

BOARD OF REGENTS OF THE UNIVERSITY OF WISCONSIN SYSTEM

I.4. Research, Economic Development,
and Innovation Committee

Thursday, February 7, 2019
10:45 a.m. – 12:00 p.m.
UW-Madison, Union South, 2nd Floor
Varsity Hall II
1308 W. Dayton Street, Madison, WI

- a) Approval of the Minutes of the December 6, 2018, Meeting of the Research, Economic Development, and Innovation Committee
- b) UW-Madison Update on UW2020 Research and Innovation Grants
- c) UW-Eau Claire Finance Teams Create Innovative Partnerships
- d) Regent Scholar Update – WiSys Perspective on the Growth of Innovation and Entrepreneurship

UW-MADISON UPDATE ON UW2020 RESEARCH AND INNOVATION GRANTS

BACKGROUND

The UW2020 Discovery Initiative is designed to stimulate and support cutting edge, multi-disciplinary research at UW-Madison and to support the acquisition of shared instruments and equipment that open new avenues for significant research. The Wisconsin Alumni Research Foundation (WARF) is underwriting this initiative to further strengthen UW-Madison's research capacity and global competitiveness. WARF's mission is to support scientific research within the UW-Madison community by providing financial support, actively managing assets, and moving innovations to the marketplace for a financial return and global impact.

Current UW2020 projects showcase UW-Madison's forward-thinking faculty and staff researchers and complement previous rounds of UW2020 projects. Related to this effort, the UW-Madison Graduate School also provides direct support for some research assistants.

Led by Interim Vice Chancellor for Research Norman Drinkwater, the UW-Madison presentation will provide an update on the UW2020 initiative which has provided 66 grants totaling approximately \$25 million to faculty since its inception in 2015.

REQUESTED ACTION

Information only.

DISCUSSION

Vice Chancellor Drinkwater will provide introductory remarks on the UW2020 initiative. He will be joined by:

- Victor E. Cabrera, Associate Professor of Dairy Science, who will discuss his UW2020 project, "A Virtual Dairy Farm Brain: The Next Big Leap in Dairy Farm Management Applying Artificial Intelligence;"
- Emily Stanley, Professor of Zoology, who will discuss her UW2020 project, "Seeing the Hydroscape: Developing a New Approach for the Study of Inland Waters."

Professor Cabrera's project involves colleagues from UW-Madison Departments of Dairy Science, Computer Science, and Agricultural Economics and professionals from UW-Extension. The project incorporates a virtual dairy "farm brain" that could become the new paradigm that transforms the way dairy farms operate. It has significant potential for extramural funding as well as potential for commercial application. The project is especially important and relevant to Wisconsin, where dairy activities contribute half of the agricultural economy, have an impact of \$43 billion a year, and support 80,000 jobs.

Professor Stanley's project explores new approaches for measuring water quality in real-time and has led to the development and improvement of the Fast Limnology Automated Measurement platform

(FLAMe). This technology allows researchers to generate maps of surface water quality that both illustrate the spatial variability within lakes and rivers and provide the datasets needed to understand underlying causes and ecological consequences. Stanley's lab is also experimenting with integrating new measurement technologies that would allow the rapid pinpointing of *E. coli* activity as an indicator of water quality impairment. Development and application of this technology will help preserve one of our state's most precious natural resources, clean water.

RELATED BOARD OF REGENTS POLICIES

Not Applicable.

**UW-EAU CLAIRE FINANCE TEAMS
CREATE INNOVATIVE PARTNERSHIPS**

BACKGROUND

In the spirit of “It takes a village to raise a child,” the UW-Eau Claire Finance Department is implementing various activities to engage new partnerships that enhance educational experiences for students and better prepare them for their professions. Results have been positive, including the creation of a new student organization focusing on financial literacy, collaborations with businesses and alumni, and new opportunities for internships. Students participating in these initiatives have received top honors in national competitive events.

REQUESTED ACTION

Information only.

