State Committee for Research

NOTES

Monday, September 19, 2022 1:00 p.m. to 3:00 p.m.

Agenda:

- 1. Review and approve <u>June 13, 2022 notes</u> Paul Layer, 2 min.
 - a.
- 2. <u>Innovators Hall of Fame 2023</u> update/kickoff Paul Layer, 10 min.
 - a. Summit March 15 & 16 Hosted at UAS on campus work with Maren to set up good displays
 - b. Brian, Jon and Mead Treadwell have been vetting on behalf of the committee and Paul asks that they continue in that role.
 - c. Currently soliciting nominees and will continue working on getting the word out. Deadline of December 16, 2022 with the expectation that it would be bumped out to midJanuary.
 - d. Modify the announcement to perhaps something more user-friendly to attract more nominations. We need to make it more obvious that anybody can nominate someone.
- 3. AK Science & Technology Plan ratify Paul Layer, 20 min.
 - a. The newest revisions include food security. Additional comments to the Renewable Resources page - third paragraph, last sentence - "Key Fisheries Research Areas include the decline of Bearing Sea pollock, Western Alaska chum, salmon and Chinook salmon populations." The sentence suggests that pollock are on the same par as chum and salmon, but it actually isn't declining anymore. Suggested rewrite:
 - i. "Key Fisheries Research Areas include the decline of Western Alaska chum, salmon, and Chinook salmon populations."
 - ii. There are also declining populations of Bering Sea snow crab and Bristol Bay renting crab. There have been record number sockeye runs and no red king crab with the suspicion that one is eating the food of the other.
 - b. Lt. Governor Meyer had a call regarding carbon capture of our gas up on the North Slope and Cook Inlet, regarding putting the carbon back into the ground and then taking the gas and making it into blue hydrogen or ammonia. The topic may fit under the Renewable section.

- i. There is a lot of research in this area and many opportunities. This may not fit in the renewable energy area, but actually in the energy section, as the biggest opportunities are where our emissions of CO2 and methane, which are their oil fields and where the storage is. It isn't a renewable resource. It would fit nicely in the transition fuels section and long-term potential evaluation.
- c. The homeless problem and drug addiction. Also, mental health is a concern. Alaska ranks first in domestic violence and sexual assault.
- d. Natural Disasters section storm surge and flooding, earthquakes, tsunamis, typhoons and coastal erosion, much of which relates to warming ocean temperatures. This is worthy in terms of community resilience.
- e. The Telecommunications section could use an update on the terminology. The phrase "high bandwidth services" is also known as "broadband". Also mention low earth orbit satellites and light pollution from radio towers. Microwave and fiber optic don't need much research.
- f. Agreement in principle with the proposed amendments -

MOTION: Mark makes a motion to accept the S&T plan with the modifications as proposed. The Lt. Governor seconds the motion.

- 4. EPSCoR/IDEA Coalition and Foundation Update Nettie LaBelle-Hamer, 15 min.
 - a. Focusing on the Arctic Research Commission.
 - b. Traveling to DC to attend EPSCoR meeting. There are simultaneous meetings here in Fairbanks, which Paul is assisting with attending those.
 - i. Conversations with the EPSCoR people is the modifications to the budget regarding additional funding for the EPSCoR program. One of the ideas was to be eligible for more than one EPSCoR grant in a state. With the expansion of the grants, there would be opportunity to participate in more than one grant. We will have to explore the possibility of cost sharing. Another possibility coming out of EPSCoR is a Five-plus-Five funding process so every four years there isn't a rush to get another proposal done. It provides more time to get more and better work done.
- 5. NSF EPSCoR update Brenda Konar, 10 min.
 - a. The biggest thing since the last meeting was that they got their proposal submitted, Glaciers to Gulf. They are expecting to get questions from NSF around November. The final decision usually comes in spring, typically around March. The planning grant was initially planned for travel, but with COVID, people didn't want to meet in person, so it was done via Zoom. That allowed for extra money to send a group of researchers to different communities around the state, which had created many connections and the smaller pool of stakeholders increased.

b. Still working on the Fire and Ice project, which just finished. Just finishing year four, and so both coastal margins and boreal fires are finishing their final parts of field work. The fifth year will be tying up everything and putting it all together. In the final year, they will also be offering grants and travel awards to UA faculty as seed money for faculty, grad students and students.

