



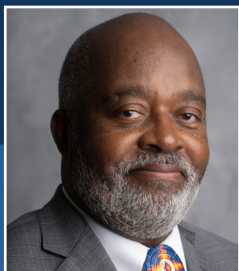
SEEDS OF **SU**ccess!

JULY
2026
VOLUME 24 | ISSUE 7

*A Monthly Newsletter
of the Southern University
Ag Center, College of Ag,
and Chancellor's Report*



Orlando F. McMeans, Ph.D.
Chancellor & Interim President of the
Southern University System



C. Reuben Walker, Ph.D.
Executive Vice Chancellor/Director of
Development: SU Agricultural, Research
and Extension Center Special Projects



Devaiah Kambiranda, Ph.D.
Interim Vice Chancellor, Research



Tiffany W. Franklin, Ph.D.
Vice Chancellor, Extension and Outreach



Brunetta Gamble-Dillard, MBA
Vice Chancellor, Finance & Administration



Renita W. Marshall, D.V.M.
Vice Chancellor, Academics & Student
Support Services/Interim Dean



Katara A. Williams, Ph.D.
Vice Chancellor, Institutional Advancement
and External Relations

Executive Leadership



Ivory Coast Ambassador & Minister of Animal and Fisheries Visits the SU Ag Center	4
Dr. Orlando McMeans Tours Muse 3 Farm with the Board of Regents and the LSU AgCenter	5
SU Ag Center and College of Ag Administrative Assistants Participate in Professional Development Day	6
Sixty-seven Students Received Degrees from the College of Agricultural, Human and Environmental Sciences	7-9
Moving Up Celebration	10
CAHES Students Present Research at LSU Discover Day 2026	11
2026 Earth Day Celebration with the Dietetic Internship and Southern University Laboratory School	12
CAHES Students Attended the Center of Excellence Student Professional Development Conference	13
CAHES Doctoral Student Georrein Dupre Appointed as MANRRS Graduate Student Vice President	14
AGSC 451: A Glimpse into this Course and the Pork Quality Assurance Plus® Certification	15
Urban Forestry Graduate Students' Papers Published in one of the Top-Tier Remote Sensing Journals	16-19
SU College of Ag Holds a Successful 2026 BAYOU Program	20
CAHES Expands Workforce Development Through Research-Based Experiential Learning Opportunities	21
Little Sprouts, Big Lessons: Southern University Child Development Lab Celebrates Earth Day Through Gardening	22
The SU Ag Center Participated in a Community Baby Show	23
Youth Create Robot Prototypes Capable of Addressing Agricultural Issues	24
Seniors Gather at the "All American Roundup" Health Event	25
EXCITE Program Expands Immunization Education Through Community Outreach	26
The SU Ag Center Expands Heirs' Property Education Through Strategic Statewide Partnerships	27
Youth Learn to Cook During NourishEd K.I.D.S. Youth Summer Cooking Camp	28
Hip Hop to Gen Z Camp Links STEAM and the Arts	29
Cultivating Future Scientists Through Faculty Mentored Research Participation	30-31
Rotational Grazing, Carbon Sequestration, Beef Cattle Production, and Soil Health	32-33
Rooted in Wellness: Soul to Soil Brings Gardening, Tea, and Community Together	34
NourishED by the B.A.Y.O.U.	35
Staff Spotlights	36-39
SU Ag Podcast	40



Ivory Coast Ambassador & Minister of Animal and Fisheries Visits the SU Ag Center

Ivory Coast (officially named Côte d'Ivoire) Ambassador to the United States, Ibrahima Touré and Minister of Animal and Fisheries Resources, Sidi Tiémoko Touré, visited the Southern University Ag Center on May 20, 2026 to learn more about the Center's research programs.

The delegation also included Alphonse Gon, Minister-Counselor at the Embassy of Côte d'Ivoire in Washington, D.C. and Natacha Leroux, Agriculture Counselor of Brussels.

While at the Ag Center, the delegation toured the Research Farm where there was a demonstration on SMART Ranching technologies and Dr. Clyde Bagley, SU Ag Center Vice Chancellor for Research (Retired) and Dr. Mallory Tate, Research Assistant Professor and Attending Veterinarian, discussed how this technology is used to monitor the health of beef cattle. Dr. Miriam Contin, SU Ag Center Post-Doctoral Researcher for Aquaculture, discussed aquaculture research, and Dr. LaShonda Hodges, Full Research Professor of Soil and Plant Sciences and FAA Certified Drone Pilot, conducted a drone demonstration and discussed its use in the field of research.



The delegation also toured the SU Ag Center's vineyard where Dr. Devaiah Kambiranda, SU Ag Center's Interim Vice Chancellor for Research, discussed the Center's Viticulture and Enology research program.

The visit concluded with lunch and a meeting with Dr. Orlando F. McMeans, Chancellor of the SU Ag Center and Interim Southern University System President, at the Valdary Center of Philanthropy.





BOARD of REGENTS
STATE OF LOUISIANA



Dr. Orlando McMeans Tours Muse 3 Farm with the Board of Regents and the LSU AgCenter

Dr. Orlando F. McMeans, Chancellor of the SU Ag Center and Interim President of the Southern University System, members of the Louisiana Board of Regents, and Dr. Matt Lee, Senior Vice Chancellor for Agriculture and Dean of the LSU College of Agriculture, toured Muse 3 Farm in Greensburg, LA on June 12, 2026. The tour was part of a visit scheduled by the Louisiana Board of Regents.

Several staff members from the SU Ag Center, the Louisiana Board of Regents, and the LSU

Ag Center also attended the tour.

During the visit, Muse 3 Farm representatives showcased the animal husbandry and horticultural aspects of the farm. They also discussed how the SU and the LSU Ag Centers have assisted them. For several years Muse 3 Farm has provided field trips for the SU Ag Center's Summer Camps, served as a vendor at the SU Ag Center's JagFresh Farmers Market and during SU Ag Center sponsored

events and programs, and as a supporter of the Annual Livestock and Poultry Show.

The group also enjoyed a delicious lunch which included food grown on the farm.

The Southern University Ag Center looks forward to continuing to grow its partnership with Muse 3 Farm and provide assistance to ensure the farm's sustainability for the future.





SU Ag Center and College of Ag Administrative Assistants Participate in Professional Development Day



The administrative assistants employed at the SU Ag Center and the College of Ag participated in a Professional Development Day on May 28, 2026. The training themed, “The Power Behind the Office: Elevating the Administrative Assistant Role,” was facilitated by Keisha Dandridge, Program Director of the SU Child Development Laboratory and held at the Tarver Center on the Southern University campus.

The training encouraged the participants to elevate their professional presence within their offices by identifying their roles, duties, and customer service excellence.



Sixty-seven Students Received Degrees from the College of Agricultural, Human and Environmental Sciences



Sixty-seven students from the College of Agricultural, Human and Environmental Sciences (CAHES) received degrees during Southern University's Spring 2026 Commencement Ceremonies held in the F. G. Clark Activity Center. A graduate ceremony was held on Thursday, May 14 at 2 p.m. and an undergraduate ceremony was held on Friday, May 15 at 10 a.m.

The speaker for the graduate ceremony is Dr. Harry L. Williams, who serves as the chief executive officer and president of the Thurgood Marshall College Fund, the nation's foremost organization exclusively representing the Black college community.

Paula A. Shepherd, senior vice president and chief operating officer of Banner Plans and Networks, which serves more than 1 million people across six states, was the speaker for the undergraduate ceremony.



