

12/01/16

BOARD OF REGENTS OF THE UNIVERSITY OF WISCONSIN SYSTEM

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

Thursday, December 8, 2016
10:15 a.m. – 11:45 a.m.
Gordon Dining and Event Center
770 W. Dayton Street, 2nd Floor
Symphony Room
Madison, Wisconsin

- a. Approval of the Minutes of the October 6, 2016, Meeting of the Research, Economic Development, and Innovation Committee
- b. Second in a Series: UW-Madison Focus on Research – Wisconsin Longitudinal Study Update and Early Education Findings – Led by Associate Vice Chancellor for Research Jan Greenberg

Presenters: Dr. Pamela Herd, Professor of Public Affairs and Sociology
Dr. Katherine Magnuson, Professor of Social Work

- c. WiSys Technology Foundation 2016 Progress and Performance Report – Operational Excellence – Led by WiSys Executive Director Arjun Sanga
- d. UW-Parkside App Factory - Led by Chancellor Debbie Ford

UW-MADISON FOCUS ON RESEARCH

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 Associate Vice Chancellor for Research Jan Greenberg, is the second in a three-part series on the Research enterprise at UW-Madison and its impact on the citizens and communities across Wisconsin and beyond. During today's presentation, Greenberg will be joined by Professor Pamela Herd, professor of Public Affairs and Sociology, and by Professor Katherine Magnuson, professor of Social Work.

Pamela Herd is a nationally renowned expert on aging and social policy and directs the Wisconsin Longitudinal Study (WLS). She will share background on the WLS and what researchers are learning from this unique, 60-year study of Wisconsin citizens.

Dr. Katherine Magnuson is one of the nation's top experts on early childhood education policy. Dr. Magnuson will share research findings on how disparities in socioeconomic status affect children's development and how these effects may be altered by policies and programs, especially early childhood education programs.

REQUESTED ACTION

Information only.

DISCUSSION

Wisconsin Longitudinal Study (WLS)

Dr. Herd will share background and findings derived from a longitudinal study of a random sample of 10,317 Wisconsin men and women. These individuals were first interviewed in 1957 when they were high school juniors or seniors. In 1974, randomly selected siblings of the original respondents were added to the study.

The WLS respondents are now in their early 70s and were last interviewed in 2011. Altogether, more than 15,000 Wisconsin residents have participated. WLS provides a unique opportunity to study the life course, intergenerational transfers and relationships, family relationships, physical and mental health, and mortality from late adolescence through early old age.

Beneficial Effects of Early Childhood Education on Children Living in Poverty

Dr. Magnuson's studies examine how parental employment, income, and education, as well as welfare policies, affect the well-being of children. A particular focus of her research is on the beneficial effects of early childhood education on children living in poverty.

Her research provides invaluable insights regarding how directing support and resources to children may counteract the harmful effects of being raised in a disadvantaged family. Dr. Magnuson will share research findings on how disparities in socioeconomic status affect children's development and how these effects may be altered by early childhood education programs.

RELATED BOARD OF REGENTS POLICIES

Not Applicable.

**WISYS TECHNOLOGY FOUNDATION
2016 PROGRESS AND PERFORMANCE REPORT
OPERATIONAL EXCELLENCE**

BACKGROUND

WiSys is the technology transfer entity authorized by the Board of Regents of the University of Wisconsin System to advance promising research and innovation from discovery through commercialization on UW System four-year comprehensive campuses and at UW Colleges and UW-Extension.

WiSys's staff is comprised of business professionals with diverse areas of expertise in academic technology transfer, Intellectual Property protection, contract management, and technology commercialization.

Since 2000, WiSys has provided significant support to advance research at UW System campuses and has played a critical role in transforming technology into jobs. WiSys has demonstrated leadership in advancing research and technology development across Wisconsin in a cost-effective manner by building strategic partnerships with innovative start-ups, high-tech companies, clinical organizations, and UW campuses.

REQUESTED ACTION

For information only.

DISCUSSION

WiSys Board Chair David J. Ward and Executive Director Arjun Sanga will provide a year-end update on WiSys and its record level of campus involvement and technology disclosures. This is in part due to expanded intensive faculty and student contact via the WiSys network of Regional Associates and WiSys Student Ambassadors who provide “in-market” support for faculty and students.

For fiscal year 2015-2016, WiSys filed 23 patent applications covering a range of innovative technologies from UW campuses.

Ward and Sanga will provide an update on WiSys programs and project support, highlight successful campus initiatives under-way, and provide an outlook for further progress.

RELATED REGENT POLICIES

Not applicable.

UW-PARKSIDE APP FACTORY

BACKGROUND

The University of Wisconsin-Parkside is a dynamic learning community grounded in academic excellence and focused on student success, diversity, inclusion, and community engagement. Through several community-facing talent and economic development initiatives, UW-Parkside students have opportunities to participate in project-based learning. The campus connects community businesses with the students and faculty. UW-Parkside students gain hands-on experience working with organizations to solve business challenges and have opportunities to find solutions to real problems affecting real companies.

Chancellor Debbie Ford will provide an update on one such program, the App Factory. This newly formed unit creates mobile app technology designed to deliver a myriad of communication, data management, and customer service solutions. The App Factory is a conduit for UW-Parkside students to gain important experience that will prepare them to compete for the best creative and technical jobs in the growing field of mobile app technology.

REQUESTED ACTION

For information only.

DISCUSSION

The UW-Parkside App Factory is a creative, professional, and interdisciplinary group that develops mobile apps for community clients throughout southeastern Wisconsin. The App Factory provides conceptual designing and prototype mobile app development services to help find solutions and strategies for technology challenges.

Students, both graduate and undergraduate, and faculty from computer science, business, art, and other disciplines collaborate to create apps within a "startup company" environment. Students gain real-world experience working with clients and working on live projects as part of internships for course credit. App Factory clients include the Cities of Racine and Kenosha, the Milwaukee County Office of Emergency Management, Tricor Fluid Manufacturing Systems, Bradley Corporation, and Vista Dental, among others.

Joining Chancellor Ford for the presentation will be Computer Science Professor Timothy Knautz, UW-Parkside students Kyle Zawacki and Hanh Le, and Dirk Baldwin, Dean of the College of Business, Economics, and Computing.

RELATED REGENT POLICIES

Not applicable.