TU RECEIVES ARTIFICIAL INTELLIGENCE GRANT

Tuskegee University is part of the White House initiative to establish seven Artificial Intelligence (AI) Research Institutes and five Quantum Information Science (QIS) Research Centers with more than $1 billion in awards during the next five years. In October 2019, National Science Foundation (NSF) catalyzed a collaboration of federal agencies—including the Department of Transportation, the Department of Homeland Security, and the Department of Agriculture—and launched the National AI Research Institutes program. The AI Research Institutes represent NSF’s flagship investment in AI research and education. The Institutes are collaborative research and education hubs, bringing university researchers together with industry and government partners so that people, ideas, and approaches can be combined for maximum impact to address frontier AI challenges. NSF and the USDA’s National Institute for Food and Agriculture announced the creation of seven new AI institutes at universities—five funded by NSF and two funded by USDA. These institutes will leverage AI techniques to address pressing issues such as extreme weather preparedness, bioengineering technology, navigation, education, and robust food systems.

Tuskegee is part of the first cohort which consists of more than 100 entities, like John Deere, that are active in 20 states. The cohort will supply manufacturing research questions and will hire the resulting workforce. Tuskegee is part of the first cohort which consists of more than 100 entities, like John Deere, that are active in 20 states. The cohort will supply manufacturing research questions and will hire the resulting workforce.

As the primary non-defense federal funder of fundamental AI research, the U.S. National Science Foundation has played a leading role in supporting basic and translational research, advancing and scaling computing resources that power AI innovations, as well as building education and workforce development for America’s AI researchers and practitioners.

The work for Tuskegee will be under the Dr. Olga Bolden-Tiller as the PI and Drs. Chuck Okere and Bernard “Chris” Gregory are co-PIs. Institutes will research machine learning, natural language processing, computer vision, human-AI interaction, and fairness, transparency — technologies that can further advances in extreme weather forecasting, physics, medicine, communications, and education. Money will also go toward the training of undergraduate and graduate students.

“Since new developments are the products of a creative mind, we must therefore stimulate and encourage that type of mind in every way possible.” – George Washington Carver

INSIDE THIS ISSUE

TU Dinkins ......................2
USDA Scholars .................2
First graduates of the IPPD ...3
130th Anniversary of 1890s ...3
Pesticides Focus ................4
Gyawu Blogging ...............4

SPECIAL POINTS OF INTEREST

- Boyd serves on National Board
- CAENS receives $1.6 M Center of Excellence grant
- Honor Society Annual event

The Horizon Reimagined is the publication produced to highlight the accomplishments of the faculty, staff, students and alumni of the College of Agriculture, Environment and Nutrition Sciences.

Contact Jacquelyn Carlisle at jcarlisle for more information
TU GRADUATE PLANS PUBLIC PRESERVATION

Tuskegee University graduate Lillian Dinkins is one of first to be a part of the national Scholars for Conservation Leadership Program. She and Papa Gueye were selected to be in the program, which is a partnership between the Land Trust Alliance and U.S. Department of Agriculture’s Forest Service to provide opportunities for students to pursue careers in natural resource management and conservation.

Dinkins who graduated with a degree in environmental science from Tuskegee University, says she thinks there’s not enough awareness among people of color about opportunities in environmental fields.

“It’s really an education thing. A lot of people just don’t know that these are actual jobs that people have.”

She is working in Orlando, Florida on nearly 500-acre parcel of land known as the D Ranch Preserve and along with fellows Gueye, they are creating a management and community outreach plan for D Ranch. This will be the first preserve for Conservation Florida.

The plan is to get the preservation ready to open to the public in 12 months to have activities such as hiking, biking, and camping pending the contingency plan by the two fellows. They are creating a plan to preserve the land, keep it healthy, while providing recreational usage.

“I’m in a space here where I really feel like it’s really important to go back into my community and encourage people to get into spaces and opportunities like this,” Dinkins said.

While Dinkins and Gueye are the program’s first two fellows, the intent is to take it nationwide, with fellows at land trusts throughout the United States.