The Ag students joined more than 600 students who received degrees during both ceremonies. The following CAHES students received degrees:

- **Bryson Armstrong**, from Baton Rouge, LA, earned a B.S. in Agricultural Sciences and Technology with a concentration in Animal Sciences
- **Symira Horton-Conecin** from Brooklyn Park, MN earned a B.S. in Agricultural Sciences and Technology Pre-Veterinary Medicine
- **Destinae Davis**, from Lebeau, LA, earned a B.S. in Agricultural Sciences and Technology with a concentration in Pre-Veterinary Medicine
- **Ikira Butler**, from Plaquemine, LA, earned a B.S. in Agricultural Sciences and Technology with a concentration in Pre-Veterinary Medicine
- **Arynn Jenkins**, from Montgomery, AL, earned a B.S. Agricultural Sciences and Technology with a concentration in Pre-Veterinary Medicine
- **Genisus Hammond**, from New Orleans, LA, earned a B.S. in Human Sciences with a concentration in Fashion Merchandising and Design
- **Kavyon Harris**, from Maurice, LA, earned a B.S. in Human Sciences with a concentration in Fashion Merchandising and Design
- **Amaya Johnson**, from Vacherie, LA, earned a B.S. in Human Sciences with a concentration in Fashion Merchandising and Design
- **Jonathan Johnson**, from Natchitoches, LA, earned a B.S. in Human Sciences with a concentration in Fashion Merchandising and Design
- **Kayla Youngblood**, from Kenner, LA, earned a B.S. in Human Sciences with a concentration in Fashion Merchandising and Design
- **Melik Little**, from Jacksonville, FL, earned a B.S. in Human Sciences with a concentration in Fashion Merchandising and Design
- **Christin Hall**, from Gonzales, LA, earned a B.S. in Human Sciences with a concentration in Child and Family Studies
- **Shanaya Thomas**, from Rayne, LA, earned a B.S. in Human Sciences with a concentration in Child and Family Studies
- **Amaya Walker**, from Texas City, TX, earned a B.S. in Human Sciences with a concentration in Child and Family Studies

- **Jadan Fobb**, from Marrero, LA, earned a B.S. in Human Sciences with a concentration in Child Development
- **Faith Elliison**, from Chula Vista, CA, earned a B.S. in Human Sciences with a concentration in Child Development
- **Zion Robinson**, from Cockeysville, MD, earned a B.S. in Human Sciences with a concentration in Child Development
- **Yolanda Harris**, from Jackson, LA, earned a B.S. in Human Sciences with a concentration in Child Development
- **Alexia Herrin**, from Lake Charles, LA, earned a B.S. in Human Sciences with a concentration in Child Development
- **Anaya Tyehimba**, from St. Louis, MO, earned a B.S. in Human Sciences with a concentration in Child Life Specialist
- **Sandy Pitts** from Holden, LA, earned a B.S. in Human Sciences with a concentration in Child Life Specialist
- **London Brown**, from Baton Rouge, LA, earned a B.S. in Human Sciences with a concentration in Culinary Food Management
- **San'aa Doss**, from Millville, NJ, earned a B.S. in Human Sciences with a concentration in Nutrition, Health, and Wellness
- **KirKevin Palmer**, from Houston, TX, earned a B.S. in Human Sciences with a concentration in Nutrition, Health, and Wellness
- **D'Nai King**, from Baton Rouge, LA, earned a B.S. in Human Sciences with a concentration in Nutrition, Health, and Wellness
- **SaNiya Stevenson**, from Kingwood, TX, earned a B.S. in Human Sciences with a concentration in Nutrition, Health, and Wellness
- **Jasmine Franklin**, from Baton Rouge, LA, earned a B.S. in Human Sciences with a concentration in Nutrition, Health, and Wellness
- **Bryce Campbell**, from Carencro, LA, earned a B.S. in Urban Forestry and Natural Resources with a concentration in Environmental Studies
- **Zayyir Wells**, from Baton Rouge, LA, earned a B.S. in Urban Forestry and Natural Resources with a concentration in Core Studies
- **Payton Beaner**, from Lafayette, LA, earned a M.S. in Urban Forestry
- **Jeremy Fontenot**, from Baker, LA, earned a M.S. in Urban Forestry
- **Lucinda Kangwana**, from Kakamega, Kenya, Africa, earned a Ph.D. in Urban Forestry
- **Priscilla Loh**, from Ghana, Africa, earned a Ph.D. in Urban Forestry
- **Janeth Mjema**, from Tanzania, Africa, earned a Ph.D. in Urban Forestry
- **Titilope Olokunde**, from Lagos, Nigeria, Africa earned a Ph.D. in Urban Forestry
- **Lakshmi Dasari**, from Vijayawada, India, earned a Ph.D. in Urban Forestry
- **Kimberly Singleton-Teasett**, from Baton Rouge, LA, earned a M.S. in Dietetic Internship

Moving Up Celebration



The Southern University Child Development Laboratory (SUCDL) held its Moving Up Celebration on May 21, 2026 in the Southern University Welcome Center. The program was themed, "BAYOU Brushstrokes: Showing Louisiana's Little Creators."

Thirty-eight students in the Infant, Toddlers, Pre-K 3-1, Pre-K 3-2, and Pre-K 4 classes displayed their knowledge of Louisiana history, addition, and telling time.

The program also included a silent auction featuring paintings and artwork created by SUCDL students. Congratulations to all the SUCDL scholars.



CAHES Students Present Research at LSU Discover Day 2026

Students from the College of Agricultural, Human and Environmental Sciences (CAHES) participated in the LSU Discover Day 2026, held on April 17, 2026, where they showcased research that highlights the College of Ag's strong commitment to academic excellence, scholarly engagement, and student achievement. The event provided a valuable opportunity for students to share their research findings with a broad audience while representing Southern University in a professional academic setting.

Among the student presenters, Kirsten Harris, a student majoring in Fashion Merchandising, and Design, presented her research titled, "An Empirical Investigation of Students' Adoption and Use of Generative Artificial Intelligence (GenAI) in Higher Education," under the guidance of Dr. Jung-Im Seo. Her presentation addressed an important topic concerning students' awareness and use of GenAI in higher education.

In addition, Camille Baines, Shelly Jones, and Monyale West, students majoring in Animal Science and Pre-Veterinary Medicine, presented their research titled, "The Effects of Fennel Supplementation During Estrus Synchronization and Estrus Detection for Gilts and Sows," under the guidance of Dr. Jodi Morton. Their presentation emphasizes meaningful research in animal science and contributed to scholarly discussion in the area of swine breeding in a small farm setting.

The students participation in the event allowed them to strengthen their research presentation skills, engage with other undergraduate students, and interact extensively with faculty members and visitors. Their involvement reflected the College's continued dedication to promoting research excellence, academic collaboration, and meaningful learning experiences beyond the classroom.



2026 Earth Day Celebration with the Dietetic Internship and Southern University Laboratory School



The Southern University Dietetic Internship Program recently partnered with Mrs. Dana Rollins' first-grade class at the Southern University Laboratory School to celebrate Earth Day through an interactive gardening and nutrition education activity focused on sustainability and environmental awareness.

The dietetic interns read the children's book, *Thank You, Garden*, and guided students in hands-on activities that introduced gardening basics, healthy foods, and the importance of environmental stewardship. Students planted seeds and explored how gardens contribute to healthier communities.

The event provided valuable experiential learning opportunities for the interns while encouraging curiosity, teamwork, and wellness among the students at Southern University Laboratory.



CAHES Students Attended the Center of Excellence Student Professional Development Conference



The Center of Excellence Student Success and Workforce Development (SSWD) Conference, held at the University of Arkansas at Pine Bluff from May 17–20, 2026, provided a dynamic and enriching experience for CAHES students Eriq Wilson, a junior Agricultural Sciences major; Hannah Brister, a senior Human Sciences major; Denim Cage, a sophomore Agricultural Sciences major; Keaira Gross, a junior Agricultural Sciences major; and Christopher Hills, a junior Agricultural Sciences major. The students were accompanied by Dr. Harold Mellieon, Jr., CAHES Assistant Dean and Alexis Motley, CAHES Dietetic Internship Director/Instructor.



