

1/19/17

BOARD OF REGENTS OF THE UNIVERSITY OF WISCONSIN SYSTEM

- I.4. Research, Economic Development,  
and Innovation Committee
- Thursday, February 2, 2017  
9:00 a.m.-10:30 a.m.  
Union South, Varsity Hall II  
UW-Madison  
Madison, Wisconsin
- a. Approval of the Minutes of the December 8, 2016, Meeting of the Research, Economic Development, and Innovation Committee
- b. Strengthening UW-Madison's Research Capacity and Competitiveness – Led by Vice Chancellor for Research and Graduate Education Marsha Mailick
- Presenters: Paul Weiss, Managing Director of Venture Investors  
Dr. Nadine Connor, Professor of Communication Sciences and Disorders and Surgery  
Heidi Kletzien, PhD student in the Department of Biomedical Engineering
- c. Dairy Science at UW-River Falls: Supporting a Key Wisconsin Industry through Engaged Learning and Regional and Global Partnerships – Led by Chancellor Dean Van Galen and Dale J. Gallenberg, Dean of the College of Agriculture, Food and Environmental Sciences
- d. A Collaborative Approach to Supporting Research, Community Engagement, and Student Involvement – Led by UW System Vice President James Henderson

**UW-MADISON FOCUS ON RESEARCH  
STRENGTHENING UW-MADISON'S RESEARCH  
CAPACITY AND COMPETITIVENESS**

**BACKGROUND**

As the state's largest research enterprise, UW-Madison expends more than \$1 billion annually to support discovery and innovation processes. Wisconsin taxpayers enjoy a tremendous return on their investment in the state's flagship university. A 2015 study found that for every state taxpayer dollar spent on UW-Madison, the university generates \$24 for the state economy, accounting for \$15 billion in economic impact statewide.

UW-Madison, UW Hospital and Clinics, and the university's affiliated organizations and startup companies support 193,310 Wisconsin jobs and generate more than \$847.5 million in state and local tax revenue. UW-Madison research has fostered the formation of at least 311 startup companies in Wisconsin. The startup companies support more than 24,972 jobs and contribute approximately \$2.3 billion to the Wisconsin economy. Collectively, these efforts contribute significantly to UW-Madison's status as a primary generator of economic and business development for the state of Wisconsin.

Today's presentation, led by Vice Chancellor for Research Marsha Mailick, is the third in a series on the research enterprise at UW-Madison and its impact on the citizens and communities across Wisconsin and beyond.

During today's presentation, Mailick will be joined by Paul Weiss, managing director of Venture Investors; UW-Madison Professor Nadine Connor; and UW-Madison graduate student Heidi Kletzien.

**REQUESTED ACTION**

Information only.

**DISCUSSION**

For the first time since 1972, UW-Madison is not ranked in the top five research institutions, according to research expenditures data collected and reported by the National Science Foundation. Vice Chancellor Mailick will present information on recent research expenditure trends for UW-Madison and peer universities; discuss efforts that other states and universities are undertaking to increase their competitiveness and research portfolios; and present information on steps that UW-Madison is undertaking to further strengthen its research capacity and competitiveness.

Following is background information on additional presenters:

Paul Weiss is the managing director of Venture Investors where he focuses on the firm's therapeutics practice. Paul has over 20 years of operating experience in the biotech and pharmaceutical industries. In addition, he is a member of WARF's Biopharmaceutical Accelerator Program and a member of the Board of Visitors for the Waisman Center. Weiss earned his MBA and PhD in biochemistry from UW-Madison.

Nadine Connor, PhD, is a UW-Madison Professor of Communication Sciences and Disorders and Surgery. Her research is in the area of communication and swallowing disorders. She has had extramural funding for her research since 2000. Professor Connor is currently serving as Interim Vice Chancellor for Research Policy and Compliance.

Heidi Kletzien is a PhD student in the Department of Biomedical Engineering at UW-Madison who studies with Dr. Connor. Kletzien is studying why muscle function in the head and neck may decline with aging and how exercise therapies for the treatment of swallowing disorders affect target muscles. She completed her BA degree at the UW-Madison and was a member of the NCAA championship UW women's hockey team in 2006 and 2007.

#### **RELATED REGENT POLICIES**

Not Applicable.