The Land Trust Alliance, a partner in the Scholars for Conservation Leadership effort, represents more than 1,000 land trusts across the country.

The first two fellows were chosen from 10 undergrads brought together for a National Land Conservation Conference in Raleigh, North Carolina, in 2019. The program plans to recruit its next cohort of 20 college students in February 2021. Students who want more information can sign up online at www.landtrustalliance.org and watch for more information about the application process in the months ahead.

CAENS IS PROUD OF THE USDA/1890 NATIONAL SCHOLARS

There are many scholarships offered at Tuskegee University, one of the most recognizable is the USDA/1890 National Scholars Program scholarship in the College of Agriculture, Environment and Nutrition Sciences (CAENS). The program is specifically for students pursuing an Agriculture or Agriulture-related bachelor’s degree.

The very competitive scholarship is available to all high school and undergraduate students entering or in an 1890 Land Grant Universities. The scholarship provides full tuition, fees, books, room and board, and a summer internship. The summer internship will convert to full-time employment with USDA after graduation.

Tuskegee University announced the four recent scholars for the 2020-21 Academic Year. They are: Brianna Miles-Environmental Science-Plant/Soils-Incoming Freshman-USDA NRCS-sponsor; Chloe Adams White-Animal Science/Pre vet-Sophomore-USDA APHIS-Sponsor; Taylor Curry-Agricultural Business-Sophomore-USDA Rural Development-sponsor and Zipporah Sowell-Environmental Science-Plant/Soils-sophomore-USDA ARS-sponsor.

During the Spring Commencement CAENS had four students to graduate as USDA/1890 scholars for 2020. They are Capri Charleston, Caitlin Skinner, Jaeden Irving and Ramses McKinstry and they are all currently working with the USDA now that they have finished their studies at Tuskegee University.

Graduates who will be working at USDA NRCS-Natural Resource Conservation Service are Capri Charleston – BS, Environmental Science (Soils-Natural Resources) and Jaeden Irving – BS, Environmental Science (Plant and Soil Science). Ramses McKinstry, BS Environmental Science (Soils-Natural Resources) is working with the USDA FS-Forest Service; and Caitlin Skinner, BS Environmental Science (Plant and Soil Science) is working with the USDA ARS-Agricultural Research Service.

Happy 2020 Homecoming!!!

Dean Walter Hill and the Leadership of the College of Agriculture, Environment, and Nutrition everyone a Happy and Safe Homecoming 2020! Please continue to support CAENS.

GO TIGERS!!
TUSKEGEE UNIVERSITY CONTINUES TO MAKE HISTORY WITH NEW IPPD PROGRAM

Tuskegee University makes history with its first graduates from the Integrative Public Policy and Development (IPPD) PhD program. Dr. Lindsey Lunsford of Fort Wayne, IN, Dr. Jasmine Ratliff of New Orleans, LA and Dr. Kara Woods of Montgomery, AL were able to accomplish a feat that is in itself challenging, and to add to it the challenges that came with the pandemic of COVID-19 made it fantastic.

Dr. Woods, a native of Montgomery, was in the first cohort to enter the program, and four others followed in the first class. “I am so grateful to have had this opportunity,” said Dr. Woods. “I owe so much to Dr. Robert Zabawa for his assistance and to working to bring this program to where it is. He did whatever was needed to make the program work and for us to be successful.”

Dr. Woods’ dissertations was “Trust God and Get to Work: The Relationship Between Heir Property, Social Institutions, and Civic Participation in Macon County, Alabama.”

Dr. Lunsford, who has a family history of attending Tuskegee, became the first to receive a PhD in her family. There have been 4 generations and 33 degrees received from Tuskegee University (Institute). “This has been a true blessing,” said Dr. Lunsford. “I am so grateful, and I realize you cannot take anything for granted.”

Dr. Lunsford’s dissertation was “Soul Food as Healing: A Restoring of African American Food Systems and Foodways.”

