MINUTES OF THE REGULAR MEETING

of the

BOARD OF REGENTS OF THE UNIVERSITY OF WISCONSIN SYSTEM

Held in the Symphony Room, 2nd Floor
Gordon Dining and Event Center
770 W. Dayton Street
Madison, Wisconsin

Thursday, March 9, 2017
9:30 a.m.

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-President Millner presiding-

PRESENT: Regents John Behling, José Delgado, Lisa Erickson, Tony Evers, Margaret Farrow, Michael Grebe, Eve Hall, Tim Higgins, Tracey Klein, James Langnes, Edmund Manydeeds, Regina Millner, Janice Mueller, Bryan Steil, Mark Tyler, and Gerald Whitburn

ABSENT: Regents Mark Bradley and Drew Petersen

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APPROVAL OF THE MINUTES OF THE FEBRUARY 2017 MEETING

The minutes of the February 2017 Board of Regents meeting had been provided. Upon the motion of Regent Whitburn, with a second by Regent Behling, the minutes were approved on a voice vote.

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REPORT OF THE PRESIDENT OF THE BOARD

President Millner welcomed everyone to the March meeting. As this was a one-day meeting with only limited committee sessions, she said the Regents would have an opportunity to explore in depth several higher education issues in a way that would not be possible during the Board's usual meetings.

President Millner said the Regents were delighted to have two guest speakers joining them: Dr. Michael Crow, President of Arizona State University, and Dr. Susan Baxter, Executive Director of the California State University Program for Education and Research in Biotechnology.

The Board's focus at this meeting would be innovation and research, and President Millner indicated that these guests are both well-known and experienced in advocating new ideas and approaches in these areas. She said the Regents looked forward to their presentations and the open discussions to follow.

Later in the afternoon, the Board would hear an annual overview of the UW System's federal priorities, led by Associate Vice President Kris Andrews.

Task Force on Campus Climate

President Millner provided an update on the Task Force on Campus Climate, which is chaired by Regents Eve Hall and Ed Manydeeds. At its February meeting, the task force was joined by Dr. Mitchell Chang, a professor of higher education and organizational change, and Asian American studies, from the University of California, Los Angeles.

President Millner reported that Dr. Chang and the task force had a good discussion about why it is important for campuses to advance diversity efforts. She was able to attend the meeting, and saw firsthand the passion and commitment of task force members as they considered ways to address campus climate.

Stating that the work of the task force is of vital importance to every UW System institution, President Millner noted that we live in an increasingly global economy and multicultural society, and that providing a healthy campus climate is essential to ensuring that all students are well equipped to thrive both professionally and socially.

She expressed her gratitude to the task force members for their work so far, as well as to Regents Manydeeds and Hall for their leadership. She said that further updates would be provided.

Research in the Rotunda: UW System Day at the Capitol

The 14th annual Research in the Rotunda: UW System Day at the Capitol is scheduled for April 12. President Millner said she was pleased to announce that the UW System is building a new layer of legislative engagement and advocacy into this event, which is already a prominent and anticipated event for legislators.

In addition to the graduate researchers from each of the UW institutions filling the rotunda with examples of their great research, each of the chancellors will bring community leaders to the Capitol to meet with legislators and talk about the important role UW System institutions play in the local community and economy, as well as the need to support the System's 2020*FWD* plan.

President Millner encouraged her fellow Regents to put this event on their calendars, go to the Capitol and participate.

100th Anniversary of Wisconsin Public Broadcasting

In anticipation of President Cross's report on news from around the UW System, President Millner said she would start by marking the 100th anniversary of Wisconsin Public Broadcasting. From its humble beginning a century earlier, with classical music broadcast by physics professor Earle Terry from Science Hall in Madison, to the array of programming available today, she observed that radio and television broadcasting have come a very long way.

President Millner explained that she had always been intrigued by the idea that, 100 years ago, the relatively isolated dairy farms across the state had piped in classical music as their only form of entertainment while milking cows. She suggested that this might be one of the origins for the appetite for classical music in Wisconsin. She added that, in linking isolated farms and communities from different parts of Wisconsin, public broadcasting's origins with the university perhaps also contributed to the state's support for higher education, which the UW System has enjoyed for more than 100 years.

Today, Wisconsin Public Radio and Wisconsin Public Television reach more than 446,000 listeners and 472,000 viewers each week in Wisconsin. With the advent of online broadcasting, they also reach audiences worldwide.

Indicating that the Board would hear a more significant presentation later in the year, President Millner offered sincere congratulations for 100 years of service.