Pictured from left: Dr. Harold Mellieon, Jr. (Assistant Dean CAHES); Eriq Wilson-(Jr. Ag Science); Hannah Brister - (Sr.-Human Sciences); Denim Cage- (Sophomore- Ag Science); Keaira Gross (Jr.-Ag Science); Christopher Hills (Jr.-Ag Sciences); Alexis Motley (Dietetic Internship Director/Instructor)

Throughout the conference, students were immersed in a series of professional development seminars, interactive sessions, and networking opportunities designed to prepare them for success beyond the classroom.

The program focused on strengthening key competencies such as career readiness, communication, and professional presence, while also exposing students to emerging trends and expectations within the workforce. Students had the opportunity to engage with peers, faculty, and industry representatives, fostering connections that will support their academic and career journeys.

Overall, the conference served as a valuable platform for students to enhance their employability, build confidence, and gain insight into future career pathways, reinforcing the importance of preparation, engagement, and continuous growth in today's competitive workforce.

CAHES Doctoral Student Georrein Dupre Appointed as MANRRS Graduate Student Vice President



Georrein Dupre, an Environmental Toxicology doctoral student in the Southern University College of Agricultural, Human and Environmental Sciences (CAHES), has been appointed as the Region IV Graduate Student Vice President of the Minorities in Agriculture, Natural Resources, and Related Sciences (MANRRS) organization. This appointment was announced during the organization's 40th National Conference and Career Expo, held in Dallas, Texas, from April 8-12, 2026.



Georrein has been a vital fixture within the Environmental Toxicology Department, consistently doing great work and representing the CAHES through travel and outreach efforts that raise awareness and promote the college's mission.

MANRRS is a collegiate organization dedicated to fostering academic and professional development by empowering members in agriculture, natural resources, and related sciences. Its mission is to support student members in becoming productive, career-ready individuals through leadership development, educational opportunities, job readiness training, and facilitating internships, and employment placements.

In his new national role, Dupre will be responsible for recruiting new student officers whose vision aligns with the organization's mission. He will also develop and implement initiatives aimed at recruiting, retaining, and tracking graduate student members and alumni within his region. Additionally, he will collaborate with regional counterparts to plan and execute regional cluster meetings, including active participation in the upcoming national conference scheduled to be held in San Diego, California, next year.

AGSC 451: A Glimpse into this Course and the Pork Quality Assurance Plus® Certification

The National Pork Board certifies that
Dana Pollard

has completed the Pork Quality Assurance® Plus program



Certificate Number: 987915057330

This certificate is good through: 03/31/2029

Verified By: Tyler John Braud

The Pork Quality Assurance® Plus (PQA Plus®) Program is sponsored by Pork Checkoff contributions from America's Pork Producers.



The CAHES initiated its inaugural AGSC 451 course in spring 2026 with 12 students. This designated Livestock Management course encompassed different areas of agriculture, which included farm biosecurity, the laws and regulations of livestock at the parish/county, state, and federal levels, etc. The students also learned how to manage a farm from startup to production and sales with various livestock species. It was taught under the professorship of Dr. Dana Pollard, with guest lectures or assistance in the following areas:



1. Drone technology and its agricultural application (Dr. LaShunda Hodges),
2. Agricultural economics (Dr. Oscar Udoh),
3. Farming Equipment (Calvin Adams), and
4. Pork Quality Assurance Plus® Certification (Dr. Tyler Braud from Louisiana State University)

In addition to the students obtaining an enhanced understanding of key areas in livestock management, they also obtained a certification in pork quality assurance via Pork Checkoff with Dr. Braud towards the end of the semester. This opportunity served as an education and certification program designed to help these students in pig farming in continually improving production practices and to make the students more marketable once they graduate. Dr. Pollard also completed the requirements for the program and received her certification as well.

*Urban Forestry
Graduate Students'
Papers Published in
one of the Top-Tier
Remote Sensing
Journals*



TM



From Left to Right: Priscilla M. Loh, Dorcas T. Gyan, Esi Dadzie, Kingsford K. Annan and Jeff D. Osei.

Five doctoral students in the Department of Urban Forestry, Environment and Natural Resources recently published peer-reviewed articles in international conference proceedings. Collectively, their work leverages remote sensing and geospatial technologies to address key environmental challenges, including land use change, water quality, and ecosystem sustainability.

The peer-reviewed publications, completed under the advisement of Dr. Yaw A. Twumasi and Dr. Zhu H. Ning, are featured in *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume XLVIII-M-10-2025 (2026)* and can be accessed at: <https://isprs-archives.copernicus.org/articles/XLVIII-M-10-2025/index.html>.

These publications follow the students impactful participation and contributions at the American Society for Photogrammetry and Remote Sensing (ASPRS) International Technical Symposium 2025, organized virtually from October 27-30, 2025.

Their research work highlights the department's continued commitment to advancing research in geospatial science, remote sensing, and environmental sustainability.

The following papers have been published.

1. Paper Title: Evaluating Spatio-temporal Dynamics of Water Quality in the Atchafalaya Basin Using Landsat 8 & 9 Surface Reflectance Imagery.

Authors: Priscilla M. Loh, Yaw A. Twumasi, Zhu H. Ning, Jeff D. Osei, Dorcas Gyan, and Esi Dadzie. (2026).

Journal: Volume, Page No. and Publication Date: *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, XLVIII-M-10-2025, 127–133, April 30, 2026.

Doi: <https://doi.org/10.5194/isprs-archives-XLVIII-M-10-2025-127-2026>

Html: <https://isprs-archives.copernicus.org/articles/XLVIII-M-10-2025/127/2026/>

2. Paper Title: Integrating the new variant OPTRAM and moisture-related indices for improved soil moisture prediction in Louisiana.

Authors: Dorcas Twumwaa Gyan, Yaw A. Twumasi, Zhu H. Ning, Esi Dadzie, Joe Mensah, Jeff Dacosta Osei, Priscilla M. Loh, and Kingsford Kobina Annan, (2026).

Journal: Volume, Page No. and Publication Date: *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, XLVIII-M-10-2025, 113–119, April 30, 2026.

Doi: <https://doi.org/10.5194/isprs-archives-XLVIII-M-10-2025-113-2026>

Html: <https://isprs-archives.copernicus.org/articles/XLVIII-M-10-2025/113/2026/isprs-archives-XLVIII-M-10-2025-113-2026.html>

3. Paper Title: Thermal Remote Sensing and ECOSTRESS for Urban Agriculture: A Systematic Review of Cooling Benefits and Water Demand.

Authors: Dorcas Twumwaa Gyan, Yaw A. Twumasi, Zhu H. Ning, Esi Dadzie, Jeff Dacosta Osei, Priscilla M. Loh, Kingsford Kobina Annan, Joe Mensah, and Sheena Dorcoo. (2026).

Journal: Volume, Page No. and Publication Date: *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, XLVIII-M-10-2025, 121–126, April 30, 2026.

Doi: <https://doi.org/10.5194/isprs-archives-XLVIII-M-10-2025-121-2026>

Html: <https://isprs-archives.copernicus.org/articles/XLVIII-M-10-2025/121/2026/>

4. Paper Title: Impacts of Urban Sprawl on Urban Heat Intensity in East Baton Rouge Parish: A Remote Sensing Assessment.

Authors: Esi Dadzie, Yaw A. Twumasi, Zhu H. Ning, Jeff Dacosta Osei, Dorcas Twumwaa Gyan, Kingsford Kobina Annan, and Priscilla M. Loh. (2026).

Journal: Volume, Page No. and Publication Date: *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, XLVIII-M-10-2025, 99–105, April 30, 2026.

