

MINUTES OF THE RESEARCH, ECONOMIC DEVELOPMENT & INNOVATION COMMITTEE

UNIVERSITY OF WISCONSIN SYSTEM BOARD OF REGENTS

Thursday, October 7, 2021

UW Oshkosh and WebEx Videoconference

REDI Chair Bob Atwell called the meeting to order at 8:45 a.m. Regents Héctor Colón, Rodney Pasch, Cris Peterson, and Brianna Tucker were present. Regent Atwell provided an opportunity for committee members to declare any conflicts of interest; none were so stated.

a) Approval of the minutes of the July 8, 2021 meeting

The minutes of the July 8, 2021, REDI Committee meeting were unanimously approved on a motion by Regent Colón and seconded by Regent Peterson.

b) UW Oshkosh: Building a Better Talent Pipeline through Undergraduate Research, Economic Engagement, and Business Outreach

Vice Chancellor Bob Roberts and Brian Langolf, Director of the UWO Biogas program provided an overview of their work in building a talent pipeline that involves business partnerships at two innovative bio-digester sites. Biogas continues to be a proven, pioneering academic and research pursuit and sustainable source of energy. This research initiative is representative of the impactful programs UW-Oshkosh supports to drive innovation and to foster outreach across the region and beyond.

The institution continues to partner with employers who are leveraging various technologies. One facility produces approximately 8 percent of the University's electrical needs and is converting 10,000 tons of yard and food waste per year and producing up to 3,300 megawatts of electrical energy annually. Brian Langolf pointed out that this facility's operations are primarily student-led.

The Allen Farms biogas project and technology involves the first small-scale biogas system in Wisconsin, a partnership with Agra Energy Corporation based in California. Tony Long, President of Agra Energy, provided details about the project, which is optimizing the process of producing electricity from methane derived from manure. He emphasized that students with experience on this equipment are highly sought for employment in this rapidly growing field.

President Long pointed that talent from this campus and expertise from the UW-Oshkosh Chemistry department and other university units have helped to take his business to new levels. Regent Peterson encouraged Agra to continue its efforts to enable this technology to become more affordable for smaller farms in the future, thereby opening new sources of revenues in a challenging economic environment.

c) Focus on the Future: Preparing Talent to Address Tomorrow’s Workforce Needs – Employer Panel

New North Vice President of Talent Development Rebecca Deschane served as moderator of a panel discussion featuring regional business leaders who run small, medium, and large companies. She noted that we’re in a “sans-demic” with too few workers available to fill the many and growing job needs in all industry sectors.

The committee heard from CEO Dan Ariens who joined virtually from Germany. Ariens is investing millions in plant, equipment, and additional infrastructure in the U.S. and in Europe to maintain and increase his firm’s competitive edge. He emphasized that employers don’t need additional assistance creating jobs, but rather help in getting people to work and staying at work.

UW Oshkosh alumnus Dave Richter, Vice President of Operations at Silver Star Brands, said his hiring team is struggling to fill its open positions and estimated Silver Star would need to hire 100 people in the next 30 days to fully address current staffing needs. Due to chronic staff shortages, Silver Star has invested more than \$1 million to automate its distribution center processes.

The third employer panelist, UW Oshkosh alumna Rebecca Timmins, is co-founder of Celebrate Neurodiversity. She noted that childcare is a critical component of labor participation. Even though flexible scheduling and increased pay ranges are becoming more common, the challenges to hiring and sustaining a strong workforce continues to affect her business.

Deschane closed the panel discussion by acknowledging that the workforce-related conversation is not new, but one in which UW and Wisconsin employers have engaged several times over the last several years and one which will continue.

d) UW-Madison School of Computer, Data & Information Sciences (CDIS): Driving a Strong Innovation Ecosystem and Educating Talent to Support Fast-Growing, Competitive Industry Needs

John Karl Scholz, UW-Madison Provost and Vice Chancellor of Academic Affairs, opened this presentation by noting CDIS represents the largest and most popular set of majors on the flagship campus. Remzi Arpaci-Dusseau, Chair of Computer Sciences, told Regents that software (computing) is “eating the world.” He said that today, six of the top-10 companies in the world are software firms. He also noted that computing and data are also “eating science,” and that it’s not machines which will replace chemists; it is chemists who use machines that will replace chemists who do not do so. He also pointed out that there are 6,600 open computing jobs in Wisconsin and that the state’s post-secondary schools combined barely meet 15% of this workforce demand. He also noted Madison has had the largest percentage growth in tech jobs in the U.S. during the last two years.

Tom Erickson, Founding Director of CDIS, said a new school was created to increase research capabilities, to produce more digitally fluent talent, and to build more effective and enduring business partnerships. Just a few days ago, CDIS announced plans to construct a new \$225 million facility that will be privately funded and will serve as a tech hub on campus. Erickson said it will serve as a centerpiece on campus and will represent a “digital lighthouse” for the state.

Erickson pointed out that student access is a key priority for CDIS and that there are no enrollment limits for students across all majors who would like to take a class to explore this topic area. The school makes it a priority to create courses that can be widely accessible to anyone interested in exploring the field. CDIS is also devoting resources to expand relations with regional industry partners. As a result, CDIS has become a magnet for students from all majors, and 100 percent of its graduates find themselves employed on or before graduation. Although the CDIS program has grown exponentially since its initial launch, in answer to a question about constraints from Regent Atwell, Erickson said CDIS expansion has been hampered by chronic funding shortfalls. The ability to expand academic and outreach programs across the state, both in the K-12 setting and in workforce training, could be dramatically enhanced with additional funding.

CDIS industry partner Michael Ellis, Johnson Controls (JCI) Executive Vice President and Chief Customer and Digital Officer, highlighted JCI’s partnership with UW-Madison and touched on numerous joint efforts to support the Internet of Things (IoT) and smart building technologies. He said that commercial buildings consume 40% of the world’s energy, and a main focus of the JCI-UW partnership is to help reduce the energy footprint of buildings. This occurs through the application of Artificial Intelligence (AI) to analyze and accelerate building efficiency and sustainability, thus further improving the experience of the people occupying buildings. Ellis sees this effort continuing to grow and called the combination of hardware and software (data intelligence) a cornerstone for economic growth in Wisconsin and worldwide.

Due to time constraints, no additional discussion ensued. Regent Atwell thanked the presenters and adjourned the meeting at 10:12 a.m.