

ARD Updates

ASSOCIATION OF 1890 RESEARCH DIRECTORS

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Capacity Building Grants due Aug. 6

The 1890 Capacity Building Grants Program (CBG) is intended to strengthen teaching, research and Extension programs in the food and agricultural sciences by building the institutional capacities of the 1890 Land-Grant Institutions, including Tuskegee University, West Virginia State University and Central State University (per Section 7129 of Pub. L. 113-79).

The CBG program supports projects that strengthen teaching programs in the food and agricultural sciences in the need areas of curriculum design and materials development, faculty development and others.

CBG supports projects that strengthen research and Extension programs in need areas of studies and experimen-

tation, Extension program development support systems and others. The CBG also supports integrated project grants. This initiative intends to increase and strengthen food and agriculture sciences at the 1890s through integration of education, research and Extension.

Applications submitted to CBG must address at least one of the following NIFA strategic goals: sustainable bioenergy, food security, childhood obesity prevention, or food safety.

1890 CBG RFA is published. [The RFA and application package](#) can be downloaded in grants.gov.



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Message from the Chair DR. LOUIS WHITESIDES



DR. LOUIS WHITESIDES

Last week, we celebrated America's independence, honoring the moment our founding fathers envisioned a government of the people, by the people and for the people. This occasion invites us to reflect on our nation's history and consider its future.

The Fourth of July holds a complex and bittersweet significance for African Americans.

Frederick Douglass, a former slave turned abolitionist, captured

this dichotomy in his 1852 speech, "What to the Slave is the Fourth of July." He poignantly questioned the celebration of freedom in a land where millions were still enslaved. His words resonated deeply, highlighting the chasm between American ideals and the lived experiences of African Americans.

Today, July 4, remains a day of reflection for African Americans. It is a time to honor the resilience and

strength of those who fought and continue to fight for true freedom. The legacy of slavery and segregation has left deep scars, but it has also forged a powerful sense of identity and community. African Americans celebrate their heritage and contributions to this nation while acknowledging the ongoing struggle for equality and justice.

I'm an optimist at heart. As I watch the current and new generation of leadership in the land-grant system and its commitment to diversity, inclusion, and access, I'm convinced that we will seize this moment and recommit ourselves to the core principles of equality and equity and human dignity found in the very document we celebrate each year. ARD's dedication to these values remains steadfast and unwavering. This is why the 1890 research and education program contributes innovative solutions to the problems adversely affecting millions of individuals, families and communities who have been underserved or marginalized.

The remaining work includes passing the 2024 Farm Bill, which looks promising as it includes reauthorizing and expanding the 1890 major programs and the Research Infrastructure Act



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Congress approved the Evans-Allen Act of 1977 to provide capacity funding for food and agricultural research at the 1890 land-grant universities and Tuskegee University (the 1890 Institutions) similar to that provided to the 1862 universities under the Hatch Act of 1887. Research conducted under the Evans-Allen Program has led to hundreds of scientific breakthroughs of benefit to both the unique stakeholders of the 1890 institutions and the nation as a whole. The Evans-Allen Program has been extremely important in allowing the 1890 institutions to attract top-notch scientists to their campuses, conduct high-quality and innovative research and become more fully integrated within the land-grant system.

This edition, includes impacts from the 1890 research program submitted by scientists at Langston and Prairie View A&M universities.

Langston University experiments with baby ginger

Ginger, a high-value spice crop, contains bioactive compounds such as gingerol, shogaols and paradols. Medical groups and organizations have studied ginger extensively, and research findings show that these compounds possess antioxidant, anti-inflammatory, and postoperative antiemetic effects on human health.

Because of these potential benefits and its antimicrobial properties, ginger has been used in many regions of the world, particularly developing countries, to prevent and cure diseases. Notably, due to its medicinal properties, ginger has been used as the main ingredient in many dishes to promote a healthy lifestyle in many communities.

Indeed, after the COVID-19 pandemic, awareness of the importance of health-promoting nutraceutical compounds found in certain specialty plants, such as ginger, has increased. Therefore, research in ginger production and its medicinal potential has received wide attention globally.

