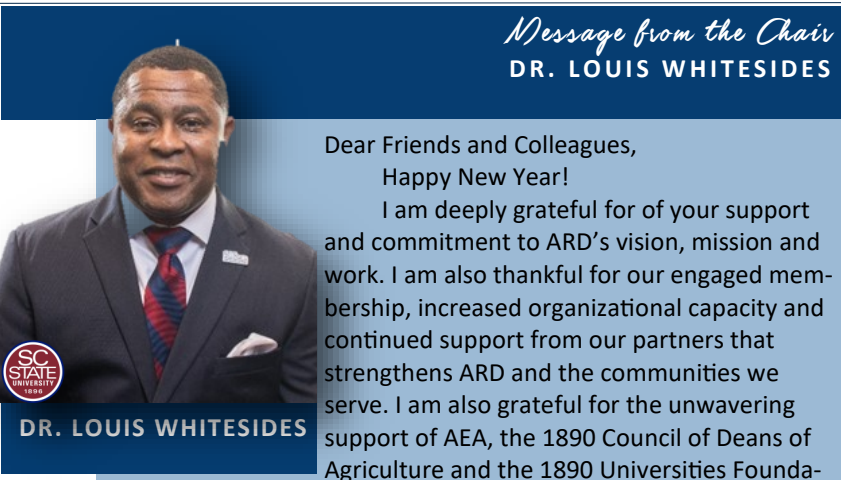


ARD Updates

ASSOCIATION OF 1890 RESEARCH DIRECTORS

January 2024, Vol. 15, Issue 1



Message from the Chair
DR. LOUIS WHITESIDES

Dear Friends and Colleagues,
Happy New Year!

I am deeply grateful for of your support and commitment to ARD’s vision, mission and work. I am also thankful for our engaged membership, increased organizational capacity and continued support from our partners that strengthens ARD and the communities we serve. I am also grateful for the unwavering support of AEA, the 1890 Council of Deans of Agriculture and the 1890 Universities Founda-

tion.

January, more than any other month, provides me a period of reflection, anticipation and thankfulness. I find myself reflecting on the incredible journey we have shared as a community and on ARD’s accomplishments and points of pride. I anticipate moving closer to our mission of establishing a broad-based, relevant research agenda. I am thankful for the opportunity to serve as ARD chair.

The North Star that led us to achieve each of these accomplishments was an unwavering focus on our mission: “...to provide innovative solutions to the food and agricultural research challenges facing the region, nation and world-at-large.”

We are blessed to serve all people, but in particular, those who are socio-economically deprived and to work with great co-workers who are like family. As we continue to strive for excellence, please know of my gratitude for the vital role that each of you play in ARD’s performance and productivity.

I know that 2024 will be a breakthrough year as ARD, in concert with agInnovation, will work on developing and implementing “Research Funding Framework,” which includes well-articulated goals, data driven and other effective advocacy strategies and clear one-, five- and 10-year science deliverables and funding benchmarks for achieving identified goals. The framework also seeks to strengthen our current partnerships and build new strategic partnerships with traditional and nontraditional entities in an effort to: 1) broaden network to industry, NGOs other federal agencies, professional organizations and others; 2) build and strengthen awareness of our land-grant uni-

Applications open for 1890 USDA scholars

USDA is accepting applications for the USDA 1890 National Scholars Program, which aims to encourage students at 1890 land-grant universities to pursue food and agriculture career paths. The application deadline is March 1.

Young people around the country are invited to complete and [submit their applications online](#) through an e-application. The USDA 1890 National Scholars Program is available to eligible high school seniors entering their freshman year of college as well as rising college sophomores and juniors.

“The USDA 1890 National Scholars Program helps to create a pipeline of skilled employees for USDA and the United States agriculture sector,” said Office of Partnerships and Public Engagement director Lisa Ramirez.

