

CENTERS OF EXCELLENCE COMMISSION

Meeting Minutes

October 26, 2016

ND Department of Commerce
1600 East Century Avenue, Suite 2
Bismarck, ND 58503
Fort Ransom Conference Room

CALL TO ORDER

Welcome & Opening Comments:

Chairman Mark Nisbet called the meeting to order at 1:30 pm. Chris Kalash Introduced Jill Schwab who is now the Boards and Commissions Specialist for the Office of Innovation and Entrepreneurship.

Commissioners Present in Person: None

Commissioners Present by Phone: Mark Nisbet, Greg Stemen, Mike Ness, Kevin Melicher, Tim Hennessy

Commissioners Absent: Jim Traynor

Guests Present in Person: KouhyarTavakolian, Reza Fazel-Rezai, Fartash Vasefi, Al Anderson, Justin Dever, Chris Kalash, and Jill Schwab

CONSENT AGENDA

Chris Kalash provided an overview of the consent agenda items:

- Change Request for Timeline extension - RND - Developing Intuitive Parking Software with FedEx using High Performance Computing
- Change Request for Timeline extension – VP1 - Continued Development of Commercialization of Quality Characterization Technology for 3D Printing
- Disbursement Request – RND - Determining Crop Harvest Readiness Using UAV and Thermal Infrared Sensors (\$31,145.50)
- Disbursement Request VP1 - Development of a Mobile Medical Application for the Analysis of Hand Arthritis (\$50,000)

Motion: Mike Ness moved to approve the consent agenda items. Greg Stemen seconded the motion. Motion carried on a voice vote.

COMMISSION BUSINESS

Research ND – Consideration of combined re-submission of Research ND grant - Management and Monitoring of Psoriasis Patient Treatment using a Mobile Application and Nevuscope: A Mobile Health Solution for Melanoma Management

Kouhyar Tavakolian stated that the project was combined to remove equipment expenses, timeline stayed the same, and the budget was increased to \$600,000 for both projects including the match. There were common themes throughout both projects and they use the same platform technology, so it made sense to combine them.

Mike Ness asked whether the match amount is the same? Kouhyar Tavakolian stated that the match amount was \$280,000. It was increased by \$20,000 to \$300,000 due to market analysis.

Kevin Melicher believes that the projects (specifically melanoma in ND and rural areas) may have a higher significance than psoriasis.

Greg Stemen expressed concerns at the previous meeting about the lack of economic impact on ND and the conveniences it could bring to ND patients. This technology would be extremely beneficial and the conveniences could mean a lot to the people across the state.

Motion: Kevin Melicher moved to approve the updates to the Research ND and Venture proposal and approve the funding. Mike Ness seconded the motion. Motion carried on a roll-call vote as follows:

Mike Ness – aye

Greg Stemen – aye

Kevin Melicher – aye

Tim Hennessy – aye

Mark Nisbet - aye

Venture Grant Phase I: Push Button Adhesion Control - Change Request for timeline extension

Chris Kalash reported that a timeline extension is being requested to change the end date to 12/30/2016. The grant expired on 9/1/2016 and the final report is due on November 1, 2016. The PI and the tech transfer office had a miscommunication and the IP protection was not completed. Dr. Croll has assured Chris Kalash that the final report can be completed on time; however, he does need an extension to be able to pay the tech transfer office to complete the IP protection work.

Motion: Kevin Melicher moved to allow the timeline extension request. Tim Hennessy seconded the motion. Motion carried on a voice vote.

Research ND: UAS Sensor Payload Development for Rescue Operations - Change Request for timeline extension and Budget Revision

Chris Kalash stated that Cyclops is asking for an end date of September 1, 2018. The original end date was March 1, 2017. Several students have graduated and moved onto careers in industry, so the team needs to be rebuilt. The originally budgeted research engineer will not be needed which was a large portion of the budget. Those funds will be used to pay two grad students and a PI after they are hired. They also want to reallocate a portion to pay a part-time consultant (9 months at \$7,100 per month) to design the impact resistant enclosure for the sensor and to assist in the coordination of the field testing, to provide onsite field testing support, and contribute to the final report. These responsibilities require a person with a mechanical engineering background, project management, and technical writing skills which are outside the capabilities of the NDSU engineering department staff. They will have a third prototype by the end of the project. NDSU originally budgeted over \$100,000 for the research engineer position.