Dr. Jasmine Ratliff was appreciative for her opportunity. The New Orleans native indicated that she had built resilience before and while in the program. The Program provided both strength and challenges.

Dr. Jasmine Ratliff’s dissertation was “Evaluating a Local Food System’s Ability to Increase Community and Economic Development in Alabama’s Black Belt Region.”

This is the first Social Science doctoral program at Tuskegee University. “It was always interesting to us that the university was not producing PhDs in the Social Sciences,” stated Dr. Robert Zabawa and Dr. Thierno Thiam, IPPD co-directors. “At the institution that had Monroe Nathan Work (Chair of the Department of Records and Research and the Negro Yearbook and lynching records), Charles Gomillion (Department of Sociology and of Gomillion versus Lightfoot in the US Supreme Court), and where its Founder, Booker T. Washington, traveled the Macon County countryside to observe and record information on the people he wanted to serve and the students he wanted to recruit, we have not had a PhD in the social sciences! Until now!”

The IPPD program came out of a joint meeting between Tuskegee University, George Washington University, and the University of Lomé in Togo, which was facilitated by the U.S. Department of State. Tuskegee University was represented by faculty and administrators including President Gilbert Rochon, Provost Luther Williams, Dean Walter Hill and Thierno Thiam and the first class entered in 2016.

“We went through long days and nights to work on the vision and the details of what would be the IPPD program. Our proposal would be approved by the Dean’s Council, Provost, President and Board of Trustees,” said Thiam. “Then we had to begin to take an even deeper look at the core faculty. Enlisting Dr. Zabawa would prove catalytic in light of his interest and expertise. He would go on to serve as co-advisor with Dr. Godfrey Vincent for the program, which was composed of five PhD students including the newly minted Dr. Kara Woods, Dr. Lindsey Lunsford and Dr. Jasmine Ratliff. We currently have 13 students in the program.”

“Success was born because three colleges -CAENS, CAS and CBIS broke through their disciplinary silos and worked integratively - leveraging their collective strengths and diverse resources to initiate and build the IPPD program,” IPPD Dean Council members W. Hill (CAENS), C. Prakash (CAS) and K. Koone (CBIS) collectively applauded the IPPD students and faculty for their excellent work and this historical accomplishment.

The research of the three dissertations by the graduates were not just academic exercises, but direct applications to the people of the Alabama Black belt and beyond. Dr. Raymon Shange, Associate Extension Administrator and IPPD mentor indicated that they addressed issues of land tenure, social institutions and voting participation, food as cultural identity, and the role of food systems in economic development.

BOYD SERVES ON NATIONAL BOARD

Julian Boyd, a junior agribusiness major at Tuskegee University student was elected to serve as the undergraduate Student Vice President for MANRRS (Minorities in Agriculture, National Resources and Related Sciences) National officer for 2019-2020.

MANRRS is a national leadership training organization representing over 2,000 members across the country. As a National Officer Boyd will represent dozens of universities and members across the nation and serve as an ambassador of MANRRS Tuskegee University with leaders in agriculture, agribusiness, local, state and federal government and other professional organizations. Most importantly, Boyd will serve as a leader of innovation and change making the future of American agriculture even brighter.

Strategic planning and strong leadership are vital to the success of any non-profit organization. Boyd will work with the Undergraduate Student President and President-Elect to ensure their objectives are implemented and the agendas focused on key strategic matters.

The Undergraduate Student Vice President is to take the lead in developing new collegiate chapters and initiatives to keep undergraduate members engaged. Additionally, the Undergraduate Student Vice President will develop relationships with appointed MANRRS National Sponsors. The Undergraduate Student Vice President attends or helps to organize social functions to maintain visibility on local chapter campuses. With the world’s population estimated to exceed 9 billion people by the year 2050, agricultural production will need to increase by 70 percent (www.nifa.usda.gov/education) to meet the growing demand for food. Addressing this need, MANRRS focuses on developing future leaders in the agricultural sector through training and providing employers with a highly skilled, diverse workforce that includes individuals from traditionally underrepresented and underserved groups.