The USDA 1890 National Scholars Program is a partnership between USDA and the 19 historically Black land-grant universities that were established in the Morrill Land-grant Act of 1890. USDA partners with these 1890 universities to provide scholarship recipients with full tuition, fees, books and room and board. Scholarship recipients attend one of the 1890 universities and pursue degrees in agriculture, food, natural resource sciences, or related academic disciplines. The scholarship also includes work experience at USDA through summer internships. Scholars accepted into the program are eligible for noncompetitive conversion to a permanent appointment with USDA upon successful completion of their degree requirements by the end of the agreement period. The USDA 1890 National Scholars Program awarded 100 scholarships in the 2023 cohort of 1890 Scholars.

Learn more and apply online at [USDA 1890 National Scholars Program](#).

For more information, contact partnerships@usda.gov.

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Visit us online at www.umes.edu/ard



DR. LOUIS WHITESIDES





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.

Below is an example of impacts from the 1890 research program submitted by scientists at North Carolina A&T State University and the University of Maryland Eastern Shore.

A&T takes multidisciplinary approach to improve ruminant gut health and feed efficiency

The demand for high-quality animal-based protein is increasing the pressure on the livestock sector to meet this growing global demand which is largely driven by an increasing human population. To meet this huge demand, the livestock industry has used an assortment of feed additives to improve feed efficiency and nutrient use, promote growth, enhance gut health and animal welfare and abatement of greenhouse gas emissions.

The predominant practice was the administration of antibiotics at low doses which consistently increased performance parameters (growth, reproduction, and health) across-the-board. But in 2017, Food and Drug Administration policies restricted the use of antibiotics in growth production for food animals, specifically to facilitate the increase of an animal's rate of weight gain and feed efficiency.

On the other hand, it is required to reduce the production of methane from animal feed. The researchers at NC A&T are studying different types of plant-based animal feed that could improve the gut health and at the same time assist in reducing GHG.

Researchers studied 17 different essential oils that

were used to formulate initially nine different essential oil blends and they were used as feed additives. Feed additives are used to improve the health of animals.



Extract from the plant product that has bioactive compounds were used to prepare the feed additives along with essential oils. The production of methane, carbon dioxide, ammonia and hydrogen sulfide were monitored. Researchers collected samples from six cattle every week. After samples have been screened, a handful are selected and tested to see if they can reduce greenhouse gas emissions without affecting the animal's ability to digest dry matter and, as an incentive, if they can increase total volatile fatty acids

and microbial mass. Also, the simulation is done to mimic the cattle's feeding and digestive habits and collects gaseous material in a gas bag.

According to researchers the project will provide practical solutions to improving feed efficiency in ruminants. The result so far is impressive; feed additives improved the ruminant's health and reduced methane production by more than 50% depending on the type of diet.

This research was funded by USDA/NIFA Evans-Allen program. For more information contact Dr. Uchenna Y Anele at uyanele@ncat.edu

UMES research indicates pathogen risks in organic produce

Certified organic production prohibits the use of chemical fertilizers, so producers use biological soil amendments of animal origin (BSAAOs) to fertilize soil. BSAAOs can include animal manures or non-fecal animal byproducts including animal mortalities, or table waste.

BSAAOs may harbor pathogens that contaminate crop soils and produce, making it harmful to consume. To reduce potential pathogen contamination concerns, the U.S. Department of Agriculture National Organic Program

(USDA-NOP) recommends a 90-day withholding period between BSAAO application and crop harvest for produce that is not in direct contact with soil, and a withholding period of 120 days for produce in direct contact with soil.

However, after testing produce for several pathogens post-harvest researchers at the University of Maryland Eastern Shore (UMES) and collaborator University of Maryland, College Park, and USDA ARS detected pathogens pre-

Pathogen ... from page 2

sent in soils and on produce after following the USDA-NOP withholding period. This finding indicates organic produce consumers could be at risk for foodborne illness.

