

## State Committee for Research

### NOTES

Thursday, June 17, 2021

2:00 p.m. to 3:30 p.m.

#### Notes:

1. Introduction of Brenda Konar who is taking over for Pips Veazey as PI for the EPSCoR program.
2. Review and approve [December meeting notes](#) – Paul Layer, 5 min.
  - a. If there are any questions or concerns, please contact Kelly.
3. [Review SCoR Membership](#) – Paul Layer, 5 min.
  - a. There are 17 members of SCoR. There is representation from USGS, ASRC, UA. Need to remove Tom Thornton. Aaron is now the Vice Chancellor at UAA. Are there areas that we are missing and should consider inviting to the committee. Richard Glenn has retired from his position.
    - i. Someone from the aerospace sector, like from Alaska Aerospace Corps. The new launch company.
    - ii. Steve Wolokowski in Alaska Aerospace. He is not the new director, but he is in the organization and is very research oriented.
    - iii. Val Davidson, who has just been appointed as president of the Alaska Native Tribal Health Consortium. They are regional and involved in INBRE.
    - iv. Larry Hinzman (adjunct - ex officio) or Church Key
    - v. USGS - state agencies
  - b. What is the role of SCoR? It is more than just providing the requirement for the EPSCoR programs. Think about how we want to use the council. We will be back into the quarterly meeting schedule. How do we want to shape research and our advocacy going forward?
    - i. What can we do to assist in setting priorities for research that are not just problems of theory. What are things that have a more practical or implementation driven type of priority? What is holding back the state from doing business in research? (beyond funding). People tend to focus their priorities on where they can get grants. Is there a way we can create an endowment or fund for state priorities with an economic/new business development focus?

- ii. Pres. Pitney has asked for a conference around fisheries in SE Alaska. Dean Moran, Chancellor Carrie and others, would like to focus on Mariculture, along with economic development. There are 50 members. Create a Center of Excellence so we can catch up with the rest of the world. There is momentum and interest and a need for economic opportunity and research. This group can help that focus and assist the research (accelerate the growth in our state).
  - 1. The committee can help to facilitate, but should not be a restriction to those activities happening. Will need to consider how this committee works with and guides the research activities.
  - 2. There is a lot of activity going on between agencies and the university, the private sector and the university, with research opportunities. A big part of what we are doing here is with the federal programs with big opportunities and big responsibilities.
- iii. The DNR, Fish & Game may be a useful tie-in to see what their issues are and they don't have a lot of resources for research behind them. It is important to get their priorities from a regulatory and industry perspective, along with the ecological biosystem component. We have had some of those commissioners on the committee before and they are important.

4. [Innovators Hall of Fame Recap](#) – Paul Layer, 5 min.

- a. Thank you to Brian and his team for a great virtual event for the Innovators Hall of Fame this year. Most were live with only a couple of pre-recorded messages. Also thank Mead, Brian and Jon for serving as the selection committee. There were 10 nominees that were all very qualified. We didn't say "no" to any.
- b. All 10 inductees were men and this was the same for the past couple of years. Is there something inherent in our process that is discouraging women and minorities to be nominated? The process is quite open and would like us all to consider who we could nominate this fall, including the broader population of the state and innovators who should be recognized.
  - i. Is there a way to make a deal with one of the journalism classes on one of the campuses to do this as a book project? Ned Rozell wrote the book for the past few years. Because we don't have a wall or someplace with pictures on it that people read.
  - ii. Jack Dangerman was prepared to talk for 20 minutes, and the fact that we recognized him as a multibillion dollar company and his Alaska roots made him think a lot more about his last groups. He was very pleased to be recognized.

