### Minutes of the Research, Economic Development & Innovation Committee University of Wisconsin System Board of Regents

#### UW-Stout October 5, 2017

Regent Tim Higgins convened the meeting of the Research, Economic Development, and Innovation (REDI) Committee at 8:35 a.m. Regents Erickson, Higgins, and Tyler were present. Regent Hill and Klein joined remotely via teleconference.

# a. Approval of the minutes of the July 6, 2017, Meeting of the Research, Economic Development, and Innovation Committee

Regent Higgins asked for a motion to approve the minutes of the July 6, 2017, REDI Committee meeting. A motion was made by Regent Tyler and seconded by Regent Erickson to approve the minutes as presented. Motion carried unanimously.

## b. UW-Stout Focus on Economic Development, Undergraduate Research, FabLabs, and Business Partnerships

Chancellor Bob Meyer welcomed the REDI Committee to UW-Stout and noted that, from an economic development and business outreach perspective, every academic program on campus has an advisory program with employer partners. He noted that the campus places a strong emphasis on experiential learning, with over 90 percent of UW-Stout programs incorporating this feature. Last week, the campus hosted 413 employers who participated in career fair events and student interviews.

UW-Stout Discovery Center Executive Director Randy Hulke provided an update on strategic initiatives and business partnerships led by his team of experts. Hulke's presentation summarized recent accomplishments and provided a status update of federal and state partnerships, including the recently expanded Wisconsin Fab Lab initiative. He also noted that Fab Labs are open to all students regardless of major, and highlighted the Center's alignment with state workforce needs. Lastly, Hulke highlighted campus participation in a 48-hour design competition held at the National Science University of Moscow where UW-Stout students took the Best Presentation award.

Larry Blackledge, Director of the UW-Stout Manufacturing Outreach Center (MOC), noted that, as reported by clients over the last year, the MOC produced \$41 million in cost-savings, sales, and investment, and supported the addition of 368 jobs to the state's economy.

Joni Geroux, Director, Professional Education Programs and Services, highlighted the Center's partnership with the WEDC and the ExporTech program that accelerates Wisconsin business in international markets. One such client is Northern Star Fire, a startup that has developed an innovative safety tool for firefighters and is expanding into markets beyond the United States. She noted that 50 educational programs at UW-Stout have built partnerships with 3,500 external

partners and support a regional tech park that employs 2,400.

Elizabeth Buchanan, Director of Research and Sponsored Programs, shared several UW-Stout student research success stories and emphasized the campus focus on a "hands on/minds on" approach to high-impact practices that connect students with business experiences. She noted faculty efforts to oversee peer-reviewed student research published on campus. Over the past year, students have taken on research projects in Canada, England, and Malawi.

During discussion, Regent Higgins highlighted the REDI Committee's strategic plan to help the comprehensive campuses strengthen outreach initiatives with business. He asked how UW-Stout has accomplished this. Hulke said the support of WiSys has been very helpful, specifically the WiSys three-day start-up special event that helped to spur business start-ups within the UW-Stout community. He also referenced the Wisconsin Big Idea event as a prime example of this type of collaboration. Additionally, Hulke expressed that the dual UW/WEDC partnership role Dave Brukardt holds has helped to broaden university business partnerships. The highly successful FabLab program was also mentioned as a key example of the work with UW-Extension for business development across Wisconsin.

Higgins pointed out faculty engagement in undergraduate research and other high impact practices that have been a focus of discussion and policy support at REDI. Chancellor Meyer characterized his experience with the MOC, which helped him to be a better teacher when he served in a faculty role earlier in his career. Chancellor Meyer encouraged Regents to support efforts to better capture the value of faculty release time that does not fit within the semester framework. He said the campus is focusing on creating more fellowships to support the funding of additional flextime.