Researchers collected more than 400 samples of manure/compost, soil, produce and water before and after BSAAO incorporation. Samples were analyzed for the presence of indicator bacteria and three foodborne pathogens, including *Listeria monocytogenes*, *Salmonella*, and Shiga toxin-producing *E. coli* ("big six" and O157), in BSAAO-amended soils with their potential to transfer to produce harvested from three organic, integrated crop-livestock farms (ICLFs) on the Maryland Eastern Shore.

These small-scale operations typically sell their products at increasingly popular farmer's markets, community supported agriculture (CSAs) and backyard stands.

Overall, 18.4% of produce samples tested positive for at least one pathogen. All three pathogens were detected in soil samples directly after BSAAO incorporation, but researchers found reduced prevalence in soils 90-120 days after application.

These results indicate pathogens associated with BSAAOs can transfer to harvestable produce, even after the USDA-NOP recommended withholding times. Further research into withholding periods is necessary to mitigate pathogen contamination risks.

Other mitigation strategies could also lead to safer consumption of organic foods and safer soil amendment practices for farmers. The three farms used in the UMES study all had different methods of storing manure/compost



amendments. According to researchers, establishing a set of best practices for small-scale, community farms to store and apply manure/compost could lessen the likelihood of pathogen survival.

Likewise, the distance of crop fields from manure/compost and animal-rearing facilities, which also varied among the three farms studied, could influence contamination. If small-scale farms lack the land to properly distance crops from potential contaminants, best practices in topography (uphill/downhill), vegetative buffers and barriers could be incorporated as mitigation strategies.

While additional research is necessary, results from this study will provide useful information for the USDA-NOP in establishing withholding periods and other mitigation strategies. Furthermore, this study provides farmers evidence to properly incorporate or follow withholding periods

and other best practices to produce safely.

According to previously cited literature, demand for local, organic produce is on the rise, due to the perception these foods contain fewer chemicals and are subject to less handling. This increase in popularity, along with the microbiological risks of BSAAOs, brings the possibility of increased foodborne illness cases and outbreaks.

[Read more about this project.](#) For more information, contact [Dr. Salina Parveen](#), *This project is supported by USDA-NIFA, Organic Transitions Program grant 2018511062880, USDA NIFA CBG 5-208070, USDA Evans Allen, and USDA ARS.*

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iversity system's research capabilities and coordination; 3) generate and reinforce appreciation of our national and global impact on lives and livelihoods; and 4) catalyze advocacy for federal and other funding to support agInnovation's food security, environmental stewardship, nutrition and health, agricultural systems, energy, bioproducts and community health and resilience priorities.

In addition, ARD needs to be aggressive in the reauthorization of the 2023 Farm Bill, be persistent in seeking funding increases for our capacity, capacity building and facilities programs, continue to develop and sustain the Centers of Excellence, support our faculty as they compete for funding from other programs and expand our integrated activities that maximize

our tripartite mission.

As you know, we have a lot of work to do, including working with the research symposium steering committee in planning and implementing a successful 2024 Biennial Research Symposium. See you in Nashville as we continue to have these important discussions.

As we bid farewell to 2023, and welcome 2024, let us carry forth the spirit of collaboration and shared success. Together, we are stronger, and it is our unity that we find the strength to navigate the challenges that lie ahead. May the coming year bring even greater opportunities for growth and collaboration and our shared commitment to each other continue to be the guiding force in our journey.

Climate, Health & Cultivating the Next Generation of Agricultural Leaders: Creating Solutions in Food, Agricultural and Natural Resources

April 6-9, 2024 | Gaylord Opryland, Nashville, TN



Regular Registration: Oct. 18, 2023—Feb. 23, 2024—\$700

Late Registration – Feb. 24 – April 5, 2024—\$725

On-Site Registration - April 6, 2024—\$750

REGISTRATION

[Symposium Registration](#) No refunds. Substitutions will be accepted until April 4, 2024. (Note: Credit card users need to pay an additional fee to cover bank charges).