**DAIRY SCIENCE AT UW-RIVER FALLS: SUPPORTING A KEY  
WISCONSIN INDUSTRY THROUGH ENGAGED LEARNING  
AND REGIONAL AND GLOBAL PARTNERSHIPS**

**BACKGROUND**

As the University of Wisconsin System's westernmost campus, UW-River Falls is located in the St. Croix Valley, a region known for its dynamic and rapidly growing economy. Guided by its strategic plan, *Pathway to Distinction*, UW-River Falls has recently launched new academic programs in agricultural engineering, data science, and neuroscience. UW-River Falls is also committed to supporting a culture of innovation and providing student opportunities to engage in high-impact practices including undergraduate research, study abroad, and internships.

UW-River Falls continues to boast strong programs and outreach activities in agriculture. Currently, the university's College of Agriculture, Food, and Environmental Sciences enrolls 1,400 undergraduate students across 12 different majors. Teaching, research, and outreach activities are supported by two laboratory farms, and a highly successful industry internship program contributes to the College's active learning environment, which emphasizes hands-on experiences in real-world settings.

The UW-River Falls Dairy Science program, with over 140 students, enjoys strong partnerships with Wisconsin's dairy industry and related business sectors. In support of the university's emphasis on internationalization and Wisconsin's interest in broadening agricultural markets, the university has played a role in extending Wisconsin's reach with respect to agriculture around the world.

**REQUESTED ACTION**

For information only.

**DISCUSSION**

UW-River Falls has one of the largest undergraduate dairy science programs in the nation, with a focus on experiential learning and providing students with relevant business experiences. Campus outreach to the dairy and related industries is extensive. For example, numerous industry partners have joined the Wisconsin Cheese Makers Association in providing philanthropic support for renovation of the UWRF Dairy Pilot Plant, home of Falcon Foods cheese and ice cream. The renovated Dairy Pilot Plant will enhance student experiences, and facilitate training and testing for the dairy industry.

Additionally, UW-River Falls has served as an effective partner for the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) in facilitating international partnerships and economic development opportunities.

Dale J. Gallenberg, Dean of the College of Agriculture, Food, and Environmental Sciences, and Jennifer Lu, Economic Development Consultant with the Wisconsin International Agribusiness Center/DATCP, will join Chancellor Van Galen for the presentation.

**RELATED REGENT POLICIES**

Not applicable.

February 2, 2017

Agenda Item I.4.d

**A COLLABORATIVE APPROACH TO SUPPORTING RESEARCH, COMMUNITY  
ENGAGEMENT, AND STUDENT INVOLVEMENT – LED BY  
UW SYSTEM VICE PRESIDENT JAMES HENDERSON**

**BACKGROUND**

The University of Wisconsin has a century-old tradition of connecting with industries and supporting economic development in the state through a concept called the “Wisconsin Idea.” The concept was first articulated in 1904 by then-president Charles Van Hise who believed the boundaries of the university are the boundaries of the state, and that every citizen of the state should benefit tangibly from the research, education, information, and inspiration offered through the University of Wisconsin.

The “Idea” contributed directly to the growth of the Wisconsin dairy industry by providing the most current research from the University of Wisconsin-Madison to small dairy operators in all corners of the state through the University of Wisconsin-Extension system. This pattern has been repeated through the decades, supporting economic development and growth in a flexible, dynamic way.

Over the past five years, the University of Wisconsin System has analyzed opportunities for increasing its connectivity with business and industry and studied best practices to determine how to move forward strategically to support the needs of its 180,000 students and 40,000 faculty and staff in their efforts to connect with new start-up companies, existing businesses, and with other key stakeholders who benefit from accessing university talent.

In order to emphasize the importance of the university’s mission of outreach and service, the UW System Board of Regents, the governing body of the UW System, created a permanent committee, the Research, Economic Development, and Innovation Committee (REDI), charged to adopt policies and develop strategies to strengthen the UW System’s overall contribution to the economic development of the state – and to support professional development, outreach, and research at all UW System institutions.

**REQUESTED ACTION**

For information only.

**DISCUSSION**

UW System Vice President James Henderson will provide an update on UW System initiatives to support faculty and student engagement across specific areas of overarching areas of interest.

Fostering a sustainable culture of collaboration requires engagement from all levels of the academic organization. Faculty who have received recognition for work done in teaching, research, and community service provide inspiration to others and help to strengthen connectivity among students, business, and government partners in more meaningful and authentic ways. With these forces as backdrop, the UW System will continue to build stronger Triple Helix connections among educational, business, and governmental partners.

**RELATED REGENT POLICIES**

Not applicable.