

COLLEGE OF AGRICULTURE, HUMAN AND NATURAL SCIENCES LINK FALL 2013



Linking the College to Alumni and Friends



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

August 26, 2013



Dear Alumni and Friends:

This is an exciting time at the College of Agriculture, Human and Natural Sciences. Construction of the Agricultural Biotechnology building is almost complete and it looks as great as we'd hoped. This is going to be a remarkable facility and expand our opportunities and abilities to conduct world class research. We just opened the bids for two new buildings to be constructed at the Main Campus Agricultural Research and Education Center (AREC) (see page 4). These projects come on the heels of the opening of our new Landscape Studio and six new greenhouses. We are also currently remodeling Lawson Hall to create new teaching laboratories and embarking on a number of smaller capital projects to accommodate the amazing growth among our students and faculty. This type of remarkable growth is a current trend throughout the College.

The Chemistry program curriculum continues to meet the standards for American Chemical Society Approval; the program has been ACS approved since 2006 (see page 8). ACS approval is a stamp that represents the high quality of our curriculum and its rigor as well as the ACS's confidence in our ability to continue to offer a program of this stature.

The Department of Agricultural and Environmental Sciences has begun offering two new concentrations within the Agricultural Science Master's degree: Food Supply Chain Management and Agribusiness Management and Analysis (see page 7). These programs are unique and train students to meet the growing needs of the agribusiness industry in Tennessee and throughout the country. The Master's program in Agricultural Sciences has experienced tremendous growth in the last few years, with student enrollment increasing from 11 students in 2008 to 85 students last Fall semester; we are still tallying students for this semester, but early indications are that the trend will continue upward.

Similarly, the enrollment of agricultural students into the Ph.D. degree program in Biological Sciences has increased from three students in 2008 to 15 last Fall. This phenomenal growth was made possible by bringing a number of faculty and financial resources together along with dedication and commitment from the College leadership to train minority students in agricultural sciences.

The College's research program is flourishing. Over the past year, the College's total new research grants including formula funds amounted to \$24 million, the highest total funding we have ever received. This growth is allowing us to recruit more researchers and extension specialists, creating a cycle that should allow us to continue to expand and increase our capacity to serve our students, our state, and our communities. More funding allows for the recruitment of new faculty and new graduate students who, in turn, bring more research grants, publish more scholarly articles, initiate new academic programs, procure state-of-the art equipment and research laboratories, and allow us to graduate more students.

The College has several multi-million dollar and multi-institutional grants and most of our research is

applied and impactful. Recently, Federal Quarantine regulations for treatment of nursery stock for Imported Fire Ants were modified using Dr. Jason Oliver and his team's research at the Nursery Research Center in McMinnville, one of our three agricultural research and education centers of the University (see page 14). These modifications directly benefit Tennessee's nursery producers, allowing for more flexible shipping and decreasing the cost of labor and insecticide. Ultimately, Dr. Oliver and his team have helped increase the bottom line for Tennessee's producers.

The County operations of the College's Extension program continue to grow at a rapid pace; we currently have TSU Extension representation in 40 counties—compared to only 13 in 2008. For the first time since the inception of this program, we have undertaken a market study of extension agent compensation and implemented its findings. As of January of 2013, TSU Extension agents earn approximately the same salaries as the agents of the sister land-grant institution of the state, the University of Tennessee. I am very excited and thankful to all who helped us in achieving this goal, including Tennessee Board of Regents Chancellor Morgan.

We have also appointed three program leaders within our Extension program, representing the three major areas of our county interventions: Agricultural and Natural Resources, 4-H programs and Youth Development, and Family and Consumer Sciences. This leadership will help to provide the continuous feedback mechanism—from campus to community and back again—that is necessary for Extension to maximize its impact and benefit to stakeholders. To improve our reporting and assessment of extension programs, Dr. Tyrone Miller was asked to share 50% of his time to this effort.

Our efforts and advancements have not gone unnoticed, as the College has been receiving good press, both within and outside the university. During the week of July 15-19th, three of the four major local broadcast television channels and cable channel Rural Free Delivery Television (RFD-TV) covered different aspects of our research, extension and international education efforts in positive lights. One particular point of pride from this media attention comes from the local Fox channel's coverage of the hydroponics greenhouse research by Dr. Dharma Pitchay and his students, which led to a request from TRICOR, a state agency that deals with transforming the lives of prison populations, to establish a partnership to train state inmates (see page 12).

I am quite pleased to tell you that the newly appointed Vice President for Academic Affairs, Dr. Mark Hardy, is very supportive of agriculture and STEM education at the university. He is very much interested to grow the research portfolio of the university and wants to help and support scholarly activities of the faculty and students. Additionally, the College is honored to welcome our newly appointed Associate Vice President of Academic Affairs, Dr. Alisa Mosley, who previously served as Executive Director of Academic Quality and Director for the Center of University Scholars at Jackson State University (see page 7). These additions to our university administration clearly represent President Glover's continued dedication to improve our beloved university.

In closing, I ask that you please enjoy reading the information provided in the pages that follow, and take the opportunity to learn about some of our highlighted people and programs. I trust that you will be pleased with some of our recent accomplishments and impacts, and hope to see some of you at our upcoming Homecoming celebrations!

Sincerely,

Chandra Reddy, Ph.D.

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Dean and director of Research/Administrator of Extension

CAHNS Breaks Ground for \$4 Million Education, Research Facility

Tennessee State University broke ground for a \$4 million, 4,800 square-foot teaching and research facility at the Agricultural Research and Education Center on the main campus on April 19, 2013.

The project, funded by the U.S. Department of Agriculture through its National Institute of Food and Agriculture, will include a Field Research Support Building, an Agricultural Education Building, equipment shed, and a pesticide storage facility. Officials who joined the ground breaking ceremony included (L-R) Tennessee Commissioner of Agriculture Julius Thomas Johnson; Chancellor John Morgan, of the Tennessee Board of Regents; Dr. Chandra Reddy, Dean of the College of Agriculture, Human and Natural Sciences; Dr. Glenda Glover, TSU President; and Ron Brooks, Associate Vice President for Facilities.

According to President Glover,

TSU must take the lead in producing job-ready students to fill the rapidly increasing demand for qualified and well-trained individuals to occupy positions in agriculture and other areas requiring a high level of specialized skill.

"Nothing makes me more excited than to see new structures sprouting every day by leaps and bounds to give our students and faculty the best opportunities and facilities to carry out cutting-edge research," President Glover said. "With all of this federal, state and local support, I can assure you that Tennessee State will be in the forefront of providing jobready students who are capable to compete for the best jobs anywhere in world."

Like President Glover, Dr. Reddy also expressed concern about the growing demand for skilled workers in agriculture, citing that, despite a demand for more than 50,000 new employees each year, the nation's educational

system was producing less than 30,000.

To meet the demand, he pointed to the "sustained" growth in his college, including \$55 million in research, 1,100 students, among them 150 paid graduate students, and an Extension program that serves 32 counties, up from 12 in 2007.