Ginger is a tropical crop that requires ten to 12 months of growing season to harvest the mature rhizome. Ginger has recently moved from a seasonal spice feature to a more mainstream, year-round ingredient in many American homes and food service kitchens.

Hawaii is the leading state in U.S. ginger production, and domestic output satisfies only 20% of the country's demand. As a result, over 77% of U.S. ginger consumption (63,000 tons per year) is imported from other countries.

Thus, increasing domestic production in the United States is essential for food security and human health.

Unpredictable weather conditions, such as high temperatures during summer months and shorter growing sea-

sons during the year for ginger growth, are the limiting factors for ginger production in Oklahoma. In this regard, Langston University in Oklahoma is seeking ways to mitigate environmental challenges and ex-



Ginger grown in high tunnels. (Photo courtesy Langston University).



Image by Freepik

tend the ginger growing season by using protected structures for cultivation. With its newly developed modern facilities, including greenhouses and high tunnels at the Horticulture Education and Research Center (HERC) and the support of Evans-Allen grant funds,

Langston University is actively exploring the feasibility of baby ginger production in Oklahoma.

In contrast to mature ginger, fresh baby ginger can be produced in five to eight months and possess relatively comparable amounts of antioxidants. In the 2023 season, the performance of two Vietnamese ginger cultivars and one Peruvian ginger cultivar was evaluated. Seed rhizomes were pre-sprouted in the greenhouse for eight weeks. The sprouted rhizomes were planted in high tunnel (96' X 33' X 10') in mid-May. A high tunnel with shade cloth on the roof kept the temperature in the desired range throughout summer. During

PVAMU intersects athletics and research with Agletics

The intersection of agriculture, nutrition and athletics offers fertile ground for innovative research and practical applications. The Agletics initiative led by the [College of Agriculture, Food, and Natural Resources \(CAFNR\)](#) at [Prairie View A&M University \(PVAMU\)](#) represents a pioneering effort to integrate agriculture research and nutrition with athletics. A collaboration between CAFNR and the [PVAMU Athletics program](#), Agletics aims to support student-athletes through education, experiential learning and evidence-based nutritional strategies.

Under the strategic direction of CAFNR Dean and Director of Land-Grant Programs Dr. Gerard D'Souza, CAFNR has a mission to serve local communities such as Waller County (location of PVAMU) and more than 56 other counties across Texas. Nutrition programs such as the [BS in Dietetics](#), [MS in Nutrition Science](#), PV Sustainable Table and the [Wellness in Houston \(WIH\)](#) multi-county initiative support the tripartite mission of academics, research and Extension. Through various levels of outreach and education, Agletics is where agriculture meets athletics to bring CAFNR research and nutrition support directly to student-athletes at PVAMU.

Through its Information, Impact, and Sustainability Center (IISC) led by Dr. TeKedra Pierre, CAFNR is leading through collaboration and cultivating relationships with internal and external partners to strengthen the Agletics impact. In conjunction with WIH Extension Specialist and CAFNR Associate Professor of Practice Dr. Jacklyn Sanders, Agletics examines the relationship between nutritional education, experiential learning and student-athlete physical performance.

While the pilot focuses on student-athletes who play football, Agletics plans to expand its reach across PVAMU athletics and incorporate additional elements of precision nutrition to broaden its research scope. This expansion includes using the [International Goat Research Center \(IGRC\)](#), [Integrated Food Security Research Center \(IFSRC\)](#), and [Meat Science Center for Innovation \(MSCI\)](#) as hubs for emerging research using goats as a local, sustainable and secure meat protein and dairy source.

Exploratory research employed a qualitative approach to investigate the current level of nutritional education and support provided to student-athletes. Informal in-depth interviews revealed a need to determine the actual nutritional needs of student-athletes and the impact of specific dietary practices on performance. Agletics merges CAFNR research with the practical needs of student-athletes. The program focuses on several key areas:

- **Research Centers:** Incorporating cutting-edge, targeted research (IGRC, IFSRC, MSCI) to develop precision nutrition plans that improve overall health and performance.
- **Community Engagement:** Serving student-athletes on campus through educational outreach, experiential learn-

ing and wellness programs.

