ESCOP CAC Teleconference Thursday, May 21, 2020 at 4 pm ET

Website: http://escop.info/committee/cac/

Zoom Connection Info:

Web/mobile https://ncsu.zoom.us/j/833707066

Phone: 1 929 205 6099 or +1 669 900 6833 Meeting ID: 833 707 066

Participants: George Hopper, Chair, Eric Young, Deb Hamernik, Jeff Jacobsen, Maggie Earle, Hunt Shipman, Chris Hamilton, Bret Hess, Doug Steele, Ernie Minton, Gary Thompson, Moses Kairo, David Leibovitz, Steve Loring, Doug Buhler, and Alton Thompson

Call Notes:

- 1. Welcome and roll call George/Donna
- 2. ESCOP reserve investment vote Deb/Jeff
 - Delayed due to shutdown
 - Should we send it out now?
 - Yes, Eric will send it out from George and each ED will distribute to their directors
- 3. APLU sign-on letter request update Doug S./Jeff
 - \$380M is not in House bill
 - Working on getting it in Senate version, but haven't seen much interest yet.
- 4. Infrastructure grant program request update Doug S./Eric
 - It will be late summer/fall before a bill is likely that this will fit in to
- 5. Gordian contract update Doug S./Eric
 - Contract signed and work will start soon
- 6. Other APLU updates Doug S.
 - Board of Agriculture Assembly webinar was held yesterday to give updates from Budget and Advocacy Committee, Committee on Legislation and Policy, and Policy Board of Directors
 - GCHERA is encouraging nominations for the World Agriculture Prize
 - Forbes-Tate Partnership will be the Communication and Marketing Committee consultant
 - An announcement and survey will go out from them soon
 - o Work will be completed by January
 - Advisory committee to help them will include Hunt Shipman, ESCOP/ECOP/AHS Charis, CGA rep, and APLU Public Affairs rep
 - Board of Agriculture Assembly assessment payments are on same track as last year
- 7. Cornerstone report Hunt or Jim (if available)
 - Is Extension working independently on \$80 Million ask with Senate?
 - Advocacy has been on combined ask, \$380 Million
 - o Call-to-Action only had a 25% open rate
 - FY'21 budget
 - House may start in Mid-June or early July, no word from the Senate
- 8. Other Committee updates since last CAC meeting
 - a. B&L Ernie/Jeff
 - o Next call is next Tuesday

- o Will discuss how to collect information on capacity funds used during shutdown
- b. S&T Jody/Bret
 - Working on finalizing the one-pager AES information sheets
 - Have developed two versions, one-sided for those who don't know us and twosided that also includes some impact statements
 - Hosted National Agriculture Library Director and lead scientist working on curating data to discuss future of that effort
 - Will be hosting NIFA AIA lead to learn more about how the input will be used to develop research agenda and how ESCOP might help
- c. DCC Ali/Rick
 - Selected a winner of the Diversity Award, a group at University of Florida in the Department of Youth and Family Science
 - Notification of the winner will go out from George
- d. NRSP-RC Doug B./Jeff
 - Meeting next week to review projects
 - o Meeting the following week to go over Guidelines revision
- e. PBD Gary/Eric
 - o No report
- 9. Other items, as needed
 - ESS Meeting
 - Moving ahead with meeting in Baltimore
 - Joint COPs
 - o Meeting will be virtual over three or four days

Recent ESCOP Appointments (since ESS meeting):

Upcoming Meetings:

- Joint COPs Virtual Meeting, July 21-24, 2020
- Fall ESS/AES/ARD Meeting and Workshop, Baltimore Marriott Waterfront, Baltimore, MD, September 28-30, 2020. Click here to reserve your hotel room: <u>https://book.passkey.com/event/50085105/owner/3649/home</u>. Registration and program coming soon.

AGRICULTURAL EXPERIMENT STATIONS

A System to Address Challenges in Food and Agriculture

Our food and agricultural systems face complex challenges as the physical environment and human societies change. Public investment in research and development is key to increasing agricultural productivity, food safety and security, community resilience, environmental stewardship, and economic growth. As part of the Land-grant University system, and with the support of USDA funding, Agricultural Experiment Stations (AES) and agricultural research programs at universities and historically black and tribal colleges are uniquely positioned to improve natural resources, food and agricultural systems.

WHAT MAKES AES UNIQUE?



