ESCOP Science & Technology

Call Agenda: 4 pm ET, October 24, 2016 215-446-3656, ACCESS CODE: 1442561

Committee Members:

Chair: Marikis Alvarez (ARD)

Delegates:

Ken Grace (WAAESD)

David Thompson (Chair-elect;

WAAESD)

Joe Colletti (NCRA)

Deb Hamernik (NCRA)

Cameron Faustman (NERA)

Adel Shirmohammadi (NERA)

Nathan McKinney (SAAESD)

Harald Scherm (SAAESD)

John Yang (ARD)

Ed Buckner (ARD)

Liaisons:

Terry Nelsen (ERS)

TBD (OSTP)

Robert Matteri (ARS)

Charles Allen (Pest Mgmt Subcom)

Edwin Price (ICOP)

Dwayne Cartmell (Social Sci Subcom)

Parag Chitnis (NIFA)

Denise Eblen (NIFA)

Executive Vice-Chair

Jeff Jacobsen (NCRA ED)

Chris Hamilton (NCRA AD; Recorder)

Participants: Marikis Alvarez, David Thompson, Joe Colletti, Cameron Faustman, Nathan McKinney, Harald Scherm, John Yang, Robert Matteri, Parag Chitnis, Denise Elben, Jeff Jacobsen, Chris Hamilton (recorder)

Action Items:

- 1. Bob Matteri will connect with ARS Chief Information Officer, Dr. Brian Scheffler, for more examples of concrete, working Big Data applications.
- 2. Committee members are asked to reach out for a list of online data science/analytics graduate courses and training certificates to share with 1890s and others.
- 3. Jeff Jacobsen will continue to reach out to Dr. Fine for more information and to see if Dr. Fine would be able to join a call, discussing the SoAR report with this committee.
- 4. Next call will be Monday, November 28 at 4 pm ET, same call-in number. December 26 call canceled due to the holiday.

Call Notes

- 1. Welcome and Roll Call taken, Marikis Alvarez and Chris Hamilton
- 2. NIFA Update, Parag Chitnis/Denise Eblen:
 - a. Parag gave a brief summary of the 10/10/2016 Data Science in Agriculture Summit. See https://nifa.usda.gov/event/data-science-agriculture-summit for presentations and link

- to the "Online Idea Engine" at https://usdanifa.codigital.com/c/usdanifa/user/login. Accepting stakeholder contributions until 10/31/2016.
- The AFRI Foundational program permits applications for workshops on numerous thematic areas such as big data and cyber infomatics for food and agricultural enterprises.
- c. NIPMCC meeting occurred last week, see: http://escop.ncsu.edu/MeetingDetail.cfm?mid=416 for agenda and linked presentations
- d. An announcement was made of a future conversation (invited only) on 2/15-16 on Tactical Sciences (e.g. CPPM, IR-4, NPDN, FADI, FARAD) will occur with NIFA and UMD.
- 3. ARS and Big Data, Bob Matteri
 - a. Supercomputers at national animal disease center in Ames, Iowa and six other locations across the country to enhance data transfer and processing. Training on the software is occurring now.
 - b. ARS is working well with universities to enhance data management and many collaborative opportunities with ARS exist in this area.
- Group discussion of C-FARE's "Advancing U.S. Agricultural Competitiveness with Big Data and Agricultural Economic Market Information, Analysis, and Research" at http://www.cfare.org/UserFiles/file/10-7-2016BigData v1.pdf
 - a. Informative, broad, and well-presented document on current issues with Big Data in agriculture with a focus on a multitude of precision agriculture elements
 - b. Clearly from written from the perspective of Ag Economists, but is somewhat narrow and misses a lot of the current collaborations going on at LGUs and with ARS.
 - c. The "Looking Forward" section at the end (pg. 14) might be good for other LGU colleagues to look at first, and then read the rest of the material.
 - d. Private sector data and IP implications section was especially important. Data transparency might be an issue.
 - e. Consumer analytics could have been emphasized more.
 - f. Need and challenges with connectivity in rural areas addressed
 - g. Perhaps there is a need for concrete examples on how to build and apply Big data solutions
 - h. Other documents that might be useful to read?
 - NSF Big Data Hubs (4 regions) good place to see how the community around Big Data is being developed in these regions. Video presentations cover some areas, pitfalls, etc. GODAN (Global Open Data for Agriculture and Nutrition), as well.
 - 1. http://midwestbigdatahub.org/
 - 2. http://www.southbdhub.org/
 - 3. http://westbigdatahub.org/
 - 4. http://nebigdatahub.org/
 - 5. GODAN: http://www.godan.info/
 - ii. Chief information officer with ARS Dr. Brian Scheffler Bob Matteri will reach out to him for information on building successful big data applications and collaborations.
- 5. Exploration of S&T topics important to the 1890s. Some thoughts:
 - a. Big Data, especially training in the use of related technologies perhaps this committee should reach out to LGUs to find and share online training programs/certificates in data science.
 - b. Plant Phenotyping, germplasm repositories
 - c. Phytobiomes

- d. Nutrition and food security
- 6. Other, as needed
 - a. Gary Thompson (ESCOP Chair-elect) is forming a program planning committee for Fall ESS 2017. Thoughts on an AR workshop? Great idea; perhaps an overview of big issues across disciplines? Are the details appropriate for a big meeting, though? Identify experts outside of the immediate family to gain additional perspectives.
 - b. Jeff reached out to Dr. Fine re: SoAR report. He will continue to work on this and get a response.
 - c. Scheduling of November and December calls (November 28 and December 26)
 - i. Go ahead with November 28 call
 - ii. Cancel December 26 call, due to the holiday

Call adjourned at 4:50 pm ET.