DISCUSSION

Partnerships

UW-Eau Claire Chancellor Jim Schmidt will lead the presentation that includes several student participants. Faculty will be available to answer questions. Examples of partnerships include:

- Creation of a financial literacy program by collaborating with McIntyre Library, US Bank, and Wipfli CPAs.
- Increased funding for the Finance program through Presto Foundation and the UW-Eau Claire Foundation.
- Development of opportunities for students to meet industry professionals through partnering with CFA societies in Madison, Milwaukee and Minnesota.
- Introduction of a Wealth Management class in collaboration with Ameriprise Financial Services, Edward Jones, NorthStar Financial, Wipfli CPAs, Royal Credit Union and other businesses. (Interviews for internships and full-time positions are built directly into this class.)
- Enhancement of the campus financial education through collaboration between the UW-Eau Claire Financial Management Association student organization and companies including Piper Jaffray, American Public Media Group, Ameriprise, Ecolab, and Chicago Board of Trade.
- Restart of the Student Managed Investment Fund class, which now includes representatives acting as mentors from a variety of firms, including Goldman Sachs (New York), RBC (New York and Minneapolis), Barclays (Chicago), and Blackrock (Philadelphia). Notable alumni participated directly in class activities, including Dick Johnson, CEO of Footlocker.

Competition—Student Managed Investment Fund Consortium Conference—First Place in Two Events

UW-Eau Claire finance students Kyle Kolb, Brock Schauer and Ben Zielinski took first place in both the stock pitch and the video pitch competitions at the 6th Annual Student Managed Investment Fund Consortium (SMIFC) Conference held last October in Chicago. Additional

student presenters included Josh Zhan, Jeff Steers, and Dier Pulatov, and faculty member Mark Alfuth. The event was open to students from 68 universities across the United States.

Competition—Chartered Financial Analyst (CFA) Challenge—First Place

The UW-Eau Claire finance case teams took first and third places at the local level of the Certified Financial Analyst (CFA) Institute Research Challenge in Madison. First place finalists included Ryan Battist, Chad Glover, Kyle Kolb, and Brock Schauer. Members of the third-place team were Danielle Kunde, Elizabeth LeMay, Dier Pulatov, Caitlin Setterman, and Richard Stafford. Dr. Pedro Sottile and Professor Mark Alfuth supported the teams. The first place Blugold team advanced to the Americas Regional Final in Boston, where competition included teams from 55 universities from across the United States, Canada, and Latin America.

RELATED REGENT POLICIES

Not applicable.

REGENT SCHOLAR UPDATE – WISYS PERSPECTIVE ON THE GROWTH OF INNOVATION AND ENTREPRENEURSHIP

BACKGROUND

The UW System Regent Scholar program provides prestigious, one-time grants to individual faculty and campus programs that undertake undergraduate research projects having the potential to foster innovation, entrepreneurship, and talent development. Formally introduced in 2014, the program was designed to stimulate faculty-student collaborative research. This recognition was developed with input from faculty and staff research associates, business partners, and other outside experts. Eligibility is open to all UW System campuses.

Regent Scholar grants are available for faculty, along with undergraduate students and other collaborative partners, supporting entrepreneurial ideas and innovative projects, with goals of:

- Providing summer funding support for faculty to engage in research and other scholarly activities;
- Promoting stellar research experiences for undergraduate students, thus preparing a high-quality workforce;
- Stimulating research across all UW System campuses, ultimately driving regional economic development; and
- Recognizing undergraduate research in the STEM disciplines and creative arts fields.

REQUESTED ACTION

Information only.

DISCUSSION

WiSys has assumed management of the Regent Scholar grant application process this year. WiSys President Arjun Sanga and Regent Mark Tyler (Selection Committee Chair) will discuss the evolution of the program and highlight the continued increase in undergraduate research, innovation, and student internships across UW System. The Regent Scholar selection committee included representatives of TitleTown Tech, the Wisconsin Technology Council, Wisconsin Economic Development Corporation, the founder of JAMF, a scientist with Shimadzu Corporation, and the UW System Office of Academic and Student Affairs. The 2019 Regent Scholar faculty award recipients will be announced and honored at the March meeting of the Board of Regents.

RELATED REGENT POLICIES

Not applicable.