Doi: <https://doi.org/10.5194/isprs-archives-XLVIII-M-10-2025-99-2026>

Html: <https://isprs-archives.copernicus.org/articles/XLVIII-M-10-2025/99/2026/>

5. Paper Title: Integrating Remote Sensing and MOLUSCE to Map and Predict Land Degradation in Baton Rouge.

Authors: Esi Dadzie, Yaw A. Twumasi, Zhu H. Ning, Jeff Dacosta Osei, Dorcas Twumwaa Gyan, Kingsford Kobina Annan, and Priscilla M. Loh. (2026).

Journal: Volume, Page No. and Publication Date: *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, XLVIII-M-10-2025, 107–112, April 30, 2026.

Doi: <https://doi.org/10.5194/isprs-archives-XLVIII-M-10-2025-107-2026>

Html: <https://isprs-archives.copernicus.org/articles/XLVIII-M-10-2025/107/2026/>

6. Paper Title: Advancing Flood Resilience in Grand Isle, Louisiana, in the United States of America, through Remote Sensing and GIS.

Authors: Kingsford Kobina Annan, Clinton Antwi Agyei, Zhu H. Ning, Yaw A. Twumasi, Jeff Dacosta Osei, Simon Mariwah, Alice Annan, and Innocent Chirisa. (2026).

Journal Name, Volume, Page No. and Publication Date: *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, XLVIII-M-10-2025, 65–70, April 30, 2026.

Doi: <https://doi.org/10.5194/isprs-archives-XLVIII-M-10-2025-65-2026>

Html: <https://isprs-archives.copernicus.org/articles/XLVIII-M-10-2025/65/2026/>

7. Paper Title: Linking Educational Attainment and Urban Green Equity through GIS in East Baton Rouge Parish, Louisiana, United States of America (USA).

Authors: Kingsford Kobina Annan, Zhu H. Ning, Yaw A. Twumasi, Recheal N.D. Armah, Daniel Aniewu, Jeff Dacosta Osei, Dorcas Twumwaa Gyan, Esi Dadzie, Alice Annan, and Priscilla M. Loh. (2026).

Journal Name, Volume, Page No. and Publication Date: *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, XLVIII-M-10-2025, 71–75, April 30, 2026.

Doi: <https://doi.org/10.5194/isprs-archives-XLVIII-M-10-2025-71-2026>

Html: <https://isprs-archives.copernicus.org/articles/XLVIII-M-10-2025/71/2026/isprs-archives-XLVIII-M-10-2025-71-2026.html>

8. Paper Title: Balancing Environmental Protection with Social Cohesion and Community Well-being in the City of Monroe, Louisiana, United States of America (USA): Case in Sustainable Urban Greenspace Management.

Authors: Kingsford Kobina Annan, Clinton Antwi Agyei, Zhu H. Ning, Yaw A. Twumasi, Recheal N. D. Armah, Daniel Aniewu, Jeff Dacosta Osei, Dorcas Twumwaa Gyan, Esi Dadzie, Alice Annan, and Innocent Chirisa. (2026).

Journal Name, Volume, Page No. and Publication Date: *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, XLVIII-M-10-2025, 55–63, April 30, 2026.

Doi: <https://doi.org/10.5194/isprs-archives-XLVIII-M-10-2025-55-2026>

Html: <https://isprs-archives.copernicus.org/articles/XLVIII-M-10-2025/55/2026/>

9. Paper Title: Connecting Geospatial Research and Community Safety: Assessing Culvert Capacity with GIS-Based Hydrological Modelling.

Authors: Jeff Dacosta Osei, Yaw A. Twumasi, Zhu H. Ning, Esi Dadzie, Dorcas T. Gyan, Priscilla M. Loh, Kingsford K. Annan, Janeth E. Mjema, and Lucinda Kangwana. (2026).

Journal Name, Volume, Page No. and Publication Date: *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, XLVIII-M-10-2025, 175–181, May 4, 2026.

Doi: <https://doi.org/10.5194/isprs-archives-XLVIII-M-10-2025-175-2026>

Html: <https://isprs-archives.copernicus.org/articles/XLVIII-M-10-2025/175/2026/>

10. Paper Title: Poisoned for Oil: Spatial Consequence Analysis of Ethylene Oxide Emissions from a Petrochemical Facility in Port Allen, Louisiana-USA.

Authors: Jeff Dacosta Osei, Yaw A. Twumasi, Zhu H. Ning, Esi Dadzie, Dorcas T. Gyan, Doris Saah, Kelvin L. Kiwale, Recheal N. D. Armah, Kingsford K. Annan, Richmond Awotwe, Desmond K. Osei, and Kwame Obeng. (2026).

Journal Name, Volume, Page No. and Publication Date: *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, XLVIII-M-10-2025, 183–189, May 4, 2026.

Doi: <https://doi.org/10.5194/isprs-archives-XLVIII-M-10-2025-183-2026>

Html: <https://isprs-archives.copernicus.org/articles/XLVIII-M-10-2025/127/2026/>

11. Paper Title: Poisoned for Oil: Mapping Petrochemical Emissions and Public Health Risks in the Alsen/St. Irma Lee Community, LA, USA.

Authors: Jeff Dacosta Osei, Yaw A. Twumasi, Zhu H. Ning, Quisha Reed-Jones, Doris Saah, Priscilla M. Loh, Kingsford K. Annan, Richmond Awotwe, Desmond K. Osei, and Kwame Obeng. (2026).

Journal Name, Volume, Page No. and Publication Date: *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, XLVIII-M-10-2025, 199–204, May 4, 2026.

Doi: <https://doi.org/10.5194/isprs-archives-XLVIII-M-10-2025-199-2026>

Html: <https://isprs-archives.copernicus.org/articles/XLVIII-M-10-2025/199/2026/>

12. Paper Title: Spectral Footprints of Gold: Eco-Friendly Exploration in Wasa Amenfi District of Ghana.

Authors: Jeff Dacosta Osei, Yaw A. Twumasi, Zhu H. Ning, Esi Dadzie, Dorcas T. Gyan, Doris Saah, Priscilla M. Loh, Daniel Aniewu, Kwame Obeng, Kingsford K. Annan, Richmond Awotwe, and Desmond K. Osei. (2026).

Journal Name, Volume, Page No. and Publication Date: *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, XLVIII-M-10-2025, 191–197, May 4, 2026.

Doi: <https://doi.org/10.5194/isprs-archives-XLVIII-M-10-2025-191-2026>

Html: <https://isprs-archives.copernicus.org/articles/XLVIII-M-10-2025/191/2026/>

The authors would like to acknowledge the USDA National Institute of Food and Agriculture (NIFA) McIntire Stennis Forestry Research Program funded project with award number NI25MSCFRXXXG033. Special thanks go to the American Society for Photogrammetry and Remote Sensing (ASPRS) Foundation for supporting the publication of these papers by removing the article processing fees.

SU College of Ag Holds a Successful 2026 BAYOU Program

The College of Agricultural, Human and Environmental Sciences (CAHES) hosted 22 high school seniors and incoming college freshmen from Louisiana, California, Texas, and Georgia for a week during the college's annual Beginning Agricultural Youth Opportunities Unlimited (BAYOU) Program.

BAYOU is designed to introduce students to the College of Agricultural, Human and Environmental Sciences while building the connections that lead to long-term success. Through early engagement with faculty, current students, industry professionals, and fellow classmates, participants explore academic programs and career pathways while developing a strong sense of belonging. BAYOU creates a supportive community that empowers students to confidently begin their first semester and remain connected throughout their college journey.

The program, which began on May 31, 2026, allowed the participants to venture through CAHES and engage with professors in the college's concentrations. The students also participated in several activities and field trips.



The students stayed in the residential dormitories throughout the program, which concluded with a closing ceremony on June 5.