"The groundbreaking for these new facilities not only demonstrates our dedication and commitment to providing students and stakeholders with the best research and training facilities, but also marks another step in the growth of the College of Agriculture, Human and Natural Sciences," Dr. Reddy said.

Chancellor Morgan congratulated President Glover and Dr. Reddy for the new project, which he said helps to enhance TSU's already growing research enterprise. Agriculture Commission Johnson also congratulated Dr. Reddy for "planting a seed of hope and potential" to develop wellqualified students and a more informed public. "To feed the growing world population will be a major challenge, which requires that students succeed by planting seeds necessary to meet that challenge," Johnson said.

For more information about the College of Agriculture, Human and Natural Sciences, visit www.tnstate.edu/agriculture.



CAHNS Hosts USDA Cochran Fellowship Program



On July 8, 2013, the College welcomed a group of Vietnamese journalists to campus as part of the USDA Cochran Fellowship Program. The journalists were on campus for two weeks of workshops and presentations by faculty and staff from TSU and the College, as well as off-campus visits to several important agricultural and media sites around the region. The Cochran Fellowship Program provides participants from middle-income countries, emerging markets, and emerging democracies with high-quality training to improve their local agricultural systems and strengthen and enhance trade links with the United States

Dean Reddy noted that TSU is a particularly good fit for hosting such a program due not only to its agricultural research expertise, but its diverse international faculty and its prime location in one of America's finest cities.

The program participants engaged in opportunities to increase their knowledge of U.S. agricultural entities as well as the procedures, techniques and goals associated with each. Due to the relationship the College has with the USDA and local and regional farmers and producers, and the cutting-edge research performed on campus, the two-week program provided the visiting journalists with an

excellent chance to get a glimpse at all the phases of the U.S. agriculture system.

In addition to the welcoming remarks, Dr. Reddy answered a number of questions from the journalists focusing mostly on the ways agricultural research in the U.S. may differ from what is common in other countries.

"The U.S. places a high priority on environmental and safety concerns—so much so that these factors are as or more important than the production itself," he said. Also, due to the obesity epidemic currently affecting the U.S., Dr. Reddy mentioned the growing importance of nutrition. "Much of our new research in the U.S. and in Tennessee is focused on improving the nutritional value of our foods and educating the public about nutrition. In the U.S. and here at TSU we are focused on the entire agricultural process."

Ultimately, the Cochran Fellowship Program's stay at TSU was beneficial to the University, the participants, and the USDA as knowledge and ideas are exchanged over the course of the program.

For more information contact Dr. Abbas at (615) 963-5616 or dsaleh@Tnstate.edu. [Courtesy of Tennessee State University News Service]

TSU Community Gardens Offer 'Field of Dreams' to Cultivate Fresh Produce

Two summers ago, Joan Clayton, a retired health care communications specialist and her husband, Biars Davis Jr., a retired police officer, decided to try their hands at growing their own vegetables. Without much experience to fall back on, they purchased a single plot at the community gardens at Tennessee State University and planted everything from beans to tomatoes to squash. Now returning for their third year, they have purchased three plots to grow what they lovingly refer to as "[their] own produce store."

The husband and wife team join a number of urban farmers looking to grow their own produce as the seeds of the local food movement take root in community gardens across the city of Nashville and Davidson County. According to officials with the city of Nashville, more than 45 community gardens have sprung up in private or vacant lots, schoolyards, or on church grounds as people look for ways to save money, eat healthy and get their hands back in the dirt.

At TSU, the College of Agriculture, Human and Natural Sciences is offering more than 50 large and 10 smaller plots for community members to rent to cultivate crops as well as gain a better understanding of nature and the environment.

"We see more and more people wanting to reconnect to nature and grow their own food," said Dr.

Arvazena Clardy, Assistant Professor in ornamental horticulture and community garden coordinator. "But the gardens are about so much more than just growing

food. It's about getting back to the earth, being outside, and understanding where food comes from."

Dr. Latif Lighari, Associate Dean of Extension Services at TSU noted the health benefits of the community gardens. "There is an obesity problem now in the U.S. and people are trying to focus on fresh fruits and vegetables," he said. "This is a way for gardeners and their families to have access to healthy foods that they grow themselves."

After three years taking part in the gardens and successfully growing her own produce, Clayton has a few hints for those just starting. "Plan what you want to grow, don't over plant, manage your space and grow 'up' instead of out," she explained. "But the biggest thing is to just have fun."

For more information, contact the TSU Extension Program at 615.963.4887 or visit tsugardens.org.

[Adapted from an article courtesy of Tennessee State University News Service]



CAHNS Welcomes Drs. Hardy and Mosley

After nation-wide searches to fill key positions, and as part of her reorganization effort, the President of Tennessee State University, Dr. Glenda Glover, announced several new appointments at the University in May, including Vice President for Academic Affairs Dr. Mark Hardy and Associate Vice President for Academic Affairs Dr. Alisa Mosley.

Dr. Hardy served as Provost and Vice President for Academic Affairs and Professor of Biology at Jackson State University. He also served as Dean of the College of Computer Science, Engineering and Technology at JSU.

Dr. Mosley previously served as Executive Director for Academic Quality, Director for the Center for University Scholars, and Associate Professor of Management at Jackson State University.



The announcement was the result of works done by seven search committees appointed by Dr. Glover earlier this year to recommend candidates to fill key positions in the management of Tennessee State University.

"Each search committee performed its responsibilities in a highly productive, open, and efficient manner," Dr. Glover said in congratulating the committee members.

Agricultural Sciences Master's Degree Program Introduces Two New Concentrations

The Department of Agricultural Sciences will be offering two new concentrations within the existing Master's degree program in Agricultural Sciences. The new concentrations—Agribusiness Management and Analysis and Food Supply Chain Management—will expose students to economic, marketing, and supply chain management concepts through a set of core courses, structured electives, and hands-on research work.

These concentrations are intended to equip professionals with the knowledge and skills that are important in helping transform the agro-food sectors and rural economies in developed countries and the rest of the world in the highly complex and competitive agribusiness industry. With a design that focuses on a complete perspective of the industry, the new concentrations will build students' professional experience, increase their understanding of the agricultural sector, and enhance the analytical skills that are necessary to thrive.

By developing connections with industry mentors and relationships with faculty and fellow students who share a broad range of local and international working experience and contacts, graduates receiving a Master's degree in Agricultural Sciences with a concentration in either Agribusiness Management and Analysis or Food Supply Chain Management will be especially prepared to make the important decisions that face managers and administrators in the food marketing and agribusiness sectors, filling a growing industry need.

For more information contact:

Surendra P. Singh

Telephone: 615-963-5829, FAX: 615-963-5436, Email: ssingh@tnstate.edu

TSU Chemistry Program Receives Continued ACS Approval

Under the leadership of Dr.
Mohammad Karim, Department
Chair, the Chemistry program at
Tennessee State University
recently received word that its
curriculum has passed a five-year
review process and continues to
meet standards and guidelines set
by the American Chemical
Society. The program has been
ACS-approved since 2006.