Preview of April Board of Regents Meeting

Looking ahead to the Board's April meeting at UW-Platteville, President Millner announced that the agenda topics would include the regular accountability presentation, as well as continued discussion of the biennial budget. The Board also would be celebrating its 25th annual Regent awards to recognize excellence in teaching.

She thanked Chancellor Shields and his team in advance, acknowledging that the Board's meetings create a lot of work. She indicated that the Regents were greatly looking forward to spending time on the UW-Platteville campus and in the Platteville community, and getting a better look at what is going on there.

Technical Updates to Regent Policy Documents

To close her report, President Millner said she would ask the Board to take up an item of business. In February, the Board considered some technical updates to the bylaws. The Board would now consider another set of technical updates for eleven Regent Policy Documents, including out-of-date references to UW System administration policies, names of Board committees, and other straightforward items.

These policies will still be subject to the regular policy-review process. President Millner explained that by approving Resolution 10835, the Board would be authorizing Executive

Director and Corporate Secretary Jane Radue to make corrections to titles and citations now, before the full-fledged review of each policy is undertaken.

The second part of the resolution authorizes similar, non-substantive corrections to be made in the future, as the need arises. President Millner described this as "housekeeping in advance."

Hearing no questions, President Millner called for a motion to adopt Resolution 10835. Regent Farrow offered the motion, which was seconded by Regent Behling and adopted on a voice vote.

Approval of Technical Corrections to Regent Policy Documents

Resolution 10835 That, upon the recommendation of the President of the University of Wisconsin System Board of Regents, the Board: (1) adopts the attached revisions to eleven Regent Policy documents to update obsolete titles and references to UW System Administrative Policies; and (2) authorizes the Executive Director and Corporate Secretary to make similar technical changes to the Regent Policy Documents in the future, to correct references to administrative policies, names or titles, and legal citations.

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REPORT OF THE PRESIDENT OF THE SYSTEM

President Millner next turned to President Cross for his report.

In response to President Millner's recognition of the 100th anniversary of Wisconsin Public Broadcasting, President Cross shared his own memories of cleaning calf pens on Saturday afternoons while listening to the Metropolitan Opera, which he called "a weird combination."

Biennial Budget Update

The Governor had announced his biennial budget in February. President Cross said the UW System was pleased that the budget provides the first investment the System has received in more than a decade. The UW System provides one of the best returns on investment for the state; he expressed appreciation for this recognition of the System's critical role in strengthening Wisconsin's economy and workforce.

The Joint Finance Committee will begin its budget listening sessions around the state in the coming weeks. The UW System is already having very productive conversations with the Governor's Office, the Joint Finance Committee, and new legislative members and leadership. President Cross said the System looks forward to these continued discussions.

President Cross said it was probably most noteworthy that the Governor's proposed budget reflects the priorities and directions expressed in the UW System's 2020*FWD* strategic

framework. The System had unveiled the 2020*FWD* plan in August, and it served as the basis for the System's biennial budget request. The plan aligns the UW System's resources with Wisconsin's greatest needs, and the System had presented it to the Governor in November.

Saying it is clear that the Governor listened, President Cross shared five key focal points in the Governor's budget which connect directly to the 2020*FWD* strategic framework.

1. Affordability: Multiple factors affect college affordability, and that theme is woven throughout the Governor's proposal. Time-to-degree has the largest impact, and that is why the UW System recommended robust initiatives to help students graduate on time, such as expanding college credit options and making it easier to transfer college credits. Noting that the Governor included proposals similar to these initiatives, President Cross said this makes it clear that both the Governor and the System listened to people around the state.

   The UW System also wants to keep higher education accessible to all students. The Board had requested more than $19 million in financial aid for students through the Wisconsin Higher Education Grant program. President Cross said he hoped that financial aid would continue to be a focus as the budget develops.

2. Accountability: The UW System was the first higher education system in the nation to implement an accountability report, and the System also posted this data online in a graphical format that includes a broad spectrum of higher education performance metrics related to access, affordability, educational performance, and much more.

   The Governor's Biennial Budget calls for a report card that connects and reveals progress that UW institutions or the System make toward established goals; this was also included in the 2020*FWD* plan. As the metrics associated with performance- or outcome-based funding are refined, President Cross said the UW System will work to make sure the role of the Board of Regents is maintained and valued; that the uniqueness of each UW institution and the UW System are recognized; and that any fundamental funding metrics are measurable and reflect established goals that are of value to the state, and to a comprehensive and quality higher education experience.