Motion: Tim Hennessy moved to allow the timeline extension request and budget revision. Greg Stemen seconded the motion. Motion carried on a voice vote.

ADMINISTRATIVELY APPROVED CHANGES AND REPORTS

Payment of Solix Invoice – August Competition

Chris Kalash reported that Solix was paid \$8,000 on October 6, 2016, for the August 2016 competition round to complete reviews of 3 Venture Grants and 2 Research ND grants.

Phase 1 Venture Grant – Minor Budget Change Request - Nanospheres to provide commercially important new properties to paints and coatings

Chris Kalash updated the Commission on Research ND and Phase 1 Venture Grant initial disbursements. The PI requested to move \$3,502 from other Direct Costs - Instrument Fees to Salaries and Fringe Benefits. A timeline extension was approved, but did not have enough funding to pay the grad students to work through December 31, 2016. This request is far less than 20% of the budget.

Phase 1/2 Venture Grant – Minor Budget Change Request – process and applications research and development for soy-based materials for industrial applications

Chris Kalash updated the Commission on Research ND and Phase 1 Venture Grant initial disbursements. This project is requesting to move \$3,248.73 from Other Direct Costs-Instrument Fees to Salaries and Fringe Benefits in the budget. Based on the project needs, it was necessary to utilize the 10 L reactor located in RIA. This reactor is operated and maintained by Jim Bahr. As a result, it was necessary to involve Jim Bahr for the project and to allow him to charge time to the project. Since the extensive use of the 10 L reactor was not originally anticipated when the project was budgeted, the budget needs to be changed to accommodate the need for Jim Bahr's time.

Phase 1 Venture Grant – Minor Budget Change Request – Production of Modified Silicon quantum dots for Sensor Applications

Chris Kalash updated the commission on Research ND and Phase 1 Venture Grant initial disbursements. Travel was not used, chemicals came in under budget, market analysis was done by staff rather than using a consultant, and rent was slightly less than budgeted. These funds will be moved to salaries/benefits for PI and a Technical Assistant. Since their rent was slightly less, salaries are going to be moved.

OTHER INFORMATION

Phase I Venture Grant Interim Reports

Nanospheres to provide commercially important new properties to paints and coatings

Chris Kalash stated that all reports appear to be in order.

Development of Micro Cold Spray Print System

Chris Kalash stated that all reports appear to be in order.

Commercial Feasibility of Novel Renewable Based Polyamide Thermoplastics

Chris Kalash stated that all reports appear to be in order.

Research ND Final Report – Law Enforcement Unmanned Aircraft Systems Research Project

Chris Kalash stated that all reports appear to be in order.

Kevin Melicher asked whether we've given this project two previous extensions?

Chris Kalash stated that a one year extension was granted along with a 6 month extension to finish the project.

Review of 2015 Centers of Excellence Monitoring Report

Chris Kalash gave an overview of projects he has reviewed for 2015 Centers of Excellence below:

NDSU – Center for Advanced Electronics Design & Manufacturing: Center is continuing work with current partners but would like to add more. UAS appears to be a promising industry. Work is planned in this area with Cyclops Technologies – a Research ND grant PSP awarded in August 2016 (**Project is on Track**)

Kevin Melicher asked whether they received \$15 million from their match and from the COE as well?

Justin Dever stated that the COE provided \$3 million, other entities provided \$15 million. Their application did not identify job creation projections. They work with companies which have job impacts in the area such as Appareo which has grown considerably in Fargo.

NDSU – Center for Surface Protection: The Center continues to grow its capabilities and areas of expertise. CSP has brought NDSU to the forefront in the area of corrosion research (**Project is on Track**)

Greg Stemen mentioned that the predicted jobs were 80 and there currently are 2. Are they related?