HOTEL REGISTRATION

[Hotel Guest Room Rates](#): Single and Double Occupancy: \$249

[Tax and Surcharges](#): Hotel rates are confirmed in 2024 and are subject to applicable taxes (currently 9.25% state tax, 6% occupancy tax, plus a \$2.50 per night city tax) in effect at the time of check in. Deadline to book, March 7, 2024.

DISPLAYS & EXHIBITS

Each 1890 campus is invited to display a university display at no-cost. Additional exhibits and non-1890 exhibits must pay the fee of \$3,000 by Feb. 9, 2024. All exhibitors, including the 1890s, must submit the Exhibit Registration Form by the deadline of Feb. 9. [To become an exhibitor, click here.](#) [To become a sponsor, click here.](#)

MORRISON-EVANS, MAYBERRY, HILL & MAYES AWARDS

The application deadline for the Morrison-Evans Outstanding Scientist Award and the B.D. Mayberry Young Scientist Award, the Walter Hill Distinguished Service Award and the McKinley Mayes Mentoring Award is Jan. 19, 2024. External reviewers, i.e. NIFA National Program Leaders will evaluate the applications. Access the [applications here](#).

In preparing the submissions, please use the following criteria: 8 1/2 x 11 inch page; Times Roman no smaller than 11 points, 1.5 line spacing, one-inch margins all around.

For additional information contact: [Dr. Alton Thompson](#), ARD Executive Director, (336) 285-2955 or [Dr. Orlando McMeans](#) (225) 771-4310.

Applications open for summer internships, fellowships and research programs

Tuskegee summer research program

The application for the 2024 Summer Research and Extension Experiential Learning for Undergraduates Program (REEU) at Tuskegee University is now available. Our REEU is designed to engage students in research and Extension projects that solve major challenges of our time (environmental and agricultural sustainability, natural resources management, public health) by using Geographic Information Systems (GIS) to integrate and analyze research

data. Students in the program really appreciated the exposure to academic research and the opportunities for interaction with a diverse group of Tuskegee University scientists.

- [Application Deadline](#): Feb. 15, 2024

- [Program Dates](#): May 23rd – July 28th, 2024. [Stipend](#): \$4,500, plus room and board and travel
- [Eligibility](#): Our internships are available to undergraduate students. Rising sophomore, junior and senior STEM Majors interested in a 10-week research and Extension immersion in food, agriculture, natural resources and human (FANRH) sciences with GIS subthemes.
- [Research Themes](#): food deserts, medicinal plants, agriculture water resources, precision farming, obesity, reproductive management, environmental health, pasture management, farmers and forecasting and more To apply, [click here](#).



CDA REU summer program

The applications for the Research Experience for Undergraduates at the University of Illinois/ Urbana-Champaign are now open for the Summer '24 CDA REU.

We are excited to bring a new cohort of students to the UIUC campus for this experience. We have projects that cover a wide range of interest from stu-

dents in agriculture, engineering and computer science majors. This is a 10-week paid opportunity, and we also arrange housing/travel for the students. [Here is a flyer to share](#) the information with your students who may be interested.

[Full details of the program are listed here](#).

FMC precision ag field specialist internship

The Precision Agriculture Field Specialist Internship for 2024 is now open, and they are actively seeking candidates with a passion for agriculture and technology.

Internship Overview: As a precision agriculture field specialist intern, students will have the unique oppor-

tunity to gain hands-on experience in the dynamic field of precision agriculture. They will work alongside industry experts, use cutting-edge technologies and contribute to innovative solutions that enhance agricultural practices.

Key Internship Details: Eligible States: California, Washington, New York, Michigan, Pennsylvania, Georgia, Alabama, Mississippi, Arkansas, Texas, Louisiana

Internship Link: [Precision Agriculture Field Specialist Internship 2024](#)

2024 agInnovation Excellence Awards

Nominations are now open for the 2024 agInnovation Excellence Awards.

