

Three Center Directors presented reports detailing their activities from the previous year outlining any major research highlights, grant activity, job creation, and a proposed budget for the coming year.

“EPSCoR & BioSNTR” presented by Jim Rice & Adam Hoppe

Jim Rice, South Dakota EPSCoR Director, gave a brief report on the current National Science Foundation (NSF) project which is integrated with the BioSNTR. The project co-principal investigators participated in a reverse site visit at NSF in April and responded to the reviewers comments May 20, 2016. Pat Lebrun asked if there is a report that shows if projects funded by EPSCoR are still in existence. Jim Rice said there is no numerical data and that it is only anecdotal.

Adam Hoppe began the presentation on Biochemical Spatiotemporal Network Resource (BioSNTR). Some highlights for the FY16 are it has become more sustainable, it has several collaborations with industry partners and initiating additional collaborations. The Center recently conducted a bio-informatics workshop which had 90 people attend and additional workshops are scheduled.

The Center collaborations include SDSU, SDSM&T, USD, Dakota Wesleyan University, Sanford Research, Augustana College, and SAB Biotherapeutics and Inanovate. The Center has 24 pending awards and been awarded 13 for FY16. The 13 awarded total in \$3,714,934. Funding has also increased from external federal funding, additional state funding, and industry sponsored research projects which totals \$8,926,194. The Center has received 19 proposals for seed grants, 6 have been selected for funding, and 5 new BioSNTR members were added. The Center is supporting 17 undergraduates, 20 graduates, and 9.75 researchers which total 43.75 staff. The Center requested a budget of \$2,397,267 for FY17 and to carryover \$600,000 that would be used for Bioinformatics, Therapeutic Antibody, Inanovate collaboration, and Seed Grant Phase II.

Eddie Sullivan, a Research and Commercialization Council member, has agreed to serve on the Advisory Board at BioSNTR and his company, SAB Biotherapeutics, has a collaborative research project with the BioSNTR. Eddie Sullivan has signed a Conflict of Interest Disclosure and disclosed the conflict to the Council members.

Jason Dilges and Brad Wheeler asked about the timing of when the new faculty members were hired into the Center and when they will begin submitting and receiving external grant funding. Adam responded that most of the faculty were hired in 2015 and have set up their labs and are beginning to submit proposals and publications now. This is reflected by the increase in the number of publications and submissions in 2016.

“Composite and Nanocomposite Advanced Manufacturing Center” presented by David Salem

Some of the major research highlights for FY16 include the further optimization of CNAM-DiFTS and they have developed a semi-structural automotive component by working with Continental Structural Plastics. The Center has collaborations with CNAM Industrial Consortium

Members, N12 Technologies, Trion Energy Solutions, SGL, General Motors, ORNL, and Adherent Technologies.

The Center has received more funding from industrial contracts than state and federal. The Center has 3 awards pending for FY16 with 17 awards already given. The total for the 17 awards is \$912,640. Total amount awarded from industrial contracts is \$826,570. The combined total for with state and federal included is \$1,383,844. Center funding also comes from membership fees from CNAM consortium companies which is \$180,000. The Center has 9 faculty members, 7 research scientists and research engineers, 1 technician, 19 graduate students, and 14 undergraduate students. The Center requests a budget of \$400,000 for FY17 and a short term carryover for payroll and supplies in the amount of \$144,686.

Jason Dilges commented that showing that a majority of the funding comes from industry contracts would be well received by legislature.

Jason Dilges asked how the patent rights on projects developed by CNAM are protected when the project is funded by industry. Dr. Salem said the rights are protected by the IP Agreement and that anything they develop belongs to CNAMN. The industry members have the right of first refusal to license the IP.

Jason Dilges asked about what happens to the revenue generated by the licensing of the Center's IP. Nathan Lukkes said the revenue is distributed in accordance with BOR policy 4:34, with the university's share distributed at the discretion of the president to support research, education, scholarship or creative activity. Jason Dilges suggested a policy be put in place to be sure the Center receives some of the revenue generated.

“Advanced Manufacturing Process Technology Transition & Training Center” presented by Christian Widener

Major research highlights include SDMS&T and spin off company VRC Metal Systems continues to be recognized as leaders in cold spray technology. The Center had one journal article published and two more in preparation and has been invited give a talk at an international conference. In 2015, VRC Metal Systems generated \$2 million in sales and is projecting \$6 million in sales in 2016. Cold Spray currently has an approved patent from Australia and is waiting for approval of a US patent.

The Center has collaborations with SDSU, HF Webster/VRC Metals Systems, Core Members, MOOG, United Technologies Research Centers, Penn State, Nordson-Xaloy, American Axle, GRACO, CAT, New Tech Ceramics, Daktronics, and Airbus. Grant activity indicates the Center has submitted 75 proposals in 3 years and 32 of them were successful. For FY16 the Center has 11 pending proposals and 10 have been awarded. The total amount for the 10 awards is \$2,670,960. The Center has 8.5 undergraduates, 6.5 graduates, 10 researchers, and 28.5 industrial staff. The Center spin off businesses currently have 32 employees in South Dakota. The Center requests a budget of \$400,000 for FY16.

Brad Wheeler highlighted VRC being the winner last year of the Giant Vision event.

Research Team Proposals – Nathan Lukkes & Mel Ustad

Nathan Lukkes and Mel Ustad began discussing the Research Team Proposals. Mel Ustad said the proposals were assigned to specific reviewers based on their expertise.

Brad Wheeler asked if Nathan Lukkes and Mel Ustad could provide a brief overview of the first seven proposals which are Center for Acceleration of Research and Development on Electrospun Nanofibers, Center for Advanced Sensors, Consortium for Genetic Influence on Behavioral Health in South Dakota, SD Center for Translational Nanomedicine, SD Center for Biologics Research and Development, Cloud Security Research Center, and the Center for Precision Agriculture.

Pat Lebrun moved that the Cloud Security Research Center not be funded and the other six proposals receive funding. Eddie Sullivan seconded the motion. Motion passed unanimously.

Eddie Sullivan stated that because his company, SAB Biotherapeutics, is involved with research collaboration with the BioSNTR, he has a conflict of interest and will recuse himself from any deliberation and action on the BioSNTR.

Pat Costello motioned to approve the BioSNTR FY 2017 budget and carry over request. Paul Batcheller seconded the motion. Eddie Sullivan abstained from voting. Motion passed unanimously, 5-0. Motion approved.

Paul Batcheller motioned to approve the AMPTECH FY 2017 budget request. Pat Costello seconded the motion. Motioned passed unanimously, 6-0. Motioned approved.

Pat Lebrun motioned to approve funding the CNAM FY 2017 budget and carry over request. Motioned passed unanimously, 6-0. Motion approved.

Brad Wheeler asked if there was any additional business. Being none he adjourned the meeting.

Meeting adjourned at 5:10pm.