Regent Tyler wondered how UW-Stout was integrating new technology breakthroughs with classroom instruction. Chancellor Meyer said the business advisory committees play a key role in ensuring classrooms are up to date and at the leading edge. He pointed out UW-Stout's partnership with Thompson Reuters, which provides the latest in technology for certain programs, and he noted UW-Stout's partnership with UW-Milwaukee on the Internet of Things (IoT) programming. He said that manufacturers are helping to shape the curriculum and to foster cross-disciplinary teams. He specifically noted that the MOC also helps to create a bridge between manufacturers and classroom.

## c. Wisconsin Economic Development Corporation (WEDC) – Channeling Tomorrow's Talent through Partnerships, FabLabs, and More

Industry Sector Director Kathy Heady highlighted WEDC's efforts to collaborate with UW-Stout to support the launch and significant expansion of the FabLab program, which represents the largest statewide rollout anywhere in the United States.

Heady acknowledged WEDC's appreciation for the opportunity to work with all of the UW campuses on a variety of projects and programs that support innovation and economic development, or provide new ways to help Wisconsin businesses thrive. She noted that the long and deep (multi-year) partnership with UW-Stout continues to grow.

From a career development perspective, WEDC supports the Inspire program for sixth to twelfth

grade students and the Career Cruising initiative that introduces and allows students to explore career opportunities. Heady's comments focused primarily on the state's FabLab initiative, now in its second year of deployment with a total of 46 WEDC grants distributed to 34 school districts. A second round of funding will expand the program even further this year.

The FabLab initiative is the latest iteration of WEDC's partnership with UW-Stout. Heady said that UW-Stout brings expertise that has helped the program achieve the high level of success it enjoys today. UW-Stout has prepared a best-practices assessment and guidance for FabLab implementation across Wisconsin and also has held a teacher retreat and regional workshops to support the instructional portion of the program. She said WEDC is always looking for new ways to expand the UW-Stout partnership in the future and welcomes the opportunity to work with other UW System campuses.

In discussion, Mark Tyler said that from conversations had at the NGA Conference in Oregon this summer, it was clear that Wisconsin is leagues ahead of other states with FabLab programming, and that the state is already starting to see incredible results. Fab Labs are a way to differentiate how we can engage youth and help them to understand career opportunities.

Regents Hall and Klein complimented WEDC and UW-Stout for the partnership on FabLabs and encouraged program managers to continue to monitor best practices. Heady noted that UW-Stout has worked closely with Stanford and MIT to monitor program enhancements and to continue to capitalize on new opportunities as they become available.

#### d. UW-Extension Update on Business and Entrepreneurship Unit, and Big Data:

Chancellor Cathy Sandeen introduced Mark Lange as the leader of the unit best known for Small Business Development Centers (SBDCs) and the Center for Technology Commercialization. She noted that Mark himself is an entrepreneur who is constantly coming up with new ideas to support startup success and help existing businesses grow.

Lange began by explaining that Big Data represents large datasets configured in a way that allows them to be sorted and analyzed. He said the UW-Extension Big Data initiative offers access to data from millions of businesses. Lange said the UW-Extension's Big Data site is providing information previously unavailable to small businesses. This advancement will allow access to 20 years of data for tracking and analyzing trends in business activity, and is sortable down to the county level. The datasets are available on Youreconomy.org and access is free to UW System researchers.

Data Analyst Greg Cole explained that the Your Economy site includes 144 million total records in a format that is unavailable elsewhere. The site provides data on jobs, industry sectors, and can track where growth is happening and where and when businesses come and go. Access to such world-class data analytics and reporting helps businesses identify opportunities for growth and allows them to target their outreach and marketing efforts to the most likely prospects.

During discussion, Mark Tyler asked if the SBDCs could use this database to identify early warning signs. Lange said this is one possible use for the dataset. Lange said the program will first be made accessible to economic developers in Wisconsin. He also noted that the database will be introduced to city and county stakeholders in attendance at the Governor's Northern

Economic Summit in Trego, Wisconsin, later this month.

Regent Hall expressed a desire to use the database to assist business development initiatives among diverse stakeholders and entrepreneurs. Lange offered to meet with Regent Hall to help familiarize her with the possibilities.

Regent Higgins adjourned the meeting at 10:05 a.m.