MANRRS is committed to developing the next generation of agricultural leaders and looks forward to working with Tuskegee University. Please join us in congratulating and recognizing Julian Boyd for this great accomplishment.
EL AFANDI RECEIVES GRANT TO FOCUS ON PESTICIDES

Tuskegee University faculty in collaboration with colleagues from the University of Illinois Springfield (UIS) have entered a new partnership that will study pesticide risks near urban agricultural communities.

The three-year grant, funded by the U.S. Department of Agriculture National Institute of Food and Agriculture, is entitled “Risk Assessment of Pesticide use and Air Dispersion in urban agricultural interface communities.” The $500,000 project will overall award Tuskegee $332,025 and UIS receiving the remaining $167,975. The study is part of an effort to learn about the risks of pesticide use and air dispersion in urban agricultural communities.

The grant will be administered by Dr. Gamal Salah El Afandi, professor in Tuskegee’s Department of Agricultural and Environmental Sciences, who will lead Tuskegee’s portion of the project alongside Dr. Ramble Ankumah and Dr. Souleymane Fall, both professors in the College of Agriculture, Environment and Nutrition Sciences.

The study will identify methods for monitoring and modeling the atmospheric spread of pesticide pollutants under numerous weather conditions, identify hotspots of occurrence, and assess the vulnerability of affected communities.

“Due to proximity, pesticide concentrations in ambient air are higher in agricultural communities and near treated fields. During the pesticide application, the direction drift of pesticide is critical to its impact on nearby communities,” said El Afandi. “Some of the health problems that affect populations living in the urban-rural interface is believed to stem from exposure to pesticide vapors that are present in the atmosphere following the application of the product by farmers.”

El Afandi said the study will also investigate the links between pesticides and health effects. The extent of this on populations living in the urban-agricultural interface is not clear, although some residents in the urban agricultural interface have attributed various ailments to pesticides and related areas and designed to support, recruit, and prepare undergraduate students enrolled in Food and Agriculture and related areas and designed to support, recruit, and prepare students to successfully graduate and enter the Food and Agriculture Workforce.

Recipients for 2020-2021 Academic Year

THE COLLEGE OF AGRICUL- TURE, ENVIRONMENT AND NUTRITION SCIENCES WELCOME YOU TO THE 2020 HOMECOMING!

Contributions to Scholarships

Name ____________________________
Graduate year__________________
Address________________________
City ____________________________
State __________________________
Contribution ____________________

MAIL TO: CAMPBELL HALL TUSKEGEE UNIVERSITY TUSKEGEE, AL 36088

THANK YOU!

TU GRADUATE CO-AUTHOR BLOG

Tuskegee University graduate Rebecca Gyawu is making a difference during the time of COVID-19 by co-authoring a blog to discuss the food security during this pandemic.

Gyawu, the Scientific Program officer, along with Dr. John Reich, Scientific Program Director of Urban Food System at Foundation for Food and Agriculture Research’s (FFAR) authored a blog post about how COVID-19 is affecting emergency food systems, such as food banks. She and Reich emphasize the importance of understanding, and mitigating, nutritional and food insecurity caused by the coronavirus crisis and other system shocks.

She holds a master’s degree in food and nutritional science from Tuskegee University and another master’s in global health policy management from Brandeis University. She completed her undergraduate studies with a major in food and nutrition from the University of Cape Coast, Ghana, where she originates.

She co-authored a diabetes education manual with her academic advisor. She published part of her master’s thesis work on evaluating the food and nutrition environment for cancer risk prevention in the Journal of Preventive Medicine Report.

According to FEAR, Gyawu joined FFAR in August 2019 as a scientific program associate. She was later promoted to scientific program officer. In this role, Gyawu supports both the Health-Agriculture Nexus and Urban Food Systems Challenge Areas. Some of her responsibilities include managing programs, recruiting, and assigning peer reviewers and assisting with content development for new programs.

