

AGENDA
Science Policy Committee Meeting
March 23, 2021

Via Zoom: <https://zoom.us/j/3012960900>

Invited Participants:

SPC Chair: Tessa Burch-Smith

ASPB Staff: Crispin Taylor, ASPB CEO

SPC Members: Becky Bart, Judy Callis, Jeff Chen, Erin Doody, Scott Jackson, Carolyn Lawrence-Dill, Gustavo MacIntosh, Shandrea Stallworth

ASPB President: Maureen McCann

Lewis-Burke Associates LLC: Bridget Krieger, Eve Granatosky, Christina Laridaen, Victoria Haber

12:00 PM US Department of Agriculture

Carrie Castille: <https://nifa.usda.gov/staff-contact/carrie-castille>

Director, National Institute of Food and Agriculture (NIFA)

Parag Chitnis: <https://nifa.usda.gov/staff-contact/parag-r-chitnis>

Associate Director for Programs; Acting Associate Director for Operations

Also on the call: John Erickson (<https://nifa.usda.gov/staff-contact/john-erickson>), Kate Fink (<https://nifa.usda.gov/staff-contact/katherine-fink>), and Bill Hoffman (<https://nifa.usda.gov/staff-contact/william-hoffman>)

Vision for NIFA

- Still very much in the works and would love for it to be molded with ideas and priorities proposed by stakeholders, like ASPB.
- Thrusts they are emphasizing include:
 - Ensuring food security in all communities;
 - Equity across all USDA;
 - Speedy Transformation of our food systems;
 - Promote health for all stages of life; and
 - Pledging to increase DEI, across partners, panels, workforces, and awardees (making sure it is representative of population).

Ongoing and Upcoming Initiatives

- The investments made are paying off, awarded \$24 million in awards to universities, businesses, etc., specifically related to COVID. Mentioned partnership with CDC on vaccine education.
- Working to tackle climate change, Robert Bonnie coming on as climate advisor to Vilsack. Have asked for volunteers to help research and build out NIFA's needs to meet the needs of climate change.
 - Looking at workforce development, a whole-agency approach.
- Joined with NSF to fund 7 AI Institutes:
 - Next Generation Food Systems;
 - Future Agricultural Resilience, Management, and Sustainability;

- Trustworthy AI in Weather, Climate, and Coastal Oceanographic;
- Foundations of Machine Learning;
- Student-AI Teaming;
- Molecular Discovery, Synthetic Strategy and Manufacturing; and
- Artificial Intelligence and Fundamental Interactions.

There was a Q&A session held.

1:00 PM SPC Business Meeting

Debrief USDA meeting

- Good observation that they are working to coordinate across agencies and that their vision is not fully formed, inviting ASPB to help shape the agency's direction.
 - Best strategies to push on that door?
 - Opportunity put out to farmers and foresters, a bit targeted but asks what research tools and data they should focus on.
 - **Action Item:** Victoria send RFI write-up around to SPC.
 - Following the release of the President's Budget Request (PBR), providing comments on the recommended funding for specific programs.
 - Biden's goal of a whole-of-government approach will be monitored.
- Emerging: Endless Frontiers Act (EFA) is going to be reintroduced by Sen. Schumer's office that would invest \$100 billion into NSF to create a new directorate in translational research. Would just be an authorization bill and would include biotechnology. House Science, Space, and Technology Committee is also introducing a reauthorization bill that would include large piece for translational research. Lastly, proposed is expected to have large translational science piece.
 - How certain biotechnology and plant sciences will be included?
 - Biotechnology has been included in the EFA draft we have seen. Good thing to monitor, and push for if not included in proposal.
- Eve: Training was focused on new investigators and new NIFA staff and less about undergrads, grad students, and post-docs, could be a good follow-up item to provide suggestions for that.
 - SPC: Time to graduate is increasing, more money in support is needed.
- SPC: Seems like researchers need to be more proactive if they need more support or funding, should we make that more known to ASPB?
 - Yes, that is a good idea, can put out statement about contacting agencies after we ask DOE and NSF as well.
- SPC: Some agency asked last year to quantitate the losses due to covid, was the research done?
 - Tapered off but could be good to revisit.
 - Would having the agencies do workshops or webinars specifically for early career faculties be helpful?
 - Yes, limited exposure for students and post docs on where money is available and how to access it.
 - SPC: They exist in many agencies but have to know where to sign up.
 - **Action Item:** ASPB get on mailing list to distribute opportunities for those engagement opportunities.