During the summer of 2012, the Department of Chemistry submitted its application to the Committee on Professional Training of the American Chemical Society (ACS-CPT) for program re-approval. The application package consisted of the Chemistry Undergraduate Program's progresses over the past five years.

In a letter from the committee announcing the approval, the ACS-CPT commended many of the positive developments, including the acquisition of new laboratory equipment, renovation of facilities, additional support staff, good faculty diversity, and outreach activities such as "Celebrate Chemistry Day."

"Re-approval is affirmation that we maintain a quality undergraduate chemistry program," said Dr. Chandra Reddy, Dean of the College of Agriculture, Human and Natural Sciences. "The continued approval is a vote of confidence for the department."

ACS-approved programs offer a broad-based and rigorous chemistry education that gives

students intellectual, experimental, and communication skills to become effective scientific professionals. The Committee on Professional Training promotes excellence in postsecondary education and provides leadership to the ACS in the professional training of chemists.

"Potential employers and graduate school admissions committees recognize that these students have passed a more rigorous course of study and are better prepared for employment or advanced study," added Reddy. More information about chemistry at TSU can be found at www.tnstate.edu/chemistry.



CHEW Program Continues

Nashville Children Eating Well (CHEW) for Health is a multi-institutional collaboration between TSU's Center for Prevention Research (CPR) in the College of Agriculture Human and Natural Sciences, Meharry Medical College and Vanderbilt University designed to address childhood obesity prevention through research, extension, and education. All project activities focus on the USDA's federal Women, Infants, and Children (WIC) supplemental nutrition program. The target population is low-income WIC participant families with children ages 2-4, with a particular focus on African American and Hispanic families, and the WIC-authorized grocers that serve this population. One of the extension components of the project is to provide nutrition education and outreach to residents in the Nashville/Davidson County area. Outreach activities through healthy food sampling target WIC participants and other consumers to improve dietary practices. Eighteen local WIC-approved stores have partnered with the CHEW project and each store is eligible to receive two healthy food samplings per year for each year they participate. To date, CPR staff, TSU Extension staff, and CPR students have conducted 16 demonstrations in efforts to expose the local community to healthier food options. The first round of two-hour samplings has included fresh fruit, low-fat yogurt, and a whole grain cereal to create a scrumptious and healthy yogurt parfait. On average, 25 samples were passed out at each store and the great majority of comments were positive. We hope to have the second round of healthy food samplings completed by the end of the year! For more information about CHEW, contact Dr. Jan Emerson at jemerson@tnstate.edu.

New Tennessee Master Nursery Program Gives State Growers Edge in Operations

Tennessee nursery crop growers are gaining insight into how to enhance their operations and improve their sustainability through a new partnership program led by Tennessee State University and University of Tennessee Extension.

Forty-seven nursery producers from the heart of Tennessee's nursery industry, Warren and surrounding counties, recently took part in the Tennessee Master Nursery Program (TNMP) held at TSU's Nursery Research Center in McMinnville. An additional seven producers in Jackson and the East Tennessee area participated through a webinar.

The nursery industry is a main driver in Tennessee's economy. According to the most recent agricultural census, taken in 2007, the state's nursery enterprises brought in \$325 million in cash receipts from farm marketing.

Consisting of six weekly training sessions, the Tennessee Master Nursery Program featured a number of national experts in various aspects of nursery production, family farm planning, marketing, and economics. The program was made possible by a \$47,000 specialty crop block grant from the Tennessee Department of Agriculture (TDA). TDA's financial support facilitated

bringing world-class experts to the Nursery Research Center to help our growers strengthen the economic and environmental sustainability of their businesses.

TDA's commitment to the program extends to offering eligibility for a 50% cost share to producers who successfully complete the course. The cost share is through the Tennessee Agricultural Enhancement Program, whose matching funds allow producers to maximize farm profits, adapt to changing market situations, improve operation safety, increase farm efficiency and make positive economic impacts in their communities.

The multi-partner project required a team approach. Led by Amy Fulcher, UT Nursery Specialist, members of the Tennessee Master Nursery Program Committee included Tennessee State University Extension area specialist Adam Blalock, an authority on nursery crops; TSU research associate professor and nursery entomologist Jason Oliver; USDA research horticulturist, Donna Fare; UT Extension specialist Mark Halcomb; and UT Grundy County Extension agent Creig Kimbro. Adam Blalock (ablalock1@tnstate.edu) can be contacted for additional information



Nutrition Students Take a Different Approach to Learning

Each semester, students enrolled in the course Nutrition and the Global Community are challenged with learning about cultural and regional food habits, ethnicity, and religious practices that affect nutrition intake. While students still learn in the standard classroom lecture format, instructors have taken the class to another level by having students take an active role in participating in different community programs. By participating in different programs students get firsthand experience and gain an understanding of food habits and practices of culturally and ethnically diverse populations.

This past spring semester, students in blue t-shirts were all over Davidson county participating in numerous events and programs. From the first day of class students expressed excitement over the opportunity to work in the community and went above and beyond. They made their presence known with wonderful TSU spirit at the Incredible City-Wide Baby Shower, Samaritan Ministries, TSU Student Center, Martha O'Bryan Center, Family Assistance Center in Ft. Campbell, KY, Garden of Hope Project in Clarksville, TN, numerous Elementary Schools in Middle Tennessee, and Second Harvest.

In recognition of National Nutrition Month students also worked with Piggly Wiggly grocery stores in Davidson County. They designed and implemented a campaign to increase fruit and vegetable intake among the grocery store's customers. Parents and students of the Metropolitans Action Commission Head Start Program also benefitted from the students outreach. Parents learned valuable information from students on how to creatively increase the fruit and vegetable intake of their children. Three and four year old head start students learned about where fruits and vegetable come from and even planted their own tomato plants.

According to Angela Lafferty, "There is no better way to learn about the global community than to interact with the population and get to know them on a personal level rather than from afar." Dr. Godwin believes that "the engagement of students in the community is vital to achieving the mission of enriching human lives."

With the students success of this past spring semester, Dr. Godwin is excited to challenge future students to see where their creativity will take the class next.



Tennessee State Hosts National STEM-Based CASE Institute for Agriculture Educators



Twenty high-school educators from across the country will descended onto the Tennessee State University campus June 9-20 as part of the National Council for Agricultural Education-sponsored Curriculum for Agricultural Science Education (CASE) project.

For the second year in a row, the Agricultural and Extension Education Service at TSU hosted the 80-hour agriculture, food and natural resources institute to help equip teachers with the skills necessary to teach and elevate student experiences in the agriculture classroom, and prepare students for success in college and careers that emphasize science, technology, technology, engineering and math. TSU is one of only 17 affiliate institutions providing the training for educators across the country, and the only institution in Tennessee.

According to Dr. John Ricketts, associate professor with the Extension Service, the CASE institute benefits teachers, students and the agriculture industry by enhancing agricultural education programs to develop and produce well-educated and highly-skilled graduates.