To participate in the free BAYOU program, students had to have completed the 11th grade with a minimum grade point average of 2.5. Graduating seniors had to have an ACT (SAT equivalent) composite score of 18 and above, or a high school grade point average of 2.5 or greater, or rank in the top 50% of their high school's graduating class, and require no more than one remedial course. Participants also had to submit their high school transcript, ACT/SAT scores, write an essay about their career goals and aspirations, and complete the BAYOU application.

For additional information on the BAYOU program contact, bayou@suagcenter.com.

CAHES Expands Workforce Development Through Research-Based Experiential Learning Opportunities

The College of Agricultural, Human and Environmental Sciences (CAHES) continues to strengthen student workforce development through the integration of research-based field experiences within course activities. These experiential learning opportunities are designed to provide students with hands-on exposure to data collection, field observations, and applied problem-solving within professional environmental and research settings.

As part of these course-integrated Experiential Learning Modules (ELMs), students participated in educational visits to key Louisiana research and coastal institutions, including Louisiana Universities Marine Consortium (LUMCON), The Water Campus, and Center for River Studies. Students also engaged in community volunteer initiatives, further connecting classroom concepts with public outreach and service-learning experiences.

Throughout these experiences, students interacted directly with scientists, researchers, educators, and environmental professionals, gaining insight into current challenges and career pathways related to coastal systems, water resources, environmental



monitoring, and deltaic research. Hearing from experts in the field provided students with valuable perspectives on interdisciplinary collaboration and workforce expectations.

These opportunities directly support the workforce development goals of the Mississippi River Delta Transition (MS Delta) Initiative by exposing students to real-world research environments and strengthening career readiness in agriculture, environmental sciences, coastal resilience, and related STEM fields. The initiative further aligns with the CAHES mission of preparing the next generation of professionals through experiential, community-engaged, and applied learning opportunities.

Little Sprouts, Big Lessons: Southern University Child Development Lab Celebrates Earth Day Through Gardening

Earth Day blossomed into a hands-on learning experience at the Southern University Child Development Laboratory as students rolled up their sleeves to help create their very own raised bed garden.

With smiling faces and tiny gardening gloves, children ages 2, 3, and 4 participated in filling the raised beds with soil and compost before planting spring vegetables and flowers. Each child had the opportunity to plant something of their own, creating a memorable experience centered around nature, nutrition, and teamwork.

The gardening activity was truly a collaborative effort across the Southern University Agricultural Research and Extension Center and campus community. The Cooperative Extension Program's Agriculture and Natural Resources (ANR) team, the Out the Mud program, the Family and Human Sciences team, and the Center of Excellence all came together to teach youth the importance of growing their own food and caring for the environment.

The children planted a variety of crops and flowers, including bell peppers, cantaloupe, cherry



tomatoes, and bright sunflowers in the two newly installed raised beds.

The excitement did not end on Earth Day. Teachers and staff at the Child Development Laboratory have remained fully dedicated to nurturing the garden by watering and caring for the plants each afternoon. Thanks to their commitment and the children's enthusiasm, the garden is now thriving.

Most importantly, the project planted more than vegetables and flowers, it planted seeds of curiosity, responsibility, and healthy living in the hearts of Southern University's youngest learners.

The happy little hands did a wonderful job, proving that even the smallest sprouts can grow something meaningful.



The SU Ag Center participated in a Community Baby Show

Southern University Ag Center EXCITE Team Regional Immunization Health Educator, Ana Williams, participated in a Community Baby Shower event at the Goodwood Library on May 8, 2026.

This event, which was held in partnership with Humana, was designed to support new and expecting families by connecting them with valuable resources, services, and educational opportunities. During the event, Ana shared information on how to effectively talk to your doctor, advocate for your health, and understand important vaccinations to consider before, during, and after pregnancy.

Supporting mothers and families through education and community outreach helps build healthier communities for the future.



Youth Create Robot Prototypes Capable of Addressing Agricultural Issues

The Southern University Agricultural Research and Extension Center's (SU Ag Center) 4-H Youth Development Program provided youth with an interactive learning experience centered on artificial intelligence, robotics, agriculture, and innovation. Facilitated by Dr. Rochelle Darville and Dr. Raquel Square Ayles, SU Ag Center Associate Vice Chancellor for Extension and Outreach, the workshop aimed to strengthen STEM knowledge while helping participants understand how emerging technologies can be used responsibly to address challenges facing communities and agriculture.

Using LEGO SPIKE Essential robotics kits, students worked in teams to create robotic prototypes capable of addressing issues such as crop inspection, pollution cleanup, flood response, farm supply delivery, and school garden maintenance. Along the way, participants examined the distinctions between artificial intelligence and robotics and explored how data, sensors, and coding enable technology to complete tasks, analyze information, and support decision-making. Through collaborative activities, students applied engineering concepts, creativity, and



analytical thinking to develop technology-based approaches to practical challenges.

Each team used planning tools and budget considerations to inform its approach and articulate how its prototype could contribute to addressing a specific agricultural or community need. The workshop concluded with student presentations showcasing their creations and highlighting key lessons learned throughout the experience.

The program increased participants' exposure to STEM disciplines, expanded their understanding of artificial intelligence and robotics, and demonstrated the role technology can play in advancing agriculture, environmental stewardship, and community well-being. The workshop also provided valuable insight into youth perceptions of emerging technologies and their potential applications, helping inform future educational programming and research efforts.

Seniors Gather at the "All American Roundup" Health Event

The Seniors at the Erwinville Community Center rounded up nutritional information on May 27, 2026, during the "All American Roundup," health event.

Seniors enjoyed a day of gathering resources and fellowshiping with each other. Angell C. Jordan, FHS Associate Agent participated in the health event where she discussed with attendees the benefits of eating healthy and staying active. All the seniors moved around socializing, eating, and of course having a good time. This was the first time that such an event had taken place in the Erwinville community. The local high school students volunteered to help serve the seniors' lunch, and everyone is looking forward to what's to come for Erwinville.



EXCITE Program Expands Immunization Education Through Community Outreach

The Extension Collaboration on Immunization Teaching and Engagement (EXCITE) is a nationwide initiative led by the U.S. Cooperative Extension System to provide trusted, research-based education on adult immunizations.

EXCITE helps rural and other key audiences make educated vaccination decisions, strengthens community-healthcare system relationships, and supports local community partners in executing health-improvement projects. EXCITE promotes vaccine confidence and informed healthcare decisions by offering accessible, evidence-based health information.

As part of this initiative, the SU Ag Center's EXCITE team, Ana Williams, Regional Immunization Health Educator/EXCITE and Jasmin Mathews, Assistant Public Health Specialist, has been actively engaging communities through educational outreach efforts. Team members have participated in community center programs, health fairs, outreach events, and other public health initiatives across the region. During these events, participants receive valuable information through the curriculum, "How to Talk to Your Doctor: Learn, Understand, Decide About Vaccines" program.

This educational program equips community members with the tools and confidence needed to communicate effectively with healthcare providers, ask informed questions, understand vaccine recommendations, and make decisions that best support their health and well-being. Through continued outreach and collaboration with local organizations, the EXCITE program remains committed to improving health literacy, increasing access to reliable vaccine information, and strengthening healthier communities throughout Louisiana and beyond.





The SU Ag Center Expands Heirs' Property Education Through Strategic Statewide Partnerships

The SU Ag Center continues to strengthen its commitment to Louisiana farmers, landowners, and rural communities through expanded partnerships focused on heirs' property education, land retention, and access to agricultural resources.

Led by Jamerson Jackson, Associate Specialist for Small Farms, the SU Ag Center has developed a growing network of partnerships with federal agencies, universities, community organizations, faith-based institutions, and local leaders to address challenges that often prevent families from maintaining ownership of inherited land and accessing agricultural programs.