Her passion about solving food security issues in underserved communities domestically and abroad started before joining FFAR. Gyawu was a design monitoring and evaluations specialist with World Vision and spent over three years working to improve food security in underserved communities through nutrition education and research. She also worked for the Food Trust as a project associate, The Center for Childhood Obesity Research, Penn State as a research technologist and the University of Maryland Eastern Shore Extension as a program assistant.
TUSKEGEE ONE OF THREE HBCU LAND-GRANTS AWARDED $1.6 M USDA CENTERS OF EXCELLENCE GRANT

Tuskegee University is one of three land-grant institutions to each receive $1.6 million from the U.S. Department of Agriculture’s National Institute of Food and Agriculture for its Center for Innovation and Sustainable Small Farms, Ranches and Forestlands. NIFA’s total $4.8 million award supporting Centers of Excellence at these 1890 Land-Grant Institutions in America is made possible through the agency’s 1890 Centers of Excellence Grants program, funded through the FY19 Federal Appropriations Bill.

“Access to research and educational opportunities is a cornerstone of prosperity, and this investment will help provide opportunities will for America’s underserved and disadvantaged farmers by providing access to research and educational opportunities that will enhance the quality of life in our rural communities,” said Scott Hutchins, deputy under secretary for research, education and economics in the U.S. Department of Agriculture.

Based in the College of Agriculture, Environment and Nutrition Sciences, Tuskegee’s Center for Innovation and Sustainable Small Farms, Ranches and Forestlands will fund research, extension and integrated projects designed to increase profitability, natural resource conservation and market demand for small farmers, including socially disadvantaged/underserved farmers, ranchers and forest landowners.

Other institutions receiving a $1.6 million NIFA grant award included the University of Maryland-Eastern Shore for its Center of Excellence for International Engagement and Development; and North Carolina Agricultural and Technical State University for its Virtual Center to Motivate and Educate for Achievement.

The 1890 COE Program provides support for Centers of Excellence that were originally established in 2015 in conjunction with the 125th Anniversary of the Second Morrill Act of 1890. The 1890s COE are hosted by 1890 Land-Grant Institutions with the goals of increasing profitability and rural prosperity in underserved farming communities; addressing critical needs for enhanced international training and development; and increasing diversity in the science, technology, engineering, agriculture and mathematics (STEAM) pipeline.

1890 UNIVERSITIES CELEBRATED 130TH ANNIVERSARY OF MORRILL ACT OF 1890

Tuskegee University and other 1890 land-grant universities celebrated the 130th anniversary passage of the second Morrill Act. The Morrill Act of 1890 established a land-grant university system of Historically Black Colleges and Universities in states where African Americans were banned from accessing a public higher education. The celebration highlighted the 19-member 1890 land-grant universities leading in areas of research, world-class education and shaping future generations.

“Each of the 1890 universities have a longstanding legacy of excellence, dedication, and mission to advancing educational opportunities for African American students,” said President Dr. Lily D. McNair. “And our mission and purpose at Tuskegee University still remains the same; to nurture and challenge our students to grow to their fullest potential – this is the principal reason for our existence.” After 130 years, the institutions designated as 1890 land-grant universities continue to work together to provide essential research, education, and Extension/public outreach that both sustains U.S. food, fiber and renewable fuel production and addresses the challenges of our time at local, regional, national and global levels.

The 1890 land-grant universities have a legacy helping to fill a crucial need of educating first-generation and economically disadvantaged college students; enhancing the resilience of limited-resource farmers, families, individuals, and underserved communities; and pioneering the most advanced and advanced education, research, and engagement programs to improve quality of life. The 1890 universities are well-positioned to advance educational opportunities, and today they educate nearly 100,000 students annually, and contribute more than $4.4 billion to the local economies, and provide pathways of opportunity for thousands of Americans.

The 1890 land-grant universities are a perfect platform for addressing the three interlocking disparities of education, health, and economic prosperity made more evident by the COVID19 pandemic. Looking ahead, the 1890 institutions plan to focus on these disparities while continuing to play a foundational role in the higher education system and in providing access and enhancing opportunities for all citizens.

