Research & Economic Development Board of Trustees Committee
Public Session – Zoom
3/24/2021

Attendance: Diana Hulme, Trustee Brad Bonner, Ed Synakowski, Trustee David Fall, Trustee Brad LaCroix, Gabrielle Allen, Farrell Rapp, Steve Farkas, Lisa Stafford, Raymond Gable, Jami Miller, Karyn Bercheni, Elizabeth Roumell, Phil Wille, Victoria Bryant, Trustee Carol Linton, Trustee Jeff Marsh, David Jewell, Mary Ivanoff, Neil Theobald, Trustee Elizabeth Greenwood, Tara Evans

1. eRA Update – Hulme
    a. We have worked with a consulting firm (Attain), who wrote up a request for proposals for us to solicit vendors for electronic Research Administration systems for campus. The RFP has been completed, and it was released by procurement, on March 12th. We have been contacted by vendors seeking clarification on our needs. Proposals are due from the vendors on April 12 at 2pm.
    b. On March 29th we have an eRA executive team comprised of two administrators here at UW. The consulting firm that generated the RFP for us will present their final report covering their review of our research administration policies and procedures,
    c. There is an evaluation committee composed of UW administrators and faculty members. They will review proposals and conduct interviews between April 13 and 20th. We hope to start the contract process with one of the vendors by the April 24th.
    d. Implementation will depend on the system chosen and how fast that contracting process goes. Depending on the system chosen we will either phase in the various modules or implement all at once.
2. ORED workforce requirements and budget implications – Hulme/Synakowski
    a. The 9-2 working group took a comprehensive look at what the institution needs to provide a robust research enterprise on this campus. There are a number of areas within the research administration arena that are understaffed. The group asked the question, "What do we really need to conduct research here at the University of Wyoming?"
    b. They discovered a need for 43 new positions in various across campus. The positions were prioritized by need based on three different criteria points (compliance, sustain, obligation).
    c. Review of positions and priorities:
        - Priority 1 positions: EST Salary + Fringe = $1,193,400.
        - Priority 2 positions: EST Salary + Fringe = $1,709,890 *some position salaries could be offset by user fees or by an endowment (AMK Director)
        - Priority 3 positions: EST Salary + Fringe = $1,543,200 *some position salaries could be offset by user fees. Some positions are currently grant funded but will need to be funded by UW at some point in the future.
        - Total cost (43) - $4,446,490 *If some positions can be covered by user fees or endowments the cost could possibly be brought down to $3,156,390
3. WIN Updates - Farkas
    a. WIN Overview/Introduction: WIN is the Wyoming Innovation Network. It works in collaboration with the community colleges to explore opportunities to leverage existing resources, to support innovation and entrepreneurship, and to drive the state's economy, both in terms of supporting the existing economy, but also looking at opportunities to diversify. The WIN is supported by a presidential Steering Group that

also ensures that the work that being done on campus is aligned with the vision of the presidential steering group, the state, and the governor's vision for economic development.
    - There are five pillar groups: digital, entrepreneurial, interdisciplinary, inclusivity, and strategic.
    - The pillar groups are working on reports, due 4/30.
    - Reports should share a five year build out plan which includes addressing what the funding mechanisms might look like, identifying existing assets to support both short and long term goals, address some of the immediate organizational steps that we'll need to take to set the stage for longer term objectives, and to identify ways that we would measure our success.

b. WIN recent actions include:
    - Building a two year degree program the software engineering collaboration with Cardiff, that would lead to a four year program with the university.
    - Software Engineering bootcamp will kick off this weekend. The program will not only pilot the curriculum but will also include an applied project, with roughly 20 students from both the University and from our community colleges
    - We are finishing up the rapid Entrepreneurship Essentials program.

c. Discussion on non-traditional learners, especially older individuals possibly re-skilling to go into a secondary career. How will we support them from a curriculum and an assessment perspective? An academic perspective? Farkas will take discussion ideas back to the working group.

4. Pillar Planning updates: These are strategic planning exercises regarding future planning. Intermediate reports have been submitted, final reports due towards the end of April.
    a. Interdisciplinary (XD) Pillar – Synakowski :
        - The XD committee has had 33 participants in various capacities. This group feels strongly about the value of interdisciplinary scholarship and research and education and the challenges faced by our current discipline oriented infrastructure. The group hopes to help UW become a proven player in interdisciplinary research, both within our own ability to partner with each other but also to partner with other institutions to engage with businesses, national laboratories. Interdisciplinarity will allow us to compete for high dollars federal grant funding.
        - Discussions have included aligning with the Grand Challenges, encouraging and protecting young faculty who are interested in XD through the T&P process, looking at schools and institutes for XD, Living Learning Communities for freshman, followed by possible mentoring by graduate students, establish a School of Graduate Studies, and engagement with our Wyoming residents and stakeholders on the by communicating the value of XD and also solicit their engagement in XD types of research and enterprises.
        - Paraphrase from a comment John Koprowski made about his experience at UA: “Obstacles to pursuing interdisciplinary research that are centered in UW practices, policy, and culture are within our power to change. The creation of supportive practices, policies, and structures to enable the flourishing of interdisciplinary research and scholarship to best enable tackling society's most

challenging problems is in our hands." Basically, we created the obstacles, we can make the change to allow faculty to engage in the XD domain.