One of the Ag Center's recent outreach efforts included participation in the United States Department of Agriculture (USDA) and Farm Services Community Enlightenment Program held in Winnsboro, Louisiana. Through collaboration with the USDA, the Farm Service Agency (FSA), the Natural Resources Conservation Service (NRCS), local community organizations, and agricultural stakeholders, the program provided producers and landowners with information regarding farm programs, farm loans, conservation opportunities, and heirs' property issues.

The event highlighted the importance of clear land ownership records and educated participants on how unresolved heirs' property challenges can affect eligibility for agricultural assistance, conservation

programs, and long-term farm sustainability. Participants also learned practical steps for protecting family land and preserving agricultural assets for future generations.

The SU Ag Center also collaborated with the PROPEL Initiative, the Southern Rural Development Center (SRDC), the LSU AgCenter, local government representatives, and community stakeholders to host an Heirs' Property Session in Ville Platte, Louisiana. The educational workshop focused on increasing awareness of heirs' property issues, succession planning, land retention strategies, and available resources for families seeking to protect inherited property.

These efforts represent a broader strategy by the Ag Center to increase access to agricultural education and strengthen relationships between producers and service providers. Through partnerships with USDA agencies, community organizations, local leaders, and educational institutions, the SU Ag Center is helping connect Louisiana landowners to the tools and information needed to make informed decisions about their land, farms, and family assets.

As outreach efforts continue to expand into additional parishes, the SU Ag Center remains committed to building partnerships that empower rural communities, support agricultural sustainability, and promote generational wealth through land ownership and preservation.

Youth Learn to Cook During NourishEd K.I.D.S. Youth Summer Cooking Camp



Flour, sugar, baking powder, salt, eggs, butter, and milk were among the ingredients 20 NourishEd Knowledge of Ingredients for Daily Success (K.I.D.S.) Youth Summer Cooking Camp participants used to make their own pancakes on June 2, 2026.

The week-long camp, which was hosted by the Southern University Ag Center's Nutrition Education Program, was held June 1 – 5, 2026, from 8 a.m. – 3 p.m. in Pinkie Thrift Hall on the Southern University campus.

The camp was designed to introduce students ages 9 – 12 to the fundamentals of preparing simple nutritious meals by learning safe food handling, measuring, following recipes, and basic cooking techniques.

Campers explored the science behind food through hands-on cooking activities, learning how fermentation preserves foods, how leavening makes foods light and fluffy, and even how ice and salt work together to create homemade ice cream. Campers also learned the importance of emergency preparedness and what essentials belong in an emergency kit, physical activity, and gardening.

The youth cooked pancakes, omelets, oatmeal chocolate chip cookies, apple sauce, chocolate mousse, and pickled vegetables.

This year's sponsors included Kleinpeter Dairy Farm, Capitol City Produce, The Louisiana Egg Commission, Northeast High School Class of 1999, and the 1890 Center of Excellence.

The SU Ag Center also held NourishEd K.I.D.S. camps in East and West Carroll, Avoyelles, and Union Parishes.

WBRZ News Channel 2 and The Advocate Newspaper both ran stories on the NourishEd K.I.D.S. Youth Summer Cooking Camp.





Hip Hop to Gen Z Camp Links STEAM and the Arts

Thirty students in 6th – 12th grade were immersed in learning experiences ranging from sound engineering and songwriting to filmmaking, and disc jockeying, facilitated by industry experts, during the SU Ag Center's 3rd Annual Hip Hop to Gen Z Summer Camp.

The two-week camp was held June 1 – 11, 2026 from 8 a.m. – 3:30 p.m. on Southern University's campus.

Campers produced original music, short films, and live performances during camp and were able to see that their creativity matters and can lead to real opportunities on the future.

"Programs like Hip Hop to Gen Z are important because they broaden students' awareness of educational and career pathways that may not otherwise be accessible to them," stated Dr. Raquel Ayles, Associate Vice Chancellor for Extension and Outreach. "Through direct engagement with industry professionals and applied learning experiences, participants develop relevant skills, expand their professional networks, and gain a deeper understanding of opportunities within the creative and entertainment sectors," added Dr.



Ayles.

The camp concluded with a closing performance, which allowed the campers to showcase their hard work in dance, DJ, vocal, and acting skills with their families and friends.

For additional information on the Hip Hop to Gen Z Camp contact, Dr. Ayles, at raquel_ayles@suagcenter.com.



Cultivating Future Scientists Through Faculty Mentored Research Participation

The project titled “Cultivating Future Scientists through Faculty Mentored Research Participation” addresses the nation’s need for producing future professionals that have solid training and applied skills critical to the management of the nation’s forest ecosystems and natural resources. Funded by the USDA-NIFA McIntire Stennis Forestry Research Program, the project’s research and training objectives are aligned with the McIntire Stennis Cooperative Forest Research Program’s research priority areas. The project supports the urban forestry graduate students and their faculty mentors in carrying out research and training that results in enhanced research capacity and workforce preparedness of the graduate students.

To achieve the project goal of cultivating future scientists through faculty mentored research participation, the faculty-student team worked together in fiscal year 2025 to accomplish four research and training objectives that aim to solve the following pressing challenges: 1. Incorporate smart growth strategies to increase tree canopy cover through urban forest assessment and tree planting; 2. Assess environmental complexity and its impacts on water resources and develop mitigation strategies; 3. Manage forests to improve flood prevention and wildlife habitat; and 4. Utilize geospatial technologies to improving ecosystem productivity.



FY 26 new recruits at the urban forest assessment training. From left to right, Aaron Hurst, Madeline Boyd, Mercy Karanja, Dr. Zhu Hua Ning (project director), Jordan Johnson, Asia A George, Ki'Aunysti Brown, and Miram Kiru.

Each objective is achieved by a faculty-student team who conduct research under a set of research topics that are designed to accomplish that objective. A faculty member serves as a research mentor, leading a particular objective, and providing training to a team of students who participate in the research topics to earn graduate assistantship.

In fiscal year 2025, under Dr. Zhu Hua Ning's mentorship, two of her students earned their master's degrees by completing their project titled, "Urban Forestry in Action: Building Community through Tree Inventory and Outreach," and "Urban Forestry as a Transformative Framework for Education and Ecological Stewardship." Her current doctoral student works on the research project, "Where Education Meets Ecology: Spatial Analysis of Educational Attainment and Urban Tree Canopy Distribution in East Baton Rouge Parish."

Dr. Yaw Twumasi led research and student training to assess human-environment interaction and their impacts on water resources, water management, coastal environmental systems, water quality and quantity, and surface infiltration and variability. His doctoral student finished his dissertation research titled, "Predicting sea level rise in Louisiana using machine learning models," and received a doctoral degree. His two doctoral graduate assistants are conducting research on, "Flood hazard mapping and hydrologic modeling for community resilience in Louisiana," and "Using Spatial Statistics and GIS to Analyze the Impact of Precipitation Patterns on Forest Cover."

Dr. Chris Chappell directed his doctoral student to assess flood risk and urban tree canopy changes in East Baton Rouge to inform resilient urban planning. This student has completed his research and received a doctoral degree. Another doctoral graduate assistant under Dr. Chappell's mentorship has been assessing the feasibility of converting and using Sargassum seaweed as a soil amendment to enhance agriculture production.

Under the mentorship of Dr. Yaw, one of his student's has been conducting a research project titled, "Mapping the Extent of Land Degradation in East Baton Rouge Parish." Another student has been carrying out research titled, "Geospatial Assessment of Agricultural Productivity in Jefferson Davis Parish, Louisiana," while another student is performing research titled, "Designing Biodiversity Corridors in Fragmented Urban Landscapes: A Case Study of Baton Rouge, Louisiana."