Chris Kalash stated that those jobs are people working at the Center. It would be great if the data was a cumulative number that the Center was sharing.

Justin Dever mentioned that this project could potentially continue through 2018.

Al Anderson reported that not only did Marvin Windows hold onto a lot of jobs in North Dakota (when losing other areas) along with Caterpillar, so it may be helpful to make the case that without having this Center, we would not have been able to retain jobs and provide company expansions.

Mark Nisbet agreed that it is a bit concerning, but that it has helped the vitality of North Dakota's economy and manufacturing plants were lost from 2008-2013.

Kevin Melicher believes that a large part of what we do is stimulate the economy in North Dakota through job creation.

LRSC – Dakota Precision Ag Center: As a Center, they have spent all of their funds (\$3.1 million). The DPAC has been at the forefront, and is the only academic unit within the state of North Dakota to deploy in-field testing and evaluation of precision ag technologies. It has repeatedly been in the lead advocating for use of approved and tested technologies in order to improve operational efficiencies of agricultural producers and lighten environmental footprints. As a result, adoption of these technologies by North Dakota agricultural producers has reached an all-time high. The ripple effect on services and goods provided by agricultural implement dealers, satellite imagery

providers, precision ag consultants, and crop consultants has been great. The precision ag industry now accounts for millions of dollars in annual revenue from sales and services within ND alone (**Project is on Track**)

NDSU – Center for Agbiotechnology: Oilseed Development: The Center will continue its focus on development of hybrid parents whose combinations as hybrid crops meet the needs of the North Dakota canola seed and processing industry (**Project is on Track**)

UND Research Foundation – Centers of Excellence in Life Sciences and Advanced Technology: Work is being done to market the space to potential tenants. ZymeFast became a tenant at the Tech Accelerator in March 2016 shortly after NovaDigm left the building in February of 2016. COELSAT was released from post-award monitoring by the COE Commission in August of 2015 (**Did Not Meet Expectations**)

Al Anderson believes this will be a good investment; however, it did not meet expectations (80% required to break-even financing). UND wants to double the research ability and use of the UND Med School and this building may play a role in that.

Kevin Melicher agrees that they need improvement and UND has buildings that need to be reallocated/changed and this could be placed in that category.

UND – Unmanned Aircraft Systems Center of Excellence: The Center is continuing to add capabilities and partners in the areas of research, training, and education. This Center was a contributing factor in North Dakota being designated by the FAA as one of six UAS test sites. A training contract for training international pilots using PMATS has been signed (**Project is on Track**)

DSU Strom Center for Entrepreneurship & Rural Revitalization – Institute for Technology & Business: The progress that this Center has made was very promising. Dickinson State University announced it would close the Center in April of 2016 (**Did Not Meet Expectations**)

Mark Nisbet asked where are the jobs located?

Justin Dever responded that the Center had actual job numbers which were more than predicted and harness jobs were located at Killdeer Mountain Manufacturing and also the KMM Dickinson location.

NDSU – Center for Biopharmaceutical Research & Production: The COE Commission heard and approved a request to terminate the Center on June 23, 2015 (**Did Not Meet Expectations**)

Motion: Greg Stemen moved to accept the 2015 Centers of Excellence Monitoring Report as follows:

CAEDM - On Track

CSP - On Track (although job creation is a concern)

LRSC DPAC - On Track

Agbio - On Track

COELSAT - Did Not Meet Expectations

UAS COE - On Track

Strom – Did Not Meet Expectations

CBRP - Did Not Meet Expectations (with the understanding that not all projects succeed)

Mike Ness seconded the motion. Motion carried on a voice vote.

ADDITIONAL DISCUSSION

Mark Nisbet mentioned that XCEL Energy will be acquiring a 150 MWh wind farm in Dickey County called Fox Tail. An announcement will be forthcoming shortly.

The next meeting will be scheduled for November 2016 in Fargo, ND.

ADJOURNMENT

There being no further business, the meeting adjourned at 3:00 p.m.

Mark Nisbet 11/30/16
Date

Mark Nisbet, Chairman

Jill Schwab 10/26/16
Date

Jill Schwab, Recorder