"This will be an intense learning environment for the teachers attending," explained Ricketts, who is one of only nine affiliate professors across the country certified to teach the post-secondary education. "The institute will focus on both the curriculum aspect as well as the pedagogy, or the science and art of teaching."

Ricketts said CASE takes a new look at classroom curriculum and helps agricultural science teachers find new and engaging ways to present the material in the classroom.

"We want our teachers to return to their classrooms and connect with students with relevant content," said Ricketts, "With the CASE instruction, teachers learn how to integrate well-balanced content with exciting activities into the curriculum. This will help them (the teachers) learn inquiry-based teaching, and how to get students to think critically and be more creative.

"CASE provides superior teacher preparation, which creates a better student experience, resulting in more students who successfully complete agriculture programs, and who are prepared for success in college and careers in science, technology, engineering and math." For more information, contact Dr. John Ricketts at iricket1@tnstate.edu. [Courtesy of Tennessee State University News Service]

CAHNS Hosts Poinsettia Open House



The 10th Annual Poinsettia Open House was hosted by the College of Agriculture, Human and Natural Sciences on December 14th at the Main Campus Agricultural Research and Extension Complex.

The event featured 20 commercial varieties of poinsettias from Dummen USA a well-known breeder of poinsettias. Visitors not only saw the beautiful flowers on display, but each person who visited the open house was given a plant upon completing a personal preference survey. Guests also had the opportunity to participate in a Christmas cactus workshop.

"The purpose of the Poinsettia Open House is to allow the general public, along with growers, marketers and retailers, the opportunity to see how a select group of 20 poinsettia cultivars perform under Middle Tennessee growing conditions," said Sarah Bhatti, Research Associate in the Department of Agricultural and Environmental Sciences. "The event is also an outreach to the community to increase awareness of agricultural research being conducted at TSU."

For more information about the open house, please contact Bhatti at sbhatti@tnstate.edu.

Cutting-Edge Technology, New Crop Production System Highlight TSU 2013 Farm Expo

Unveiling a cutting-edge technology in alternative energy production, and a novel approach to growing crops without the benefit of soil, Tennessee State University's 2013 Small Farm Expo on July 18 left many in awe.



"As a farmer, I am really excited to be a part of this annual exhibition to see these new inventions and production techniques," said Chad Koop, a Cornersville, Tenn., cattle breeder and corn and bean grower, who along with his wife, Marty, won this year's Small Farmer of Year Award. "We are very honored and excited about being named farmers of the year, but more than that we like what Tennessee State University and its partners are doing to help farmers in the state."

The 2013 Expo, organized by the CAHNS, along with several agencies and institutions, exhibited a biodiesel fuel production unit that farmers can use to turn crops into fuel for their equipment; a hydroponic crop production system that does not use pesticides or soil; a greenhouse emission reduction system for field crops; community gardening; meat goat production and genetics; and student research tours of other agricultural production systems.

The biggest draw at this year's exhibition was the showpiece of the University's alternative fuels program, a mobile biodiesel lab that produces renewable fuels from crops like canola, vegetable

oils, animal fats and recycled restaurant grease.

With the high cost of gasoline and other fuels a major concern for many Tennesseans, alternative fuels like biodiesel could just be the answer for some, TSU researchers say.

"The average farm uses about 6 gallons of diesel per acre per year," said Dr. Jason de Koff, assistant professor of agronomy and soil sciences in the College of Agriculture, Human and Natural Sciences, who led the demonstration of the lab at the Expo. "If that farmer devotes about 15 percent of their acreage to growing canola crop, they could fuel their farm equipment for the entire year."

The highlight of the Expo was recognition of the state's top four farmers for various awards. An overall winner is selected for the Small Farmer of

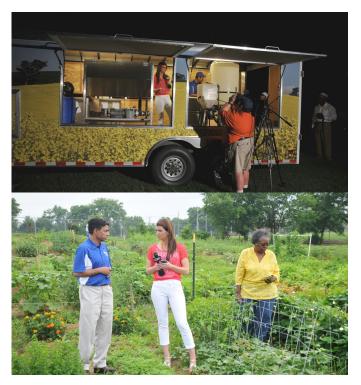
the Year Award. That honor went to the Koops, who breed Maine-Anjou, Chiangus and Suffolk sheep, as well as grow corn, beans and wheat on their nearly 300-acre farm in Marshall County. They were first selected for "Innovative Marketing."



Chad Koop

The other three award winners were Leamon Bratton, a beef cattle farmer in Woodlawn, Tenn., "Best Management Practice"; Ray and Elizabeth Clifton, honey and herb producers in Dickson, Tenn., "Alternative Enterprise"; and Marvin Lusk, owner of a 128-acre farm in McMinnville, Tenn., who was recognized for developing improved conservation techniques. He won the award for "Alternative Enterprise."

In presenting the awards, Dr. Chandra Reddy, Dean of the College of Agriculture, assisted by University officials, Tennessee Agriculture Commissioner Julius Johnson, and State Rep. Harold Love Jr., congratulated the honorees, and the institution



and agency representatives for the support and cooperation in making the Expo a success.

"This could not have been possible without your partnership and cooperation," Reddy told the packed luncheon on the TSU farm, making special reference to head Expo organizer, Dr. Latif Lighari, Associate Dean for Extension, for "yet another" successful Expo.

Other speakers included TSU Associate Vice President for Academic Affairs, Dr. Alisa Mosley: and Kelli Sharpe, Assistant Vice President for Marketing and Communications, who made special presentations on behalf of President Glenda Glover, who was on travel. Also speaking were Rep. Love: Agriculture Commissioner Johnson; Dr. Tim Cross, Dean of Extension at the University of Tennessee; and Pettus Read, Director of Communications of the Tennessee Farm Bureau. For additional about Extension or the Small Farm Expo, contact Dr. L. Lighari at llighari@tnstate.edu.



TSU Nursery Research Center Hosts 2013 Tennessee Green Industry Field Day

The 2013 Tennessee Green Industry Field Day was held on June 4th, 2013 at the Tennessee State University Otis L. Floyd Nursery Research Center in McMinnville, Tennessee.

This event was co-sponsored by the College of Agriculture, Human and Natural Sciences and the Tennessee Nursery and Landscape Association. Over 150 nursery professionals attended the daylong event that featured educational seminars presented by TSU scientists and other industry experts. Attendees also toured the Nursery Research Center laboratories and field research areas and visited with 20 commercial vendors featuring products and equipment of interest to the nursery and landscape industry.

Educational sessions included presentations on new research on fire ants, Japanese beetle, trunk boring insects and other invasive nursery pests by TSU scientists Dr. Jason Oliver and Dr. Karla Addesso, new developments in pesticide safety (Tennessee Department of Agriculture), rules and regulations for transporting equipment and trailers on Tennessee highways (Tennessee Department of Transportation), and a session on turf and landscape plant care by UT Extension.