6. INBRE Update - Brian Barnes, 10 min.

- a. INBRE is part of the IDEA program of the NIH and is a parallel program to EPSCoR. It is a statewide program to build capacity and environmental health research and to grow a diversified pipeline of students entering those fields. There are also co-BRE's in the biological research excellence, which we have one in its first phase. A previous co-BRE founded and sustained the Center for Alaska Health Research. Each university can have three of the co-BREs, so they're always looking for other really focused ideas and research that have some expertise and opportunities. There are also clinical and translational research programs. They are part of an IDEA partnership with Montana that emphasizes the American Indian and Alaska Native health disparities that is ending. The program cannot be renewed because the decision was made that only states that have medical schools and clinical research programs can be eligible for CTRs.
- b. In the fourth year and heading towards the fifth, and just received the ninth supplement to the program. Will continue the SARS COV 2 sequencing program, trying to sequences every isolated virus in the state of Alaska. There is a publication coming out on that information and the website showing that work will be updated every two weeks is available through the State COVID19 entry point. With the nine supplements, the program has been able to increase by \$3 million in the last 18 months.
- c. The visit by the EDC is followed by their annual retreat, which will be at the Talkeetna Lodge. There are about 80 people expected, including undergrads, grad students, faculty and some administrators. The once a year gathering to network with the campuses, Alaska Native Tribal Health Consortium and South Central Foundation. We are the only INBRE in the US that has Tribal Health Organization lead research departments. Working on the competitive renewal for the INBRE five. The application is due in May of 2023, so they're putting together working and writing groups now for the different courses. They're expanding their network in this renewal application to include Elsotic College and Kavik Alaska.

7. DoE EPSCoR Update - 10 min.

- a. Mari brought on a new faculty member directly attributable to the EPSCoR funding, Andrew Miles who grew up in Juneau. He is the second faculty member due to the EPSCoR funding.
- b. They have a team at the University of Puerto Rico Miques South to go to the State University of Hawaii Natural Energy Institute at the University of Hawaii Manoa. Adding the University of Maine because their PI at South Dakota State

- University is joining in May to start a new processing program. They do a lot of offshore wind research as well.
- c. Have made a couple of trips to Kotzubue with some students. There are some very good collaborations there looking at both the electric side and thermal side. They are looking at what happens when you shut the diesels off and all of the power plants and buildings that have been heated by what was free waste heat. The power plant itself is under insulated.
- d. They did get their continuation funding, so they are good for another year. At the end of next year, sometime in the winter, they have to decide if they will apply for a second renewal. They may be able to apply for up to two renewals.
- 8. NASA EPSCoR update Denise Thorsen, 10 min.
 - a. She is unable to be here because she is hosting the NASA Program Management for EPSCoR in Anchorage. They are looking into various projects associated with the NASA Obscure program and the NSF NASA fast opportunities.
 - b. Have reviewed the NASA SCOR Research Grant pre-proposals that have been selected by the Space Weather Research proposal by Dr. Amani Reddy, who is a new joint faculty member between CEM and GI. The proposal is expected to be submitted in the fall.
- 9. Future topics/Roundtable All, time remaining
 - a. Lt. Governor Meyer Shout out to Nettie, Paul and Bob McCoy the Arctic issues are getting attention back east. The hope is that they will consult Alaskans first before making decisions. There are people starting to realize that the University of Alaska Fairbanks has done a lot of research in this area and are a great source of information that they need on Arctic issues. Jimmy and others have been very active on drones. He serves on an Aerospace States Association committee and has a lot of good things going on there.
 - b. Paul shouts out to Lt. Governor for his support in the university's budget with substantial funding for drone, critical minerals, heavy oil and food security research. There are a lot of good initiatives that have been coming out that we are collaborating with the state on and in bringing Alaska to the forefront.
 - c. Dani Appreciates the Lt. Governor's comment and echoes the thoughts -
 - d. Mark No comments
 - e. Brian Excited about the next round of Innovators
 - f. Alex Will send the requested text to Kelly
 - g. James Nothing to add
 - h. Nettie Nothing to add

- i. Aaron Nothing to add
- j. Maren Nothing to add

Kelly will send out a Doodle Poll for the next meeting for early December. IHOF deadline about 12/15/22. The S&T plan will be finalized this week and sent to Brenda for NSF.

Upcoming Events:

Oct 26, 2022 - Arctic Research Commission