The nomination guidelines are available at the following hyperlinks on the ESCOP website:

[Nominations for Leadership Awards](#) (due Feb. 1)

[Nominations for Research Innovation Awards](#) (due Feb. 1)

[Nominations for Multistate Research Awards](#) (due Feb. 28)

Please note nomination deadlines vary by award. Nominations for awards due in February are to be submitted to your respective regional associations.

USDA teaching awards

USDA NIFA has opened the nomination process for the 2024 USDA Excellence in Teaching Awards. To find information about the awards, [please click here](#).

[Please see the 2024 guidelines for details](#).

Nominees may find this [webinar](#) helpful when thinking about how to prepare their nomination packets:

Please note that the guidelines say the deadline is APRIL 15, 2023. That is an error; it should be APRIL 15, 2024. I have contacted USDA to have that changed, but please know that April 15, 2024, is the correct deadline date.

For additional information contact, [Wendy Fink](#)



USDA climate change fellows

USDA is hiring 40 climate change fellows to help with the record numbers of applications from farmers, ranchers and rural small businesses seeking funding for clean energy projects under the [Rural Energy for America Program](#) (REAP).

The new positions are being funded by President

Biden's Inflation Reduction Act, the nation's largest-ever investment in combatting the climate crisis, a key pillar of Bidenomics and part of the Investing in America agenda.





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Lisa Williamson (Exec. Asst.)

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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

JOB OPPORTUNITIES

NORTH CAROLINA A&T STATE UNIVERSITY, College of Agriculture and Environmental Sciences, [Dean](#)

ALCORN STATE UNIVERSITY, School of Agriculture and Applied Sciences, [Dean](#)

UNIVERSITY OF MARYLAND EASTERN SHORE, School of Veterinary Medicine, [Inaugural Dean](#)

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.

CALIFORNIA POLYTECHNIC STATE UNIVERSITY, San Luis Obispo | San Luis Obispo, CA, College of Agriculture, Food and Environmental Sciences, [Dean](#).



CALENDAR

AEA-ARD JOINT WINTER MEETING, The Inn at Opryland, Nashville, TN, Jan. 24-26, 2024.

The rates are \$175 plus tax for exterior rooms and \$195 plus for atrium/interior rooms. One-day pre and one-day post will be at the group rates, but are based on availability. A credit card is required to hold the room. The hotel does not charge a deposit. The cancellation policy is 72 hours prior to arrival. Cancellation within 72 hours of arrival will forfeit one (1) night room and tax. **Hotel (s) offering your special group rate:**

The Inn at Opryland, A Gaylord Hotel for 175 USD and 195 USD per night

[Book your group rate for 1890 Research Directors Planning/Joint AEA-ARD Winter Meeting - Jan 22-26, 2024](#). The cut-off date for the block is Tuesday, Dec. 26, 2023.

USDA'S 100TH ANNUAL AGRICULTURAL OUTLOOK FORUM, "Cultivating the Future," Feb. 15-16, 2024, Crystal City Gateway Marriott, Arlington, VA.

2024 CARET/AHS JOINT MEETING, Omni Shoreham Hotel, Washington, DC, Feb. 25-28, 2024



Book your [hotel reservation](#) at the Omni Shoreham Hotel. Reservations can be made online or by calling 1-800-THE-OMNI and ask for the "APLU 2024 CARET/BAA Meeting Block". To take advantage of the discounted rate of \$215+/night, please book by Feb. 2, 2024. We look forward to seeing you there.

THE FUTURE OF RESEARCH INTEGRITY CONFERENCE | May 20-21, 2024 | The University of South Alabama. Our primary goal is for research communities and stakeholders to be better informed about the effects of technological change and perceived barriers within the research ecosystem and to be prepared to cultivate a climate that advances responsible and ethical research.

SAVE THE DATE

2024 BAA Summer Leadership Meeting (formerly known as Joint COPs) | July 16-18, 2024
Providence, Rhode Island