- **Academic Integration:** Providing pathways for student-athletes to engage in agricultural and nutritional studies, broadening their academic and professional prospects. Initial feedback indicates positive outcomes. The first Agletics Ambassador, 2024 PVAMU graduate Myles McHaney IV, was instrumental in promoting the program through social media to highlight healthy habits like daily hydration with lemon water. Agletics has conducted several informal workshops with student-athletes, including the annual PVAMU Football Mega Camp, supporting over 200 middle



Image supplied by Prairie View AMU.

and high school students with nutritional education and healthy snacks.

The Agletics initiative at PVAMU represents a novel approach to integrating agriculture research and nutrition with athletics. The new master's degree in nutrition science will allow undergraduate nutrition students to seamlessly transition into graduate studies, participating in research with student-athletes through Agletics and the PVAMU Athletics Sports Nutrition internship offered in partnership with Houston Methodist Hospital. By fostering interdisciplinary collaboration, industry support and emphasizing evidence-based practices, Agletics aims to enhance the health and performance of student-athletes while contributing to academic research and community well-being.

Follow us on Instagram [@pvamucafnr](#)

Agletics aims to leverage the research and resources of CAFNR along with the engagement and excitement of athletics to strengthen nutritional education and support sustainable, healthy lifestyles for student-athletes. For more information about Agletics or CAFNR, please contact [Dr. TeKedra Pierre](#) or 936-261-5116

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chill days and nights during fall months, the high tunnel kept warm inside and allowed favorable growing conditions until the second week of November. Evaluation of the three cultivars showed high performance. They produced baby rhizomes in the range of 23.36 ± 2.3 ton/hectare to 29.30 ± 3.9 ton/hectare in mid-November.

In the 2024 season, experiment replication is ongoing to disseminate baby ginger production technology with additional funding from the Extension Foundation. The first year's results have been shared with local Oklahoma farmers during workshops and field days, and most of the limited-resource producers have shown great interest in producing baby ginger as an alternative high-value crop.

To share the technology with a broader group of producers and other stakeholders, more than 100 growers across Oklahoma, including limited resources, small and minority farmers, and other stakeholders, are invited for field day demonstrations every year. Besides sharing training material for baby ginger production in Oklahoma, two workshops have been scheduled for the summer of 2024. Participants will be small and limited resource growers and other stakeholders.

The next phase of the experiment includes an economic analysis of this production system and determining the antioxidant content in various cultivars produced under different production environments. The commercial cultivars and rhizomes derived from tissue culture will be evaluated in high tunnel, greenhouse environments and nutraceutical

compound content in different harvesting stages will be determined.

Using cost-effective and protected structures, this project shows the potential for producing baby ginger as a locally produced, high-demand and high-value crop (HVC) in



Sprouting of rhizomes in the greenhouse to be transplanted to high tunnel. (Photo courtesy Langston University).

Oklahoma. It will provide an alternative option to increase the productivity and profitability of limited-resources, small and minority farmers and stakeholders.

For more information, contact: [Dr. Devi Kandel](#) or 405-466-6208, and [Dr. Leonard Kibet](#) or 405-466-6162. The Evans-Allen program of the USDA's National Institute of Food and Agriculture (NIFA) supports the Baby Ginger Technology project at Langston University, Oklahoma.



Last month, FFAR supported the [USDA's Agrifood Innovation Symposium](#) in Washington, D.C., where FFAR and USDA launched the funding opportunity for the Nourishing Next Generation Agrifood Breakthroughs Program (Innovation Challenge). The Innovation Challenge supports trans-disciplinary teams led by early-career scientists in high-risk, high-reward research through innovations at the intersection of nutrition security, equity and justice and climate-smart agriculture. Join FFAR and USDA on July 10 at 1 p.m. ET for a Q&A webinar on the application process. [Register now.](#)

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(RFA). We will continue to engage with the House and Senate Agriculture committees during their negotiations on the Farm Bill, including the RFA.

ARD attended the AEA summer meeting held in Greensboro, N.C. This in-person gathering of 1890 administrators offered a platform for attendees to engage in critical discussions about pressing issues and significant problems facing 1890 universities. The meeting focused on bringing together selected 1890 Extension program leaders in ANR, 4-H Youth Development, FCS and CRD to serve on newly formed program area task forces. The task forces were assigned to assist AEA in setting the regional Extension program priorities to focus on the critical issues affecting the communities we serve.