- iii. The Innovators Hall of Fame has recognized people who have been truly innovative in the way that we think about ecosystems and the interconnectivity. Just talking to the awardees shows how innovation comes in a lot of different flavors and emphases. Some were responding to an immediate crisis and some were a long term career kind of innovation.
  - iv. Next year's Innovation Summit is scheduled for the last week of February 2022. Will start to get the word out at the September meeting and at the December meeting go through the nominees.
  - v. Will need to figure out where the biographies and photographs would be most visible.
5. [Discuss Alaska Research Priorities](#) – Paul Layer, 10 min.
- a. The Lt. Governor provided a document from the Department of Fish and Game and Department of Natural Resources outlining the 2022-2026 Arctic Research Plan, which requires collaboration with State and local management agencies.
  - b. The authors are the heads of federal agencies, and no one named in the document is actually from Alaska.
    - i. The authors of this document are at a very high level. They received input from the state and the Arctic Research Commission, which Mead was chair of at that time. There is input from the Arctic Research Commission, which does have Alaskans on it. It's a very broad based document.
    - ii. Currently, the USGS has seen extensive coordination at the staff level among federal agencies to include a lot of people here in Alaska.
6. [AK Science & Technology Plan](#) - update and ratify - Paul Layer, 15 min.
- a. In 2018, we had a meeting reviewing it, but do we need to reaffirm the plan? The plan is still guiding what we do in our research programs. Denise is in the middle of a renewal proposal and refers to this document to show she is meeting the states and NASAs research needs. Would like to be sure the plan is the same.
  - b. There is no known requirement with EPSCoR to review and update the Plan. The challenge is keeping it from expansion. There are 7 focus areas. They are still relevant for the university and the state. It remains strong. It is important that we review the Arctic planning and see how it can be included.

#### DISCUSSION:

- More purposefully engage indigneous communities
  - It may be addressed a little in the Community Resilience part, but doing it in a culturally sensitive way and thinking about that collaboration is important

- Thinking about what getting to net zero policies would mean for our economy
  - There are a lot of technology issues
- Ambivalence for China - human rights issues/trade issues - Exports are all dependent on China. Policy research to help bridge the national gap with China for infrastructure and research.
- Diplomacy - Arctic aspect of the Putin-Biden Summit - How do we reinvigorate the Russia ties and encourage discussion of how to avoid the problems we had in the Bering Sea with the military exercise right on top of our fishery. How to avoid Russia's monopoly in shipping and what our role should be in shipping.
- Co-production knowledge because it's in NSF and not done particularly well. We need to understand better what that co-production is and how to make it happen in an authentic, meaningful way.
- Connected Arctic - resource sourcing, the connection and the consequences of that, local traditional knowledge and co-production knowledge. The Arctic is very connected to indigenous people, and crosses national boundaries. We also need to look at the dates and proposals. There is outdated language that needs to be cleaned up.
  - c. Add an 8th category - a small section in the same format
    - i. Fisheries - Co-production - there is an area of funding and areas of interest to the state. How do we incorporate indigenous ways of understanding fisheries with modern fisheries techniques?
    - ii. The Connected Arctic - a title we may want to consider as part of the additions

7. [EPSCoR/IDEA Coalition and Foundation Update](#) - Paul & Brenda, 15 min.

- a. There have been some leadership changes. UAA and UAF - Brenda has stepped into the role of the Fire and Ice project PI. Allison Bidlack at UAS also left the project and is now with NOAA. Julie Schramm is the new PI. The project is at it's halfway mark, so there are a lot of results being produced. Now back on track to accomplish the project goals after our COVID challenges.
  - i. Boreal Forest and the coastal margins are going smoothly despite some lingering hurdles of code restrictions. There has been a lot of success in improving hyperspectral imaging of boreal forests. They've published the first papers and continue to study intact forests and burn scars, expanding into imaging of active fires.
  - ii. Successful research partnerships with Tanana Chiefs Conference and ADF&G. Using drones to study fire breaks and the effects on salmon, and impacts on moose harvest.
  - iii. Coastal margins - Because of the addition of key researchers, they have significantly expanded their data collection into new areas of inquiries.

- iv. Seed grants - Were able to provide 11 faculty and 12 students seed grants from both boreal forest and coastal origins.
- v. Piloting a Boreal Forest curriculum for 3rd through 5th graders. Girls on Water and Girls in the Forest are going to happen this summer. An open online boreal forest remote sensing course on wildfires that was offered to youth. There were 1750 students enrolled, which is a large number compared to other types of courses.
- vi. Submitted about 50 grant proposals requesting about \$50M. Have published 20 peer reviewed articles with an another 10 that are waiting to hear back from the reviewers. This compares to 7 last year and 0 the year before.
- vii. Have made all 5 of the planned faculty hires. And a total of 5 postdocs and many undergraduate students. There is an annual report due at the end of the month and a site visit scheduled with NSF.
- viii. Started working on a new collaboration with the Sound Science Center. The next EPSCoR developing a framework that will build on the Coastal Margins portion. Considering a 5+5 model, and expanding on what we're doing, focusing on a glaciers to gulf project. Build a relationship between climate change and the coastal watershed marine environment. Would like to bring communities in and bring farmers into the discussion to put the framework together. Once the framework is constructed, will put out a call for a whitepaper to use to put together a larger proposal.