Of special interest to the attendees were the field tours; additional tours were added to the schedule to accommodate the number of attendees who

wished to view the field research. For more information about the Tennessee State University Nursery Research Center, contact Dr. Nick Gawel, ngawel@tnstate.edu or visit www.tnstate.edu/ agriculture/nrc.



From Seeds to Fuel

Soybeans, canola and sunflower seeds have long been used in the production of cooking oils and other products for human consumption. A 60-pound bushel of soybeans, for example, can yield about 11 pounds of crude soybean oil used in cooking, while also producing soymilk that is high in protein and low in fat

But the oil extracted from the plants can also be used to produce a renewable fuel that does not deplete finite petroleum resources, and that can be used in diesel engines with little or no modification.

Now researchers at
Tennessee State University are
traveling across the state in an
effort to educate farmers on the
potential to produce their own
biodiesel fuel by demonstrating
the process with their new mobile
lab.

"This region has a modest oil seed production rate by area farmers," said Dr. Jason de Koff, assistant professor of agronomy and soil sciences in the College of Agriculture, Human and Natural Sciences. "We want to be able to show them something they might not have thought about. With as much oil seed production taking place in the



state, we want to explain the production of biodiesel fuel from vegetable oil is a viable process that can replace traditional fuel used in existing diesel engines."

According to de Koff, a typical farm uses around two to six gallons of diesel fuel per acre every year. Depending on the oilseed crop and yield, a farmer could devote one to 15 percent of farm acreage to producing oilseed crops strictly for biodiesel fuel production.

"It is possible they could become totally self-sufficient in diesel fuel use," added de Koff. "As a

> clean-burning, renewable energy source, biodiesel fuel offers a number of built-in advantages that regular diesel fuels simply can't match."

> "It is our hope that we can show farmers how easy the process really is and that after the initial expenditure of the upfront costs, there is a possibility they could be self sufficient or supplement the

fuel they are currently using," added de Koff.

Along with demonstrating how to produce fuel to farmers across the state, the mobile lab can also be used for education, to show the production cycle to area legislators, 4H clubs and metro schools. [Courtesy of Tennessee State University News Service]

Tennessee State University Research Leads to Changes in Federal Quarantine Treatments

The Tennessee Department of Agriculture has announced that research conducted at the TSU Nursery Research Center by Dr. Jason Oliver and his team has led to a change in the Federal Quarantine regulations for treatment of nursery stock for Imported Fire Ant. Nursery plants produced in most regions of the state need to be treated for fire ants before they can be sipped to non-infested areas. The old treatments required the plants be treated every 30 days until shipped; the newly approved treatments provide a six month certification period. Utilizing these new treatments, recently approved by the USDA/Animal and Plant Health Inspection Service, permits grows more flexibility in shipping their products and reduces labor and insecticide costs. Dr. Oliver can be reached at joliver@tnstate.edu.

TSU to Study Sustainable Strawberry Production

According to the USDA, Americans are eating more strawberries grown in the United States, with average consumption growing from three to five pounds per person since the mid 1970s. But strawberries are a highly perishable fruit with a short shelf life, and travel an average distance up to or exceeding 3,000 miles from farm to market. Though prized for their delicate taste and texture, those same qualities can be the berries' weakness – especially when hauled thousands of miles.

Now, researchers from Tennessee State University will join forces with other scientists from land-grant public universities across the country to study sustainable strawberry production that will benefit consumers, and provide an economic boost for local farmers. TSU will receive nearly \$200,000 in research funding as part of a \$2.64 million grant from the Walmart Foundation for projects that will, among other things, expand the area where strawberries can be grown, enabling shorter trips for the berries between farm and consumer.

"Securing this grant shows the level of quality and talent our researchers have at TSU," said Dr. Latif Lighari, Associate Dean of the Cooperative Extension Program in the College of Agriculture, Human and Natural Sciences. "This is the most practical and useful research that can directly benefit consumers of fresh farm produce, such as strawberries, and other fruits and vegetables."

Dr. Suping Zhou, Research Associate Professor in agricultural and environmental sciences, will head TSU's research, along with Dr. Fur-Chi Chen, Research Associate Professor, Family and Consumer Sciences, and Dr. Roy Bullock, Extension Professor, Agricultural and Environmental Sciences. They will work with county Extension agents to develop the logistics for producing human pathogen-free organic strawberries in Tennessee.

"Markets for fresh fruits are evolving such that

'clean' or 'human-pathogen free' organic products are considered highly desirable," said Zhou. "Achieving this status is a particular challenge for certain fruits, such as strawberries, where it is difficult to remove contaminates by surface washing without causing physical damage to the berry. Having a science-based strategy and providing specific guidance on how to manage microbial contamination are very important steps for all parties engaged in the production, marketing and consumption aspects of the industry."

Outcomes of this project include promoting organic strawberry production by setting up demonstration farms in four major strawberry counties in Middle Tennessee, developing a safe production and consumption environment for fresh strawberries by defining the status of potential human pathogen contamination, and developing an easy-to-use tool to detect human pathogens on fresh strawberries. Contact Dr. Zhou at zsuping@tnstate.edu for more information. [Courtesy of Tennessee State University News Service]



4-H Students Celebrate Science Day During Eco-Bot Challenge at TSU

What do robotics and the environment have to do with 4-H and students?

On November 30, more than 70 students from Smithson-Craighead Academy made the connection when they visited Tennessee State University to take part in the fifth annual 4-H National Youth Science Day.

The event seeks to spark an early interest in science and future science careers, and to reclaim the nation's position of leadership in scientific exploration. Hosted by the College of Agriculture, Human and Natural Sciences, the 4-H'ers learned to enhance their engineering skills by assembling their own Eco-Bots and surface controls to manage an environmental clean up.

The students were given supplies and instruction in building the miniature robot, then turned loose using toothbrushes and batteries to build a robot that could clean the toxic spill, simulated by rice and birdseed. The students then tested the interaction between the

Eco-Bot's design features and various surface control configurations to determine the most effective clean up solution

"This was a valuable experience for our students," said Cherifa Ghassoul, science teacher at Smithson-Craighead Academy. "It builds self esteem and they start to believe they can be scientists. They learn more from hands-on [activities] and you can see the level of excitement in their eyes."

"Our nation is falling behind other countries in the fields of science, technology,

engineering and math," said Dr. Tyrone Miller, Cooperative Extension Leadership Specialist. "However, participation in high-quality positive youth-development programs like 4-H and the youth science day offers students 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. Additional information about National Youth Science Day can be obtained form Dr. Tyrone Miller, tmiller11@tnstate.edu.

[Courtesy of Tennessee State University News Service]



TSU Extension Provides 4-H Scholarships for Annual Conference

Thanks to the generosity of the National 4-H Council, eight high-school students from Madison County, Tennessee had the opportunity this summer to attend, free of charge, a leadership program that is designed to strengthen their communication, leadership and citizenship skills on a national level.