Leadership Award

- Some names were omitted, Crispin has done a redo asking people to supply a few paragraphs advocating for their vote. Will do differently in future years.
 - Goals of the award? On [website](#). Individuals who have made contributions to advance ASPB and its work.

Hill Meetings Update

- Strong position in regard to testimony for when the call comes out.
- In the process of scheduling Hill meetings. Very first meetings start next week and then a number throughout April. Some dates are still being finalized.

2:00 PM Department of Energy

Sharlene Weatherwax: <https://science.osti.gov/ber/About/Staff/Sharlene-Weatherwax>

Assistant Director, Biological and Environmental Research

Introductions

Presentation (**Action Item:** Sharlene send slides from presentation)

- Office of Science at a Glance:
 - New Secretary, Jennifer Granholm
 - Will confirm David Turk as Deputy this week, he is policy oriented.
 - No Director or Secretary for Office of Science yet (and no hints of names yet).
 - \$7 billion budget for office of science
- BER in one slide (\$750 million)
 - Explore frontiers of genome-enabled biology
 - Understand physical and biogeochemical earth system processes
 - Enable innovation and discovery through user facilities
 - Climate report shapes a lot of actions, this one will have a large ag component
- How do we accomplish all of that?
 - Lots of areas that have a long run lead plan, they run a workshop on new areas and issue a funding opportunity and eventually it will become a core part of their portfolio.
 - Sometimes need more help, outside experts like ASPB or DECADAL vision will help provide expertise and the advisory council will compile some reports, recommendations, etc. BERAC is working on report to benchmark them internationally right now.
 - Do a lot through interagency collaboration, OSTPs direction.
- Awards
 - Limited in number but large sums of money, made to a variety of institutions (large number of co-investigators). Many include partnerships with DOE National Labs, advise people to find out what they do and build some collaboration there. They have a knowledge base of individuals that can be leveraged to make connections.
 - Snapshot of this year (focused on plants & molecular level):
 - Early Career Research Program

- Systems Biology of Bioenergy-Relevant Microbes to Enable Production of Next-Generation Biofuels
- Bioimaging Research to Develop Imaging Instrumentation and Approaches
- Environmental System Sciences
- Continuation of Solicitation for the Office of Science Financial Assistance Program
- Environmental level: Funding call out with three research levels
 - All funding apps require preapplication, 2-pager on intention and skims to see if they are responsive. If they say yes, send full application two months or so later. All review panels have been virtual.
- National Virtual Biotechnology Laboratory Symposium was hosted last October, example of some of the work DOE did with its COVID relief funding. Used it to address epidemiological and logistical support, supply chain bottlenecks, medical therapeutics, innovations in testing capabilities, and new project in understanding fate and transport of virus in the environment.
 - But did not received any funding for research in this last package.
- No budget yet, looking like May.

There was a Q&A session held.

3:00 PM National Science Foundation

Alan Tessier: https://www.nsf.gov/staff/staff_bio.jsp?lan=atessier&org=NSF&from_org=
Deputy Assistant Director, Directorate of Biological Sciences

Donal Manahan:

https://www.nsf.gov/staff/staff_bio.jsp?lan=dmanahan&org=NSF&from_org=; <https://dornsife.usc.edu/cf/faculty-and-staff/faculty.cfm?pid=1003493>
Division Director, Integrative Organismal Systems

Introductions

Opening Comments (Alan Tessier)

- Lots of change in DC and NSF, did receive a budget for NSF and received a 3% increase to research. Allowing a bit of freedom to create new opportunities. Covid has created many issues, they are trying to mitigate challenges to researchers and early-careers. No deadlines for Bio and now on third year of core programs, consider this a healthy state. Panelists now feel the projects they give feedback to receive funding, the effort in writing and receiving proposals is worth it. Still deadlines in many programs outside the core. Plant genome is doing well also, expanding other programs and increasingly seeing that exploring underlying biological issues at the genomic level are increasingly important.
 - Leading to a lot more cross disciplinary interests, ex: Plant biotic interactions
- Biden Harris Admin pillars of priority, one of which is climate. The White House's view is very broad, not just research in climate but also in mitigation which include biotechnology, bio, and syn bio that will help us adapt to these environmental changes.

- Awaiting full PBR, anticipated in May. Hoping to get some signals from the skinny budget, anticipated next week.

Opening Remarks (Donal Manahan) IOS

- Plant genome research program, but seen that area of research pour across disciplines. Genomic tool program, a focus of the EDGE program, was released and now has partnership with NIH.

There was a Q&A session held.