Institutions in all 50 states and many U.S. territories with research sites representing diverse ecosystems, communities, and food production systems



A family of land-grant universities directs research that reflects a diverse U.S. population and varied needs



Laboratories, greenhouses, computational centers, equipment, and tools focused on improving the food supply and protecting the environment



Skilled scientists, educators, students, and staff working in fundamental and applied research fields



Impartial, verified science, technology, and recommendations

THE POWER OF PARTNERSHIPS



Federal and state funding allows AES to mobilize scientists to respond quickly to local issues



Multistate projects bring together scientists from AES across the country to tackle regional and national issues, creating state synergy, reducing duplication, and leveraging funds, facilities, and other resources



A close relationship with Extension and educators creates a feedback loop from research to application



Strong relationships with government agencies, farm and commodity groups, and the private sector transform innovations into economic development and business opportunities **山口市市区**(山田市市市市市市市

South Central Agricultural Laboratory. Photo by University of Nebraska-Lincoln.



Experiment Station Committee on Organization and Policy (ESCOP)

http://escop.info

HOW ARE AES ADDRESSING CHALLENGES IN FOOD AND AGRICULTURE?

Improving sustainability, competitiveness, and profitability

Onion growers applied **75%** less insecticide and saved **\$300 per acre** using pest management programs developed by researchers.

Researchers *quadrupled* the length of the strawberry growing season, increasing production *80%*.

Research-based recommendations saved **10,500** honey bee colonies, enough to provide crop pollination worth **\$6 million each year**.

Cutting-edge research has minimized the impacts of cattle diseases, which cause *billions of dollars* in losses.

In just one generation, soybean yields have *doubled* and corn yields have *quadrupled*.

Adapting to and mitigating climate change impacts

Researchers have developed crop varieties that grow well on marginal land and bred animals that can tolerate heat.

Researchers found that changes in temperature and precipitation caused soybean yields to be 30% lower over the last 20 years, resulting in losses of \$11 billion.

Supporting energy security and the bioeconomy

Growers using recommended lighting and heating sensors and strategies have reduced energy use *up to 30%*.

Researchers increased the oil content of sugarcane tissues **80-fold** and genetically modified cell walls, improving ethanol production efficiency by **more than 60%**.

Scientists developed bio-based textiles that add value to agricultural byproducts, reduce waste, and provide alternatives to synthetic, petroleum-based textiles.

Ensuring a safe, secure, and abundant food supply

Researchers designed antimicrobial sprays, high pressure processing, and other technology that ensures food safety without damaging quality.

24 peanut varieties worth \$200 million per year were bred from a single peanut sample collected by researchers in 1952.

Improving human health, nutrition, and wellness

Pioneering research on bioactive compounds is guiding diet-based interventions, new food products, and accurate food labels, helping people make healthy choices, stave off illness, and reduce healthcare costs.

85 colleges are using a research-based program to create healthier campuses and encourage healthy diet, exercise, and stress management choices among their students.

Heightening environmental stewardship

Information about the economic value of ecosystem services has helped land managers and policymakers weigh the costs and benefits of management options, estimate losses under certain land use and climate scenarios, and predict how mitigation strategies might reduce losses.

Researchers helped install prairie strips on **35 farms** in **9 states**, reducing soil, nitrogen, and phosphorus runoff from these farms by **up to 95%**.

80% of commercial egg producers have adopted new feeding strategies that reduce ammonia emissions.

Building personal, family, and community resilience

Research on rural areas is guiding programs and policies, increasing the likelihood they successfully meet needs.

Nationwide, residents, businesses, and government agencies use research to guide disaster preparedness and recovery and to adapt to climate change impacts.

Research has shown that diversity and tolerance can lead to richer stores of social capital and economic prosperity.

WHAT DO AES NEED NOW?

With enhanced support, AES and agricultural research programs at universities and historically black and tribal colleges can continue to address challenges in food and agriculture more efficiently than any other system in the world. Filling current gaps and needs will require:



Enhanced funding to support diverse research, enable exploratory and early-career projects, and give AES the flexibility to respond to emerging local issues



Resources to improve campus infrastructure and facilities for cutting-edge research



Interdisciplinary, systems-level research



Broader focus on sustainability and wellness



Models and decision-making tools that account for interlinked variables and uncertainty



Harnessing advances in big data, genetics, nanotechnology, and other emerging fields



Strategies for communicating information and sharing technology

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