The council provided the scholarships for the students to attend the 2013 Citizenship Washington Focus for 4-H youth who participate in Cooperative Extension 4-H Programs operated by 1890 Landgrant Universities and Tribal 4-H Programs. The Cooperative Extension at Tennessee State University will administer the scholarships, which will pay for registration fees, room and board, and meals for the week.

Citizenship Washington Focus is a week-long 4-H leadership program for high school youth. Delegates learn about the government, citizenship and civic education in group discussions, tours to points of interest, visits with senators and congressmen, listening to guest speakers, and exchanging program ideas and information with their fellow delegates from across the country.

A joint venture between the University of Tennessee

and the TSU extension offices, a total of 15 students along with chaperones from Madison County near Jackson, Tenn., will attend the conference.

Dr. Latif Lighari, Associate Dean for Extension with the College of Agriculture, Human and Natural Sciences, knows the importance of acquiring these scholarships. "This is a huge thing for all of us here at the University and particularly for the students that will be able to attend this conference through the help of the National 4-H Council," he said. "I have attended this conference myself many times, so I know first hand what a great opportunity this is. It will change the life of those that participate in it and seriously learn from this experience."

For more information about the Conference or the TSU Extension program, contact Dr. Lighari at 615.963.5526.









TSU Extension Assistant Sheds 170 Pounds, Starts New Life

As a 4-H teaching assistant with the TSU/UT extension service in Murfreesboro, Heather Gum has recited the club's pledge more times than she can remember. But, despite this familiarity, there was one line that always got to her. That line was "I pledge...my health to better living for my club, my community, my country and my world."

She struggled with this line because, though she was teaching children to live a healthy lifestyle, she herself was morbidly obese. After 30 years of overeating and bad choices, she tipped the scales at 367 pounds and had a 55½-inch waist. "It really hit me that I needed to make a change, that I had lived this lifestyle for far too long," said Gum. "But to start my journey I had to learn to love myself first."

Gum recently returned from a trip to Hollywood where she taped an episode of "The Doctors," a medical television talk show. She sent a letter to producers telling them of her life story and how she shed more than 170 pounds in 15 months. "I told them everything, the problems I had growing up and how I got to be where I was," Gum said. "I wanted to share my story so that others know they can lose an extreme amount of weight by just eating right and changing their lifestyle."

According to Gum, she grew up in the era of



Before — After

"cleaning your plate" or eating everything, and never learned to feel full on her own. She ate because it was time to eat—not because she was hungry, but because it was there.

On Feb. 14th, 2011 at the age of 40, she made the decision of a lifetime. After eating a couple of Taco Bell Five-Layer Burritos for a quick lunch, she decided to make the life-changing decision to improve the health of her body. Gum was referred to the Metabolic Research Center in Murfreesboro by another client, and according to Brittany Tucker, manager of the weight-loss center, she was ready to start her journey.

The program consisted of twice-weekly weigh-ins, sessions of encouragement, blood pressure checks and documentation of health history. Gum had to learn to eat all over again. Now she was weighing her food as instructed by the center, eating lots of fruits, vegetables and lean meats. "It was so easy," she said. "I didn't have to count calories. I just had to weigh my portions. I didn't go anywhere without my scales."

With the weight loss came a lot of firsts for Gum, including being able to sit in a chair without touching the sides, going kayaking, and just recently, snow skiing with her children in January. But one of the biggest moments was when her youngest daughter, now 11, was able to put her arms around her mom for the first time after losing 80 pounds. "It was a special moment for the two of us," she said. "I wondered how I ever got to that point, a point I am never going back to."

Today, Gum is down to about 185 pounds and went from a size 30 to a 12/14, but her journey is not yet complete. "My goal is to get to a size 8/10," she said.

[Adapted from an article courtesy of Tennessee State University News Service]

Dr. Godwin Joins the Million Dollar Club



Congratulations to Dr. Sandria Godwin on her inclusion in TSU's Million Dollar Club. This is an exclusive club of scholars who are on the cutting edge in research, teaching and service and have been awarded \$1,000,000 or more in a grant. Dr. Godwin, Professor and Program Leader of the Food Science, Nutrition and Health Team in the Department of Family and Consumer Sciences, has received over \$11 million in external funding since joining TSU in 1982. Specializing in research that directly improves consumers' lives, her work has been featured on National Public Radio, the Jay Leno Show, the John Tesh Show

and in dozens of magazines and newspapers. In addition to publishing extensively in refereed journals, Dr. Godwin has authored numerous publications and education programs intended for the public. She has been recognized with the Leader Award from the American Association of Family and Consumer Sciences, the TSU Blue and White Award for Research, TSU Researcher of the Year, the Partner Award for the Metropolitan Action Commission and the Community Health Hero Award from the Metropolitan Nashville Health Department. She recently received a USDA/NIFA grant of \$2,440,000 for Improving Consumers' Storage, Handling, and Preparation of Poultry and



TSU Professor Named Fulbright Scholar

Poultry Products. Dr. Godwin can be reached at sgodwin@tnstate.edu.



Associate professor of agricultural and environmental sciences Dr. Makonnen Lema has been selected for a Fulbright Scholar Award to teach next year in Ethiopia, according to the United States Department of State and the J. William Fulbright Foreign Scholarship Board.

Dr. Lema's award will take him to Haramaya University, one of Ethiopia's oldest and most prestigious universities, for the 2013-2014 academic year to teach and conduct research.

"This is a great opportunity for Dr. Lema," said Dr. Chandra Reddy, Dean of the College of Agriculture, Human and Natural Sciences. "He is originally from Ethiopia, and I know he will be able to take back lessons learned here and apply them in his home country."

The Fulbright Program was created in 1946 to increase cultural exchange and research between the United States and other nations. Each year roughly 1,200 U.S. scholars study, teach or conduct research abroad with the flagship program. Recipients of Fulbright awards are selected on the basis of academic or professional achievement, as well as demonstrated leadership potential in their fields.

"I am thrilled to have been selected for this prestigious award and extend my professional service internationally," said Lema. "I couldn't do this without the support of the University."

Currently, Lema teaches in the Department of Agricultural & Environmental Sciences where he is also the coordinator and adviser for the Animal Science and Pre-veterinary Science Program.

[Courtesy of Tennessee State University News Service]

CAHNS Recognizes Top Teacher, Researchers, & Students of the Year

From teacher of the year to the top researcher and most outstanding student, the College of Agriculture, Human and Natural Sciences recognized its top performers of 2013 at a ceremony culminating the celebration of Natural Sciences Week, April 15-19. The week included activities dedicated to each major science program in the College and the groundbreaking ceremony for a \$4 million education and research facility.

Dr. Chandra Reddy, Dean of the CAHNS, assisted by Dr. Millicent Lownes-Jackson, interim Provost and Executive Vice President for Academic Affairs, presented certificates and cash awards to the honorees during a ceremony in the Ferrell-Westbrook Research Complex Auditorium on the main campus.

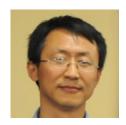
Staff, faculty and students of the CAHNS, as well as other senior TSU administration officials and representatives of the various colleges attended the ceremony.