They proposed relevant activities, program outcomes and common measurable indicators to improve the quality of life in these communities. ARD reaffirmed its commitment to working collaboratively with AEA to achieve these regional program priorities and emphasized that its AEA partnership is essential to ARD's ultimate goal: sharing of science-based knowledge with individuals, families and communities served by our 19 STRONG institutions. Creativity and innovation will be our only sustainable, competitive advantage.

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1890 Land Grant Universities

[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](#)
[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](#)
[University of Arkansas at Pine Bluff](#)
[University of Maryland Eastern Shore](#)
[Virginia State University](#)
[West Virginia State University](#)

ARD Updates is published monthly by the Association of Research Directors. To suggest articles, contact Dr. Alton Thompson at athompson1@ncat.edu

NEW APPOINTMENT

KUTI, MORAKINYO A.O., president Central State University, effective July 1.

JOB OPPORTUNITIES

PROGRAM SPECIALISTS, Office of Partnerships and Public Engagement, Department of Agriculture, Multiple Locations (Alabama A&M University; Alcorn State University and University of Arkansas at Pine Bluff).

UNITED STATES DEPARTMENT OF AGRICULTURE'S OFFICE OF ENERGY AND ENVIRONMENTAL QUALITY, [Climate Fellow Program Analyst](#). The Fellow will assist with many aspects of USDA's climate change strategy, including providing technical support; conducting analysis on or providing support to climate change initiatives. Salary: GS 11-13, \$82,764 - \$153,354. Restrictions: This position is located in Washington, DC. Applicants must be a U.S. Citizen or U.S. National.

TUSKEGEE UNIVERSITY, College of Agriculture, Environment and Nutrition Sciences, [Climate-Smart Project Associate](#) and [Agroforestry Project Coordinator](#)

UNIVERSITY OF ARKANSAS SYSTEM, [Associate Director—Research Development and Compliance](#)

UNIVERSITY OF MARYLAND EASTERN SHORE, School of Veterinary Medicine, [Inaugural Dean Associate Dean of 1890 Programs and Associate Director of UMES Agricultural Experiment Station](#).

PRAIRIE VIEW A&M UNIVERSITY, Cooperative Agricultural Research Center, [Veterinarian](#)

PRAIRIE VIEW A&M UNIVERSITY, Cooperative Agricultural Research Center, [Research Associate/Professor and the Director of the International Goat Research Center \(IGRC\)](#)

WEST VIRGINIA STATE UNIVERSITY, WVSU Research & Development Corporation, [Associate Dean/Associate Director for Research](#)

USDA FOREST SERVICE, SOUTHERN RESEARCH STATION, [Research Economist](#) or [Research Forester](#) to conduct research in economics and policy focused on wildfire and other forest-based disturbances. This is a permanent, full time position at the GS-12 level or the GS-13 level.

FLORIDA A&M UNIVERSITY, COLLEGE OF AGRICULTURE AND FOOD SCIENCES, [Executive Director](#), Brooksville Agricultural and Environmental Research Station (BAERS) in Brooksville, Florida.

SOUTH CAROLINA STATE UNIVERSITY, Senior Director for Research Development. Send resume and cover letter to PSAhumanresources@scsu.edu 803536835.

IOWA STATE UNIVERSITY, [Associate Dean for Global Engagement](#)

LANGSTON UNIVERSITY SHERMAN LEWIS SCHOOL OF AGRICULTURE & APPLIED SCIENCES, [Associate Professor of Biosystems Engineering/Precision Agriculture](#), [Associate Extension Administrator](#)

LINCOLN UNIVERSITY OF MISSOURI, [Director of Agricultural Communications](#). Contact the Search Committee Chair, [Dr. Douglas LaVergne](#) with questions.

USDA OFFICE OF ENERGY AND ENVIRONMENTAL QUALITY, [Climate Fellow Program Analyst](#).

CALENDAR

2024 BAA SUMMER LEADERSHIP MEETING (formerly known as Joint COPs) | July 16-18. Providence, Rhode Island

SOUTHERN REGIONAL MEETING | July 26-28 | Lexington, Kentucky.