3. Employee compensation: President Cross noted that both he and members of the Board have previously stated that the UW System's faculty and staff work incredibly hard and need a compensation adjustment. UW System employees make up more than half of all Wisconsin state employees, and the System competes at an international level. Faculty and staff are the reason that institutions within the UW System are among the best in the world.

   President Cross said that the UW System sincerely appreciates the Governor's recognition that its employees are key to the System's success. The Governor's budget proposal would be the largest increase seen by state employees in at least a decade. President Cross indicated that he would continue to advocate that UW System employees continue to receive every benefit and salary adjustment possible.

4. Capital infrastructure: The UW System's infrastructure accounts for about 60 percent of state-owned facilities in Wisconsin. The System carefully developed a reasonable capital budget plan, almost exclusively renovations, repairs and maintenance.

   The capital infrastructure plan submitted by the System affects about 3 percent of its existing inventory; it proposes to renovate, remodel, or update about 1.6 percent of the System's gross square footage. The Governor's capital budget proposal will allow institutions to make some general repairs across the UW System, as well as to update some technology in the classroom.

   President Cross said the UW System will work with the Governor and the legislature in the months ahead to strongly advocate funding of the System's capital budget proposal, observing that it ultimately costs students and taxpayers more when critical repairs are delayed.

5. Flexibilities: The Governor's budget provided some significant new procurement, purchasing and lease facilities. President Cross said the System applauds and appreciates these new tools, and would continue to make the case for the ability to manage its own program revenue-funded projects. This ability would decrease state bonding obligations while also reducing student costs by decreasing the time it takes to develop and complete critically important projects.

   At a time when leaders in Washington and Madison are working to reduce regulatory burdens at all levels, not only in public higher education but throughout government, President Cross encouraged legislators and the Governor to empower the Board of Regents. It is important that the UW System maintain flexibility to develop and manage its curriculum, manage its employees, and allocate its resources. This allows the System to more nimbly, efficiently, and effectively respond to the challenges facing Wisconsin.

President Cross expressed appreciation for the support the UW System has received from the Governor and legislators on both sides of the aisle. Saying that this is just the beginning, he indicated that this is the best budget proposal the System has seen in over a decade, and that the System looks forward to working with its partners in state government over the next months to ensure this budget continues to reflect their common goals.

In closing, President Cross said the UW System's 2020*FWD* framework includes proposals to reinvigorate the state's economy and enhance the quality of life for its citizens. Regents, chancellors, faculty, staff, community and business leaders, and the citizens of Wisconsin helped build this plan. Stating that the Governor clearly supports the ideas and vision expressed in the 2020*FWD* plan, President Cross proposed to continue the discussion to build an even better budget.

Legislative Update

In addition to budget matters, President Cross said the UW System continues to engage positively with legislators on a variety of bills. The UW System supports legislation authored by Representative Bob Kulp and Senator Howard Marklein, which would make building materials used by the System tax exempt, as well as legislation authored by Senator Dan Feyen and Representative Jessie Kremer that would make employer contributions to a college savings account tax deductible. Both of these bills will help reduce costs and make college more affordable, he said.

The UW System also has registered its support for Special Session Bill 6, authored by Representative John Nygren and Senator Alberta Darling, which would enable the System's Office of Educational Opportunity to authorize a substance abuse recovery charter school. President Cross indicated that he testified in favor of this bill the previous week, and he expressed thanks to the authors for working with the System to find an innovative way for the university to leverage faculty expertise and to work with local school districts and communities on a serious and growing problem in Wisconsin.

UW System Business Council

President Cross noted that in October he had announced that the UW System would be forming a Business Council to include key business, industry, and organizational leaders from around the state, with diverse backgrounds, expertise and experience. The Council will advise the UW System about how the university can be more strategic, better understand where businesses and industries want to be in the future, and address emerging issues.

The Business Council's formation affirms the strong feedback received during the UW System's 2020*FWD* listening sessions, calling for even closer alignment between the university and the business community. Community and business mobilization is one of the four key focal areas within the strategic framework.

The System is working with executives from companies ranging from the Green Bay Packers and the Milwaukee Brewers, to the Promega Corporation, Kwik Trip, Inc., and the Oshkosh Corporation. President Cross said he had visited many of these companies in recent months and had spent considerable time discussing this idea; in every case, the willingness and the energy expressed in those conversations was heartwarming.

The Business Council was due to hold its first meeting in the near future.

News from Around the UW System

President Cross next shared some news from around the UW System, by means of a video presentation.