Those honored were:



Dr. Graham P. Matthews, *Teacher of the Year* – Dr. Matthews, an eight-year member of the faculty, is associate professor of Early Childhood Education. Credited with being an outstanding student mentor, Dr. Graham's recent research project is titled, "Successful Indicators and Family Dynamics Found in the Academic Achievement of Young Black Children from Single-Parent Families." The Sharon, Penn., native is an ordained Elder in the Methodist Church and has taught at Temple University, Ohio University, Morgan

State University, Howard University, and Georgia College and State University.



Dr. Dafeng Hui, *Outstanding Researcher* – Dr. Hui is an assistant professor of Biological Sciences. He joined TSU in 2007. His research interests are in plant ecology, ecosystem ecology, global climate change, and ecological modeling. He has collaborated extensively with colleagues at TSU and other universities in the US and China. Dr. Hui has published one book, three book chapters, and more than 50 papers in scientific journals such as *Nature*, *Global Change Biology*, *Plant and Soil*, and *New Phytologist*. Additionally, Dr.

Hui has secured more than \$2 million of extramural funds to support his research and student training.



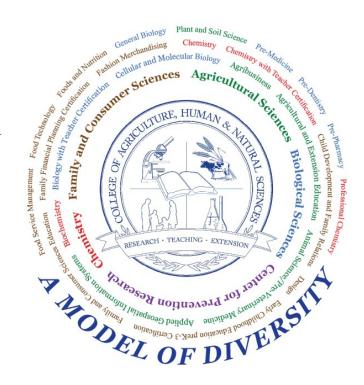
Dr. Hongwei Si, *Outstanding Young Researcher* – Dr. Hongwei Si joined TSU as a Research Assistant Professor of Family and Consumer Sciences in 2010 after seven years of doctoral and postdoctoral training at Virginia Tech. He investigates plant-derived chemicals on human health, including childhood obesity, aging and Cardiovascular diseases. In the last two and half years, Dr. Si has authored or co-authored eight research articles.



Linda J. Celada, *Outstanding (Doctoral) Graduate Student* – Now in the fifth year of her doctoral program, Celada received her B.S. degree in Biology from Lipscomb University in 2006. Her research focus is on the effect of environmental contaminants on the mitogen -activated-protein kinase activity in human natural killer cells. She is currently a Graduate Teaching Assistant for the Department of Biology.

Also recognized were: Dollie J. Hodges, Outstanding Administrative Support; William Bradford Smith, Outstanding Technical Support; Nabil Saleh, Outstanding (Master's) Graduate Student; Sharia **Yeasmin**, Outstanding Undergraduate Student – College of Agriculture, Human and Natural Sciences; **Toney Tillman,** Outstanding Undergraduate Student – Department of Agricultural and Environmental Sciences; Melissa Andrew Diniz, Outstanding *Undergraduate Student* – Department of Biological Sciences: Tasfia Islam, Outstanding Student – Department of Chemistry; and Nataliia Johnson, Outstanding Undergraduate Student - Department of Family and Consumer Sciences.

For their cash awards, Drs. Matthewas, Hui and Si received \$1,000 each; Celada, Hodges and Smith received \$500 each; Saleh and Yeasmin received \$350 each; and Tillman, Diniz, Islam and Johnson received \$100 each.



Dr. Chandra Reddy Honored For Contribution To Higher Education, Nation's Food System

The Food System Leadership Institute, a program of the Association of Public Land-grant Universities, has recognized Dr. Chandra Reddy, Dean of the College of Agriculture, Human and Natural Sciences, for his contribution to higher education and the nation's food system.

Dr. Reddy, a Fellow of the Institute, was among 19 others honored recently for their accomplishments in completing the FSLI executive leadership program, a two-year training initiative for experienced leaders in academia, government and industry.

Through a dynamic curriculum that includes three executivestyle residential sessions, individual coaching, mentoring and personal projects, the FSLI seeks to enhance personal leadership



Dr. William DeLauder, Chair of the FSLI/APLU, left, and Dr. Ken Swartzel, Director of FLSI, right, congratulate Dr. Reddy, after honoring him for his contribution to higher education and the nation's food system.

ability, develop skills and knowledge for organizational change, and broaden perspectives on integrated food systems.

"This was a great leadership development process over the course of two years that featured lectures from very highly accomplished individuals and mentorship by two presidents," Reddy said. "I have benefited greatly from this program."

The institute, sponsored by the Kellogg Foundation, is operated in partnership with North Carolina State University, The Ohio State University, and California Polytechnic State University San Luis Obispo.

Ag Business Major Named Federal Student Ambassador



Leslie Hughes had a very busy spring semester at Tennessee State University.

On top of taking 18 credit hours, the senior agriculturebusiness major also completed an internship at the State Capitol where she worked for two State

Representatives. If that wasn't enough to keep the 20-year old busy, she added one more activity—serving as a U.S. Forest Service Student Ambassador for the 2012-2013 academic year.

Hughes is one of 10 students selected from across the nation specifically by the non-profit Partnership for Public Service and the U.S. Forest Service for a unique job recruitment effort with the Forest Service. The Forest Service is looking to Hughes to help promote a wide-range of occupations including forestry technicians, law enforcement officers, engineers, program analysts, biological science technicians and more.

Despite the array of opportunities, the Forest

Service and other federal agencies have trouble attracting students because of a lack of knowledge about job openings and application processes. "It can be a very cumbersome process," said Hughes, who hails from Guthrie, Okla. "Many of the students here don't know about the process or get frustrated with it since there is so much to do. I see myself as a helpful source to those beginning the search and application process, and to [those looking to] land a job."

As a Forest Service Student Ambassador, Hughes serves as an on-campus resource for Forest Service job and internship information, providing tips on where to find positions within the agency and how to land them.

Hughes has conducted presentations and workshops at Tennessee State University and collaborated with career services representatives and faculty members. "I'm excited about my future and the opportunities that I have been given," added Hughes. "I am paying it forward and helping others [to] do the same."

Student Award Winners Association of Research Directors Meeting in Jacksonville, FL

- Alex Frederick (right), Department of Family and Consumer Sciences, Undergraduate, First Place Oral for presenting "Storage Practices and Microbiological Contamination of Home Refrigerated Foods"
- Sasikiranreddy Sangireddy (left), Department of
 Agricultural and Environmental Sciences, Graduate, First
 Place Oral for presenting "Proteomic Analysis of micro
 tomato roots under aluminum stress". He was also awarded
 a travel grant to attend the PGRP meeting in Providence, RI
 to present "Characterization of lactolglutathione lyase and
 FHA1 homolog genes for aluminum stress".
- Hui Li (center), Department of Agricultural and Environmental Sciences, Graduate, Third Place Oral for the presentation of "Characterization of a bacterial strain and identification of its cellulolytic activity".



Essay Winning Earns TSU Graduate Student Seat at National Agricultural Outlook Forum



What is the greatest challenge facing agriculture over the next five years?