b. Entrepreneurship Pillar (EP) – Farkas:
    - The EP's charge is fairly broad. Key areas/considerations:
        - Raising additional revenue streams for the university,
        - Supporting new value creation with new businesses
        - Creating a culture of entrepreneurship and innovation at the university
        - Exploring programs, infrastructure and organizational structures that need to be in place to build out the idea innovation and entrepreneurship across campus.
        - Position the university as an economic development engine for the state.
        - UW Center for Entrepreneurship and Innovation –
        - to include a coordinated cooperate partners program
        - ensure UW and WIN are supported in the respective activities
        - ensure entrepreneurship training and practice available to all students, faculty and staff
        - that there is a heavy focus on the idea of interdisciplinarity and inclusivity
        - better leverage our existing incubator asset
    - Coordination of these activities to ensure that they are aligned with both the WIN and the state's priority economic sectors.
    - Conducted an asset inventory of entrepreneurial and innovative programmatic pieces and recognized that we've got a lot of programs that are aligned but could be more efficient/measured in how we deliver across these different programs.
    - Value added by centralizing these activities in a way that makes them easy to understand, interdisciplinary, inclusive, with easily understood outcomes and engagement, also demonstrating the value of investments made.
    - Honing in on research, teaching, service and engagement around entrepreneurship, innovation. Organizing these activities, keeping in mind how do they align with the state's economic objectives. And also while also supporting entrepreneurship, new business creation.
    - Looking at not only how these pieces come together, but how we operationalize in a way that makes sense while leveraging existing assets.

5. Federal Endless Frontier Act (EFA)
    a. The EFA is a bipartisan bill in Congress that majority leader Schumer and Senator Young are co-sponsoring this. It proposes to invest $100 billion dollars over a five year period to create a new Technology Directorate for the designation of regional technology hubs that are centered in urban areas. The EGA is in recognition of the idea "Without a significant increase in investment in research, education, technology transfer, and the cores strengths of the United States innovation eco- system, it is only a matter of time before the global competitors of the United States overtake the United States in terms of technological primacy. The country that wins the race in key technologies—such as artificial intelligence, quantum computing, advanced communications, and advanced manufacturing—will be the superpower of the future"

b. A group representing rural public universities from north and west rural America met with NSF Director Panchanathan to discuss amending the EFA to include a Rural Midwest Mountain Hub (RMWM) to become a national resource regarding rural issues. Focusing on invigorating a digital work force, research, education, and commerce which offers an integrated curriculum directed to the challenge of emerging cyber space and robotic/AI machine systems, in technical fields and social sciences
c. Work to finalize the language is ongoing. Submission should occur in the next few weeks.

6. NCAR UPDATE – ALLEN
    a. Background: In 2010 the state of Wyoming and the University of Wyoming formed a long term partnership with the University Corporation for Atmospheric Research (UCAR) to create the NCAR-Wyoming Supercomputing Center (NWSC). It is a state of the art Supercomputer Center to support NSF funded research in the geosciences. Wyoming provided contributions of land, power, and some financial investment in the buildings and ongoing operation of the facility. In return, our researchers in Wyoming have access to a large allocation on the NSF funded for supercomputer (around 20%). We have a governing committee that involves NCAR, UCAR, and UW that oversees the partnership and reviews proposals from faculty and researchers, to provide time on the supercomputer. At the time the agreement was made it was envisioned that there would collaboration between NCAR and UW researchers. Mutual research benefits, particularly around the GC problems, will include broadening participation activities. UW researchers have benefited from access to this research facility. It's enhanced our ability to attract and retain computational faculty, and has supported their research.
    b. Updates:
        - There is significant room to increase our collaboration with NCAR car so that we can really leverage the facility for broadening participation regionally, and also to expand the computing infrastructure at the NWSC beyond the NSF supported Earth and Atmospheric Sciences domain the geosciences.
        - We think there's now a great need for the university to reinvigorate the partnership with NCAR and UCAR to expand the supercomputer facility. To enable us to be really competitive for funding that we're pursuing (e.g. Endless Frontier Act), to better work with the new WIN, and growing regional partnerships around the Mountain West. We envisage the expansion of the facility will contribute to the to the President’s pillars that we are focusing on now. It will help us to attract and retain computing and data faculty across all disciplines, including the new potential new School of Computing. It could provide more experiential learning opportunities for students they need now for modern careers. It will help catalyze and support economic development by providing new public private partnerships with Wyoming companies.
        - We have a group (including President Seidel & VP Synakowski) that have been having conversations with the UCAR leadership, with federal agencies including the National Science Foundation, as well as computing companies and potential national lab partners. Our is to find some funding that's going to allow us to deploy additional computing infrastructure at the NWSC, that will support a much broader set of science applications, as well as public private partnerships. We also hope to create a new infrastructure to support the new artificial intelligence applications.

- Recently submitted a couple of large proposals, totaling some $23 million and are awaiting the outcomes of those proposals.
- We've talked recently with the NSF XC project that provides a national computing infrastructure, and we have upcoming meetings with the other agencies including USGS. One of the ideas is to place at the NWSC a smaller version of the DOE Exascale computing project. The DOE recently funded a machine that is to be deployed at the Argonne National Lab. It is to be built by HP and Intel will be the chip provider. If we deploy a smaller version at the NWSC it will make it easier to develop collaborations around the common science and engineering.