The 1890 land-grant universities are: Alabama A&M University, Alcorn State University, Central State University, Delaware State University, Florida A&M University, Fort Valley State University, Kentucky State University, Langston University, Lincoln University in Missouri, North Carolina A&T State University, Prairie View A&M University, South Carolina State University, Southern University and A&M College, Tennessee State University, Tuskegee University, the University of Arkansas at Pine Bluff, the University of Maryland Eastern Shore, Virginia State University and West Virginia State University.
The Honor Society of Agriculture (HSA), Gamma Sigma Delta (GSD) organized the second Wellness Walk and Run (WWR) on February 27, 2020. This WWR was concentrated on Macon County schools and the community. The one-mile walk and two-mile run has multi-faceted implications in every walk of life: academic, social, professional, personal, family, and farming. The theme of the event was ‘healthy life – healthy agriculture.’ Simultaneously, we wanted to promote the norms and values of Cooperative Extension (CE) in Tuskegee University (TU) and underpin its underlying mission ‘serving community’ in various ways. One of them has been promoting physical fitness including but not limited to clientelle, local schools, community people, university constituencies, and other stakeholders. The event was intended to encourage ALL participating schools and individuals to rekindle friendship, interact, and strengthen networking for future activities and projects. The WWR was generously sponsored by Cooperative Extension at Tuskegee University and was organized at the football stadium of Booker T. Washington High School in Tuskegee, Alabama. The following five schools along with local community at large and university faculty, staff and students participated in the event.

Notasulga High School, Tuskegee University, and Local community

A total of 463 people participated in this WWR event. All participants enjoyed walking, running, jumping, interacting, networking, taking pictures, signing in, filling out surveys, and eating healthy snacks. It was the second event in a series in which GSD reached out to the community, other institutions, and individuals. A collective voice of WWR from eight different entities (as listed above) enthralled the participants at Booker T. Washington High School’s football field, where the event was held. Participants enjoyed wearing green-color (symbol of agriculture) T-shirts while walking, running, posing for the pictures, and networking. With the help of the Cooperative Extension, GSD managed to distribute trophies to the first, second, and third place winner boys and girls and all participating schools. All participants were served healthy snacks and given green-color T-Shirts.

Tuskegee University’s College of Agriculture, Environment and Nutrition Sciences (CAENS) offers an education that prepares future professionals and leaders in the agricultural, environmental, and nutritional sciences, as well as veterinary medicine and other professional programs through course work along with internships, research and outreach activities related to their chosen majors.

The overall mission of the College of Agriculture, Environment and Nutrition Sciences is to develop students with skills in critical and systematic thinking, intellectual curiosity, a desire for lifelong learning and to prepare them leadership and service in the basic and applied sciences.

Pesticides from Page 4

During the study Tuskegee University undergraduate and graduate students will have the opportunity to receive technical and research education. “The project will provide an excellent platform for training students to run simulation models in the past, present, and future situations and to make use of the high-performance computing at Alabama supercomputer,” noted El Afandi. “The project will improve modeling capabilities to estimate future scenarios to develop new ideas for field management practice.” Researchers expect at the projects conclusion, a better understanding and management of pesticides risk based on the use of air dispersion modeling and geographic information technologies. In addition, it will also provide data and information to enhance the preparedness of local communities dealing with such issues.

Partners at UIS include assistant professor of Public Health Dr. Egbe Egiebor and associate professor of Public Health Dr. Dorine Brand.

CAENS 2020 Virtual Homecoming Reception

College of Agriculture, Environment, and Nutrition Sciences Dean’s Office is inviting you to a scheduled Zoom meeting on Friday, Oct 23, 2020 at 3:30 PM Central Time (US and Canada)

Join Zoom Meeting
https://zoom.us/j/96699270033?pwd=gWg1UVhFejB4Qms1cmoxWE8vL3dodz09

Join by phone (audio only): (312) 626-6799
Meeting ID: 966 9927 0033
Passcode: 898093