representing their state at the National FFA Convention & Expo. The event, held at the Hyatt Regency Hotel in Indianapolis, Ind., is one of many educational activities at the National FFA Convention & Expo in which FFA members practice the lessons taught in agricultural education classes. Raynette's team members also included Lauren Agcanas, Jessie Pyland, Elena Smith, Rebekah Davenport, and Tara Swirka, all of Munford "Big Boll" FFA. TSU is sure proud to call you one of ours!



Farm Credit Scholarship Winners

This fall, five \$1,000 scholarships were awarded to TSU students through a new scholarship program established via Farm Credit Mid-America's relationship with Agricultural Education. This year's winners were Racheal Gregory (Jr., Ag Ed from Gallatin, TN), Brittany Watson (Soph., Ag Ed from Paducah, KY), Raynette Johnson (Fr., Ag Ed/Ag Bus., from Munford, TN), Toney Tillman (Sr., Plant & Soil Science, from Antioch, TN), and Carla Hayes (Fr., Ag Ed/Ag Bus from Hendersonville, TN).



TSU Student Receives Honor Degree from FFA

Each year, the National FFA Organization is proud to honor the FFA members who show the utmost dedication to the organization through their desire to develop their potential for premier leadership, personal growth and career success through agricultural education. That honor, the American FFA Degree, is bestowed upon a select group of individuals for years of academic and professional excellence.

TSU Ag Ed student, Mia Sullivan, an FFA member representing the Heritage FFA Chapter in Maryville, TN was selected to join that exclusive list and was awarded the American FFA Degree at the 85th National FFA Convention & Expo in Indianapolis, IN this past October.

The award recognizes demonstrated ability and outstanding achievements in agricultural business, production, processing or service programs. To be eligible, FFA members must have earned and productively invested \$7,500

through a supervised agricultural experience program in which they start, own or hold a professional position in an existing agriculture enterprise. Recipients must also complete 50 community service hours, as well as demonstrate outstanding leadership abilities and community involvement.

Mrs. Sullivan's supervised agricultural experience project involved the care and maintenance of a now 6 year-old American Spotted Saddlebred gelding. This also included maintaining the family farm, which includes 28 acres of pasture and forest land, two barns, and an assortment of crops and other small animals. Mrs. Sullivan received her Bachelor of Science degree in Career and Technical

Education from the University of Kentucky in 2012 and is now currently pursuing a Master of Science degree in Agricultural Sciences with a concentration in Agricultural & Extension Education. Dr. John C. Ricketts is her advisor.



A Moment of Silence

It is with great sadness that the College of Agriculture, Human & Natural Sciences announces the passing of our dear friends and esteemed colleagues.



Mrs. Allie Gooch, affectionately known as Hilda, was employed by Tennessee State University for over 36 years. At the time of her death, she served as Administrative Assistant IV in the College's Business Operations Office. The majority of her service at TSU was with the Cooperative Extension Program where she served as Executive Secretary to several Administrators, beginning with the first Administrator, Dr. James E. Farrell. She also served as Administrative Assistant IV for the Associate Director. In 2008, she received the Certified Professional Secretary (CPS) designation. Mrs. Gooch was named Outstanding Staff Member for the School of Agriculture, Family and Consumer Science in 2009. She received an Associates Degree in Office Management from TSU in 1987.

Mrs. Gooch is survived by her devoted husband, Franklin Gooch; son, Gary (Lisa) Frierson; daughter, Jamica (Mark) Quarles; six grandchildren and a host of other relatives and friends.



Dr. Weiguang (Ade) Yi passed away after a battle with cancer on Tuesday, January 22, 2013. Dr. Yi joined the Department of Agriculture and Environmental Sciences in the College of Agriculture, Human and Natural Sciences in May of 2012 as a Research Assistant Professor. His research in the field of food chemistry focused on phytochemicals, functional foods, bioactive food components, and the prevention of obesity, cancer, and chronic inflammation, earning him multiple awards and publications.

Dr. Yi is survived by his wife and son.



Degree Programs Offered In The College Of Agriculture, Human and Natural Sciences

Agribusiness	Early Childhood Education
Agricultural and Extension Education	Family and Consumer Sciences Education
Animal Science/Pre-Veterinary Medicine	Family Financial Planning Certification
Applied Geospatial Information Systems	Fashion Merchandising
Biochemistry	Food Service Management
Biology with Teacher Certification	Food Technology
Cellular and Molecular Biology	Foods and Nutrition (Dietetics)
Chemistry	General Biology
Chemistry with Teacher Certification	Plant and Soil Science
Child Development and Family Relations	Pre-Medicine, Pre-Dentistry, Pre-Pharmacy Programs
Design	Professional Chemistry

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**Thanks to all
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