8. INBRE Update – Brian Barnes, 10 min.

- a. INBRE is midway through their program. NIH has had a lot of supplement opportunities to add on to the core budget, which supports building the VA Medical Health research capacity across the state. Will be awarded \$775,000 to increase the sequencing of SARS COVID. We have about 4,000 samples dating back to March 2020. Will be receiving new samples to do full genome sequencing of those to identify variants of interest and variants of concern. Will have some of the first reports in another few months.
- b. Female health initiative allowing for expansion of the immunotherapy of cancer project.
- c. Two awards - postpartum hemorrhage prevalent in Alaska native women and liver disease in Alaska native adolescence.
- d. A rabies virus that has the ability to cross the body/brain barrier in animals. Will use that as a vector to bring medicines into the brain that can be administered systemically.

- e. Considering expanding our network to include APU and \_\_\_\_\_ College, emphasizing more undergraduate experiences. Have been unable to travel to make the contacts due to COVID, but will do that before meeting again.
9. NASA EPSCoR update – Denise Thorsen, 10 min.
- a. Currently in its final year. Awarded the last 4 seagrants last spring, but due to COVID there was leftover funding and were able to award an additional seed grants this fall. The new programmatic grant will be submitted in mid-July. The changes that were made this year are in 2 major areas. The Alaska NASA EPSCoR programs are different. We do not propose a specific research topic. We propose to give money away. Our budget has increased to \$200,000 a year. Because the budget was increased, we would like to increase the amount of the individual award, up to about \$34,000 a year. There is hope that they could do more with it, as opposed to giving away to more people. Have decided to open it up to postdocs. The intent is to grow research in the state.
  - b. There is a planned proposal writing workshop for the fall. Primarily for new faculty trying to write to NASA EPSCoR. NASA has told us that the proposals they are getting are not very good, so setting up the workshop to improve grants for NASA EPSCoR.
  - c. Awarded this year with an R3 award, a Rapid Response Research award where NASA defines a research project and faculty say how they're going to implement the research in the area that has been specifically outlined.
  - d. Waiting on the decision of the larger EPSCoR grants that are 3 years at \$250,000 per year. The PI for this year is Sveta Stuefer. She submitted a proposal and is waiting on a decision.
  - e. Next week NASA will host a virtual technical interchange meeting. There are about 5 researchers that will attend this year who will talk one-on-one with researchers at NASA and figure out whether there's a commonality in terms of their research interests.
10. EPSCoR and IDEA Chart - We have seen steady growth in EPSCoR funding, NIH and NSF growth as well. DOD EPSCoR or DEPCoR has not caught on the same way and we do not have a DEPCoR program in Alaska. There has been some growth in NASA and in USDA. There has been a bump in the budget request for next year.
11. There will be a virtual meeting in September. Will also have the Innovators Hall of Fame on the agenda.
12. Roundtable – All
- a. Alex - Shout out to Brian and the Innovators team for a successful Hall of Fame team.

- b. Denise - NSF and NASA signed a collaboration agreement for joint solicitation opportunity to broaden participation in engineering. They have received a minimal amount of proposals and were disappointed in the lack of interest. Encourages people to strongly consider the opportunity.
- c. Mark - Nothing
- d. James - Nothing
- e. Mead - Had to leave - Wanted to talk about something along the sustainable energy conference area.
  - i. Senator Merkowski was encouraged by the meeting held at UAS a couple of years ago and would like to see that again next year (spring) in Fairbanks.
  - ii. The Arctic Research Commission just had a major conference on renewable energy that a lot of Alaskans would like when we're involved with it, as well as Canadians and others across the Arctic.
- f. Jon - Did launch the Phase Zero SDR-STR grant program, looking for submissions of up to \$10,000.
- g. Brian Holst - Nothing
- h. Dianne - Nothing