Graduate students are the major target audiences/trainees. The project team trained, mentored, and produced graduate students for the forestry and natural resources workforce. We equipped students with solid research skills and applied skills in areas critical to the management of the nation's forest ecosystems and natural resources. The project enhanced teaching, research, and extension in the priority areas addressed. The project also strengthened students' competencies in urban forestry, GIS, remote sensing analysis, and spatial modeling. The project enhances students' research skills and demonstrated the practical value of urban forestry science in addressing real-world environmental challenges, contributing to workforce development, and community-focused scientific innovation.

Training provided by the project faculty resulted in student achievements in research, publications, and conference presentations. In fiscal year 2025, the research training resulted in one Ph.D. student and six M.S. students receiving their degrees. The faculty-student team also produced ten journal articles, one doctoral dissertation, six master's degree capstone project reports, five abstracts, and seven conference presentations in 2025.

The project funds are the key reason that the urban forestry Ph.D. degree program and master's degree program are successful, exceeding the number of graduates required by the Louisiana Board of Regents each year. The funds have been used to recruit students by providing graduate assistantships, support for their research toward their dissertations, and theses for graduation. For more information about assistantships please contact Dr. Ning, Project Director at zhu.ning@sus.edu



Rotational Grazing, Carbon Sequestration, Beef Cattle Production, and Soil Health



Managing beef cattle grazing operations is mainly focused on what happens above ground, but a recent three-year USDA Natural Resources Conservation Service (NRCS) funded study conducted by Southern University Ag Center scientists at three privately owned farms, has measured the importance of what also happens below ground. The depth of roots in plants is proportional to the amount of top growth; taller plants have deeper roots. While this seems obvious, many people do not consider the major impact this has on forage productivity, soil characteristics, water infiltration, soil organic matter, and overall soil health.

“Soil health” is a newer term tossed around in beef grazing operations, but one of critical importance. While many characteristics influence “soil health” the one we will focus on in this article is “soil organic matter (SOM).” When we discuss and describe soil health, SOM is a critical measure, and we are generally referring to a SOM that makes up about 1 – 5% of the total matter in a soil. But what a critical role SOM plays. Simply stated, SOM is any fraction of the soil that was once alive (plants or animals) that is in a state of decay. Mostly we think of animal manures deposited on the soil surface and plant parts, including roots, that are in various states of decay. But SOM also promotes soil aggregation properties, increases soil moisture holding capacity, and provides nutrients required by plants as SOM breaks down over time. The gradual breakdown of SOM from organic to inorganic will yield the equivalent of about 30 lb. of N fertilizer per ac for each 1% SOM. Many well-managed pastures will have about 3% SOM, or close to the equivalent of 100 lb./ac of actual N which is the equivalent of about 200 lb. or urea fertilizer (46-0-0).

Research project: The research project was conducted on three privately owned farms in DeRidder (O’Neal Farm), Palmetto (Larkin Farm), and Clinton, LA (Barth Farm). All farms had or were implementing rotational grazing practices as supported by NRCS. All farms were beef cow-calf operations using spring-calving cows. Pastures were primarily bahiagrass and were overseeded each year with ryegrass, red clover, and white clover. Pastures and soils were intensively sampled from April through October each year to evaluate both pasture and soil characteristics. Each year at each of the three locations we

held “Pasture Walks” where local producers were invited to tour these farms and see first-hand these activities at a neighbor’s farm. We had as many as 80 people attend individual Pasture Walks, thanks to advertising through the Southern University Ag Center and NRCS personnel.

Over the course of the three-year study, we saw slow but consistent changes in pastures and soil characteristics. These changes are believed to be caused by the process of rotational grazing. Rather than have cow-calf pairs on a single pasture, all three producers used rotational grazing to all pastures to rest and rotate. If you have watched what happens after a pasture is harvested for hay, there is little forage growth the first week after cutting. By the third week, forage growth rates accelerate as there are more leaves on plants to do more photosynthesis and provide energy for plant growth. As plants grow taller, we also measured much deeper root depth in the soils. During year one, roots were not commonly found at soil depths of eight inches. However, by year three in the study, almost all soil samples had roots to 10 inches, which was the depth soil bore holes were dug. Also, we found increased numbers of earthworms and insects in deeper depths of the soil showing more activity.

The most dramatic changes seen were at the O’Neal Farm in DeRidder where pastures were just being converted to rotational grazing. Over the three years of the study, SOM matter increased from less than 2% to almost 3%, a most dramatic change. Usually, it is considered that the best SOM can change is 0.1% per year. However, year two of this study was an historic drought, with wildfires common in the DeRidder area. It was considered that these drought conditions would reduce SOM levels, but just the opposite occurred. Apparently, the lack of soil moisture slowed the breakdown rate of SOM resulting in an increase in SOM levels.

Conclusions: Research efforts such as this one are more difficult due to travel and outside farmer involvement, but more rewarding since they touch real producers on real-time farms settings. This study could only have been conducted with the assistance and support of the O’Neal’s, Larkins, and Barthes as well as support from NRCS and their personnel.

For additional information on the study contact, Dr. Clyde Bagley, SU Ag Center Vice Chancellor for Research (Retired) at clyde_bagley@suagcenter.com.





Rooted in Wellness: Soul to Soil Brings Gardening, Tea, and Community Together



The Center of Excellence hosted its 'Soul to Soil' wellness activity at the JagFresh Farmers Market on April 30, 2026, bringing together students, faculty, and community members for a hands on experience rooted in creativity, calm, and connection. The event invited participants to design their own DIY Zen Gardens, using a variety of materials including succulents, sand, stones, miniature bridges, and small wooden rakes. Each garden became a personalized expression of mindfulness, offering attendees a moment to slow down, focus, and reconnect with themselves.



In addition to the garden making activity, guests enjoyed a refreshing green tea blend infused with orange juice, honey, and strawberry purée. Green tea has long been recognized for its supportive role in mental and physical well-being. Its natural antioxidants help reduce inflammation, while its gentle caffeine content can enhance focus without the jittery effects of stronger stimulants. Compounds like L-theanine promote relaxation and mental clarity, making tea an ideal companion for mindfulness-based activities. When paired with natural ingredients such as citrus, honey, or fruit purée, tea becomes both a soothing beverage and a simple way to support daily wellness.

Soul to Soil was designed to encourage participants to pause, breathe, and engage in a grounding activity that supports mental well being. By combining nature based creativity with mindful reflection, the event highlighted the importance of incorporating small, restorative practices into daily life. The Center of Excellence continues to champion initiatives that promote holistic health, and Soul to Soil served as a meaningful opportunity for the campus community to cultivate peace, cultivate a sense of Zen and inner balance.



NourishED by the B.A.Y.O.U.



On Tuesday, June 2, The Center of Excellence for Nutrition, Health, Wellness and Quality of Life (COE) partnered with the Beginning Agricultural Youth Opportunities Unlimited (B.A.Y.O.U.) Program to provide participants with a hands on learning experience focused on navigating the grocery store and making healthy, budget friendly food choices. As part of the lesson, participants took a guided trip to Walmart, where they used a grocery list to purchase ingredients needed to prepare two featured recipes: taco bowls and chicken cabbage bowls. The SU Ag Center's Agricultural and Natural Resources Department harvested and donated fresh tomatoes, yellow squash, zucchini, and Italian heirloom peppers from its Demonstration Farm, which were incorporated into the recipes.

During the session, the Ag Center Family and Human Sciences NourishED K.I.D.S. Youth Summer Cooking Camp participants joined the B.A.Y.O.U. participants in preparing the meals. This collaborative experience allowed students to apply the meal planning, budgeting, and grocery shopping skills they had learned throughout the camp in a real world setting. Together, the youth prepared 93 taco bowls and 10 sandwiches, which were donated to two local community refrigerators located at Little Zion Baptist Church and The Red Shoes. Through this service project, students strengthened their culinary and nutrition knowledge while supporting community members who benefit from shared food resources.