The answer to that essay question earned a TSU graduate student a coveted seat at the U.S. Secretary of Agriculture's 2013

Agricultural Outlook Forum in Arlington, Va., Feb. 21-22.

Agribusiness major Allen Denkins and nine other graduate students from across the nation, selected from among hundreds of applicants based on their responses to that essay question, will join leading government and industry experts to discuss a broad range of topics and issues affecting agriculture.

In his essay, Denkins cited genetically-modified foods, global warming and climate change, and the growing global population as "distinct" areas of promise that also pose serious risks and challenges to agriculture.

Dr. Surendra Singh, Professor and Head of the Department of Agricultural and Environmental Sciences, expressed his appreciation for Denkins' accomplishment. "We in the Department are proud of Allen Denkins for this outstanding achievement," he said. "The essay he submitted for the competition showed his knowledge and understanding of issues facing the U.S. agriculture."

Denkins, a married father of four from Houston, will join students from Iowa State, Oklahoma State, Mississippi State, Utah State, the University of Florida, Texas Tech, Texas A&M, Washington State and Tuskegee University at the Forum.

"Competing against some of the top schools in the country, I am surprised that I was selected," Denkins said. "But I am excited for the opportunity to represent Tennessee State University."

[Adapted from an article courtesy of Tennessee State University News Service]

Student Award Winners University Wide Research Symposium

- Tasfia Islam, Department of Chemistry, Undergraduate, First Place Poster
- Hui Li, Department of Agricultural and Environmental Sciences, Graduate Student, First Place Oral
- Nabil Saleh, Department of Chemistry, Graduate Student, First Place Oral
- David Solomon, S. McMillan, A. West, L. Sharpe, T.D. Byl, Department Biological Sciences, Undergraduate, First Place Oral
- Ms. Shari Scott, Department Biological Sciences and CHEW intern, Graduate Student, Second Place Oral
- Lipi Parikh, Department of Agricultural and Environmental Sciences, Graduate Student, Third Place Oral
- Emily Rotich, Department of Agricultural and Environmental Sciences, Graduate Student, Third Place Oral

Young Kurdish Immigrant Beats Nearly Insurmountable Odds to Earn University Education, American Dream

Ghariba Babiry is a classic American dream story.

15 years ago she came to the United States without understanding a word of English and having had no prior schooling. Now, she has received a college degree—with a potential teaching job in tow. *That's quite an accomplishment*.

"It's all still a dream," she said.

For the young Kurd, it all started at around the age of 14 when she, along with her father, mother and three younger siblings, fled the tyrannical rule of Saddam Hussein. They left their Kurdish homeland in northern Iraq for a new life in the U.S.—

Nashville, to be precise—and were immersed in a totally different culture and way of life. It's difficult enough to be 14, but this culture shock presented an entirely new set of obstacles. "This was all a new experience and my siblings and I were required to cope and succeed amid some serious challenges," Babiry said.

But challenge, for Babiry, is an understatement. It was an awakening. "For my first time ever in a classroom, I was thrust into the eighth grade at Cameron Middle School, with no understanding of English. I was totally dumbfounded," she said. "I had a separate interpreter with me in class about three hours a week to guide me through the instructions while the teacher was teaching. Worse yet, at 14, I was the oldest in the class but understood the least. That was very difficult. I tried to give up several times."

Thanks to Babiry's very persistent parents, however, she did not give up. She persevered through the daily struggle of trying to complete class assignments and, though she was almost always the last to finish, her persistence paid off as she made her way through middle school, high school, community college, and now Tennessee State University.

On May 11, she was among the more than 1,000



graduates who received their degrees when TSU held its spring commencement at Hale Stadium. "The idea of graduating is surreal because I have been through so much and there were many times that I was not sure I would get through the Praxis exams," said Babiry, who received her degree in Early Childhood Education. "It is even more special to know that my parents will finally see me graduate after many years of hard work. I am thankful to them and Allah the almighty for their support and for giving me strength. I was also fortunate to meet some wonderful people who understood my situation and encouraged me along the way," she said.

"I will be like those teachers who did everything they could to make sure I fit in, who understood [my situation] and treated me with respect and not like I was a burden," she said. She also recognized some of her TSU professors including TSU's Dr. Graham Matthews (her senior advisor), Ms. Deborah Bellamy, and Reading Clinical Coordinator for the Metro School System Dr. Tammy Lipsey. "They were never too busy to make sure I was doing the right thing," she said. "A kind word and a little encouragement go a long way."

[Adapted from an article courtesy of Tennessee State University News Service]

On April 24, 2013, employees from the College of Agriculture, Human and Natural Sciences were awarded plaques for years of service with Tennessee State University. The service awards were given by President Glenda Glover. They were:

5 Years

Walter Dirl
Emily Gonzalez
Rachel Howell
Dafeng Hui
Tyrone Miller
Alan Otey
Natalie Owens
Darby Payne
Grace Perry
Dharmalingam Pitchay
Chandra Reddy
William Stuckey
Jessica Waters

10 Years

Mu Zheng

Mohommad Al-Masum
Bridgette Collins
Wendell Smith
William Smith
S. Corrine Vaughn

15 Years

Aleta Ballard de Ruiz Anthony Ejiofor Sierra Ham Shirley Miller

20 Years

Van Cain
Queen Edwards
Philip Ganter
Lois Harlston
Terrance Johnson
Lillie Taylor
Darren Wright

25 Years

Roger Sauve Dianne Stewart-Starks William Taylor, Jr. Benny Washington

30 Years

Albretta Jackson

40 Years

Desh Duseja Mary Johnson Elease Jolley





Topics Include:

Tornado Safety
Helping Kids Through A Disaster
Keep Food Safe When The Lights Go Out
Avoiding The Danger Zone When It Is Hot Outside
Can I Salvage My Flooded Garden
Goat Management In A Drought
and Many More

Visit Our Website At: www.tnstate.edu/agriculture



The CAHNS

Agricultural Biotechnology Building Is Finally Taking Shape



Some More Additions to the College of Agriculture, Human and Natural Sciences



Agricultural Education Building



Field Research Support Building

Undergraduate Academic Programs Offered in The College of Agriculture, Human and Natural Sciences

Agribusiness

Agricultural and Extension Education

Animal Science/Pre-Veterinary Medicine

Applied Geospatial Information Systems

Biochemistry

Biology with Teacher Certification

Cellular and Molecular Biology

Chemistry

Chemistry with Teacher Certification

Design

Early Childhood Education

Family and Consumer Sciences Education

Family Financial Planning Certification

Fashion Merchandising

Food Service Management

Food Technology

Foods and Nutrition (Dietetics)

General Biology

Plant and Soil Science

Child Development and Family Relations Pre-Medicine, Pre-Dentistry, Pre-Pharmacy Programs

Professional Chemistry

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

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(615)963-7561 http://www.tnstate.edu/ agriculture/

Dr. Chandra Reddy, Dean

LINK Editors:

Dr Nick Gawel Richard W. Stone **Brett Seybert**

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