UW-Whitewater Student Becomes Published Author

President Cross noted that UW-Whitewater student Brandon Fong is now a published author. His book on college success is receiving rave reviews from famous CEOs, including Kevin Harrington from ABC's hit show, *Shark Tank.*

UW-Superior Students Visit Washington, D.C.

In January, six high school students from UW-Superior's Upward Bound program took part in a once-in-a-lifetime opportunity to visit Washington, D.C., for the presidential inauguration.

UW-Stout Engineering Students Prepare for New Age in Manufacturing

UW-Stout engineering students are preparing for the new age of manufacturing by learning how to build, repair, and program 3D printers.

UW-Stevens Point Earns Business School Accreditation

UW-Stevens Point has earned accreditation from the Association to Advance Collegiate Schools of Business – an accomplishment that resonates with students and business leaders alike.

UW-River Falls Connects Students with Career Resources

The Career Treks program at UW-River Falls is a free series that connects students with industry professionals to broaden their awareness of career paths and to expand their professional networks.

UW-Platteville Professor Receives USDA Grant

UW-Platteville's Dr. Rami Reddy received a USDA grant to introduce a niche crop to Southwest Wisconsin. Students will help grow baby ginger for medicinal and culinary purposes.

UW-Parkside Theatre Company Adds Value through the Arts

UW-Parkside Theatre Company graduates add value to the state through the arts. The company has earned 32 first- or second-place Kennedy Center awards in the past five years.

UW-Oshkosh Professor Appointed to Scientific Review Panel

Dr. Chad Cotti's recent work at UW-Oshkosh in health economics led to an appointment to the Scientific Committee Review Panel for the 2017 World Health Economics Congress in Boston.

UW-Milwaukee Connects Students with Water Industry Careers

UW-Milwaukee is connecting students with careers in the growing water industry. The "See Yourself Succeeding in STEM" program places students from area technical colleges in internships in water-related businesses.

UW-La Crosse Receives National Accreditation in Biochemistry

UW-La Crosse has received national accreditation from the American Society for Biochemistry and Molecular Biology. UW-La Crosse's biochemistry major is helping meet the demand in a field which ranks number 11 among the state's top 25 fastest-growing occupations.

UW-Green Bay Leads Great Lakes Soil Health Research Efforts

UW-Green Bay is leading one of the first large-scale research efforts to link soil health with water quality monitoring across the Great Lakes Basin. The results will provide recommendations for improving the health and quality of the Great Lakes.

UW Health Information Management Technology Students Succeed in Certification

UW Health Information Management Technology students have a 100-percent pass rate on one of the most in-demand health care certifications in the workforce. This far exceeds the national pass rate of 60 percent. The program is a partnership with UW-Extension.

UW-Eau Claire Ranked Top School for Graduate School Preparation

According the Council on Undergraduate Research, UW-Eau Claire is the top university in the country for preparing students for graduate school. Forty-five percent of Blugolds have at least one in-depth scholarly research experience.

UW-Baraboo Students Conduct Geological Research

Two UW-Baraboo students, Dan Emerson and Shannon Brink, accepted placement into an elite program at the University of Texas at El Paso. These UW Colleges students will be paid to conduct four weeks of geological research.

UW-Madison Sleep Research Receives Worldwide Media Attention

Research at UW-Madison's Wisconsin Center for Sleep and Consciousness shows that our brains reset during sleep, creating more room for growth and learning the next day. This four-year project received worldwide media attention.

President Cross having concluded his report, President Millner noted that the budget process is ongoing and said Board members would have time to ask questions and discuss the budget at the Board's April meeting.

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REPORT AND APPROVAL OF ACTIONS TAKEN BY THE EDUCATION COMMITTEE

President Millner called upon Regent Whitburn to present a report of the actions taken by the Education Committee.

Regent Whitburn stated that, with support from Chancellors Meyer, Sandeen, and Ford, together with their provosts and respective faculties, the Education Committee approved post-tenure review policies for UW-Stout, UW-Extension, and UW-Parkside.

Regent Whitburn said the Education Committee had seen policies from 11 of the UW institutions, and looked forward to seeing policies from UW-Madison, UW-Stevens Point, UW-Whitewater, and the UW Colleges to complete the review and approval process by the April deadline established by the Board in 2016.

Regent Whitburn then moved adoption of Resolutions 10836, 10837, and 10838. The motion was seconded by Regent Behling and adopted on a voice vote.

Approval of Post-Tenure Review Policy, UW-Stout

Resolution 10836 That, upon the recommendation of the Chancellor of the University of Wisconsin-Stout and the President of the University of Wisconsin System, the Chancellor is authorized to implement the University's Post-Tenure Review Policy.