Staff Spotlight:

Tyra Davis Selected to Serve on the National FFA Career and Leadership Committee for 2026



Tyra Davis, D.V.M., CAHES Pre-Veterinary Medicine Program Lead, Assistant Professor, and SUBR Campus Veterinarian, has been selected to serve as a provisional committee member of the National Future Farmers of America (FFA) Career and Leadership Development Event Committee.

Dr. Davis will play a pivotal role as a provisional committee member in planning and implementing the 2026 Veterinary Science Career Development Event (CDE), which will be held October 21-24, during the 99th National FFA Convention & Expo in Indianapolis, Indiana. The competition tests students' technical competencies in both small and large animal veterinary practices.

Her permanent status on the committee will be determined following the 2026 convention. Committee members are requested to serve at least two years on the committee following their trial year.



Staff Spotlight:

Dr. Raquel Ayles Appointed to the Arts Council of Greater Baton Rouge Board of Directors



The Arts Council of Greater Baton Rouge has appointed Dr. Raquel Square Ayles, Associate Vice Chancellor for Extension and Outreach at the Southern University Ag Center, to its Board of Directors.

For more than five decades, the Arts Council has served as a driving force for arts and culture in the Capital Region. As the region's official arts agency, the organization supports artists, promotes arts education, convenes community partners, and advocates for the role of the arts in enhancing economic development and quality of life. Through its programs, exhibitions, grants, and public initiatives, the Arts Council continues to expand access to the arts while fostering a vibrant and creative community.

Board of Directors provides strategic leadership and stewardship for the organization, helping to guide its vision, strengthen community partnerships, and ensure the continued advancement of arts and cultural opportunities throughout the region. The Board is comprised of leaders from across the public, private, nonprofit, and educational sectors who share a commitment to the growth and sustainability of the arts.

Dr. Ayles' appointment reflects the Arts Council's commitment to engaging leaders whose work intersects with education, community development, and public service. Her selection further strengthens the relationship between the arts, education, and community engagement while advancing opportunities for collaboration that benefits the Greater Baton Rouge community.



Staff Spotlight:

CAHES Faculty Member Engages in Mentorship Training and AI Literacy for Teaching Excellence



Dr. Jacqueline McComb, Assistant Professor of Plant and Soil Science in the College of Agricultural, Human and Environmental Sciences, was selected to participate in the Full-Day Faculty Mentor Training Workshop held at Louisiana State University on May 18, 2026.

The training was hosted through a collaborative effort between the Office of Undergraduate Research, the College of Science, and the Louisiana Space Grant Consortium (LaSPACE). The workshop was designed to strengthen faculty mentorship capacity by providing training on best practices for mentoring undergraduate researchers, fostering student engagement in research experiences, and supporting pathways into STEM careers and advanced educational opportunities. The collaboration highlighted interdisciplinary approaches to undergraduate research development and emphasized the role of faculty mentors in cultivating student success, workforce readiness, and research participation.

Dr. McComb's participation reflects an ongoing commitment to enhancing experiential learning opportunities and preparing students for careers in agriculture, environmental sciences, and STEM-related disciplines. The professional development opportunity also supports the mission of the College of Agricultural, Human and Environmental Sciences by advancing workforce development initiatives and expanding student engagement in research and applied learning experiences.

Additionally, participation aligns with the goals of the MS Delta Transition Initiative (MissDelta), which emphasizes experiential learning, research engagement, and workforce pathway development in coastal, environmental, and delta systems. LaSPACE's mission to strengthen STEM education, research, and workforce preparedness complements these efforts by helping prepare future leaders to address challenges across agricultural, environmental, and Mississippi River Delta systems.

Dr. McComb also participated in the 2026 Teaching Professor Conference held June 5–7, 2026 in St. Louis, Missouri. The national conference brought together hundreds of faculty members from across the country for three days of evidence-based teaching strategies, peer collaboration, and innovative

solutions to contemporary instructional challenges.

The conference featured keynote presentations by renowned educators Michael Wesch, Ph.D., and José Antonio Bowen, Ph.D., FRSA, who explored topics including the power of transformative teaching practices and the growing importance of artificial intelligence (AI) literacy in higher education.

During the conference, Dr. McComb served as both a participant and moderator in several sessions and preconference workshops focused on AI literacy and its implications for teaching and learning. Highlights included discussions such as *“Students Have AI—Now What?”* and *“Finding the Friction: Redesigning Our Assessments in the Age of AI.”* These sessions examined practical approaches for integrating emerging technologies into the classroom while maintaining academic rigor, student engagement, and instructional effectiveness.

Dr. McComb's participation supports the CAHES' commitment to innovative teaching practices and workforce development by bringing emerging educational strategies and AI-informed pedagogical approaches back to the classroom and research environment.

Staff Spotlight:

Drs. Jodi Morton and Jacqueline McComb Have Been Awarded a Research Enhancement Awards Program Grant to Enhance Undergraduate Research

The research project titled, “Integrated Regenerative Agriculture Training for Undergraduates,” by Dr. Jodi Morton, Assistant Professor and Interim Department Chair of Agricultural Sciences and Technology and Dr. Jacqueline McComb, Assistant Professor of Plant and Soil Science, has been awarded a Research Enhancement Awards Program Grant.

The one-year grant is funded through the Southern University RDI Research Enhancement Awards Program in the amount of \$48,556.

The project focuses on animal and plant/soil research within Drs. Morton and McComb's courses and aims to improve students' preparation for the workforce. The funds will support semester-long regenerative agriculture research projects using a whole class research project format.

Research projects like this continue to support the CAHES' mission of advancing student workforce and career readiness.





SUAG

PODCAST

“Everyday we use some form of agriculture, from the time we wake up, until we go to bed. From clothing, gasoline, food, and bed linens — agriculture is all around us!”

Hosted by:

Dexter Newman



Join us as we interview your Ag favorites, and bring you agriculture news.

TUNE IN TO THE LATEST EDITION AT:

<https://www.suagcenter.com/podcast>

Office of Communications, Technology & Advancement

Katara A. Williams, Ph.D.

*Vice Chancellor, Institutional Advancement
and External Relations*

Clourth L. Wilson Jr., MS-IT

Director of Technology

Robert L. Easley, Jr., MS

Director of Advancement

LaKeeshia Giddens Lusk, MA

Communications Coordinator

Allison Ezidore-Tassin, MBA

Creative Specialist/Graphic & Digital Designer

Lauryn M. Jackson, BA

*Electronic Content Development/
Communications Specialist*

Dexter D. Newman, MA

Video Production Specialist

Devender Rapolu, Ph.D.

Network Database Admin

D'Andrea Lee, M.Ed.

Special Assistant for Stakeholder Engagement

SEEDS OF Success!

*A Monthly Newsletter
of the Southern University Ag Center,
College of Ag, and Chancellor's Report*



P.O. Box 10010
Baton Rouge, LA 70813



(225) 771-2242



www.suagcenter.com



@suagcenter



@su_agcenter



Southern University Agricultural Research and Extension Center and the College of Agricultural, Human and Environmental Sciences is an entity of the Southern University System, Orlando F. McMeans, Chancellor and Interim Southern University System President, Tony Clayton, Esq., Chairman, Board of Supervisors. It is issued in furtherance of the Cooperative Extension Work Act of December 1971, in cooperation with the U. S. Department of Agriculture. All educational programs conducted by the Southern University Agricultural Research and Extension Center and the College of Agricultural, Human and Environmental Sciences are provided to people of all ages regardless of race, national origin, or disability.

©2026 Produced by SU Ag Center's Office of Communications,
Technology & Advancement