Approval of Post-Tenure Review Policy, UW-Extension

Resolution 10837 That, upon the recommendation of the Chancellor of the University of Wisconsin-Extension and the President of the University of Wisconsin System, the Chancellor is authorized to implement the University's Post-Tenure Review Policy.

Approval of Post-Tenure Review Policy, UW-Parkside

Resolution 10838 That, upon the recommendation of the Chancellor of the University of Wisconsin-Parkside and the President of the University of Wisconsin System, the Chancellor is authorized to implement the University's Post-Tenure Review Policy.

President Millner thanked Regent Whitburn for his report, and expressed appreciation to the three campuses that had provided post-tenure review policies for approval at the March meeting.

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"PUBLIC HIGHER EDUCATION – INNOVATE OR UNDERSERVE," BY DR. MICHAEL CROW, PRESIDENT, ARIZONA STATE UNIVERSITY

President Millner said the Board of Regents was delighted to welcome a nationally recognized authority on critical issues shaping the higher education landscape: Dr. Michael Crow, president of Arizona State University. Indicating that there would be time following his presentation for questions and discussion, she then asked President Cross to introduce Dr. Crow.

Introduction

President Cross stated that Dr. Crow has served as president of Arizona State University (ASU) since 2002. In that time, he has been instrumental in transforming ASU's focus to simultaneously pursue excellence, broad access to quality education, and meaningful societal impact. President Cross indicated that the university's three-fold mission, as captured in ASU's charter, is both succinct and unique in higher education, particularly at Research I institutions:

> "ASU is a comprehensive public research university, measured not by whom it excludes, but by whom it includes and how they succeed; enhancing research and discovery of public value; and assuming fundamental responsibility for the economic, social, cultural, and overall health of the communities it serves."

During Dr. Crow's tenure, the university has quadrupled research expenditures, completed a major infrastructure expansion, and was named the nation's most innovative school by *U.S. News and World Report* in 2015 and 2016.

In 2015, Dr. Crow co-authored a book, *Designing the New American University*. President Cross encouraged everyone to read this book, which he noted has generated considerable discussion in higher education circles.

President Cross explained that he invited Dr. Crow to the Board's innovation conversation because Dr. Crow raises provocative questions, confronting higher education in a way that is unique and challenging, and offers some intriguing, if sometimes controversial answers. Predicting that this presentation would "stretch our thinking," President Cross invited all present to join him in welcoming Dr. Crow.

The New American University

Dr. Crow said it was great to have the opportunity to talk about what Arizona State University has been doing. Referring to "The New American University," a phrase used at ASU since his appointment as president, Dr. Crow explained that the term is not meant to suggest that previous American universities are old or unsuccessful. He noted that our country can attribute much of its success in the founding of the republic to a number of college graduates who got together and wrote documents like the Declaration of Independence and the U.S. Constitution, or

who contributed to the rise of the American economy in the 19th and 20th centuries. Colleges and universities of all types have been critical to this success.

He indicated that there have been four waves of higher education evolution in the United States. The first wave was the colonial colleges. The second wave was the beginning of some public colleges, including UW-Madison. UW-Madison then moved into the third wave, with the establishment of the land grant universities by federal investment. The fourth wave was the emergence of research universities; the University of Wisconsin was at the forefront of this change as well.

Dr. Crow suggested that there is an emerging fifth wave, with different kinds of institutions beginning to emerge. ASU is consciously trying to be a prototype of these institutions.

Unlike business, where waves of change – through the forces of creative destruction – replace all of the previous forms of organization, Dr. Crow indicated that the original wave of colleges in the United States are still healthy and doing fantastically well. There is a fundamental difference between higher education and business in the sense that previous waves of higher education evolution do not go away. There is also movement between these waves.

ASU was originally a territorial teachers college, just as the University of California at Los Angeles was originally the Los Angeles State Teachers College, or the University of California at Santa Barbara was a home economics college. As a teachers college, the institution had no charter and no identity; Dr. Crow described it as a generic public university with no specific mission.

ASU has derived a charter through debate, discussion, and articulation in the last 15 years. This charter became formal just three years earlier, after being articulated initially as a vision. Dr. Crow emphasized that the three elements of the charter are the means by which ASU's entire culture has been altered within the institution.

First, ASU's core purpose as an institution is inclusion, with the success of the student being the single most important measurement of the outcomes of the institution. All other measurements are secondary.

Second, ASU advances research that benefits the public good.

Third, ASU assumes fundamental responsibility for the economic, social, cultural, and overall health of the communities that it serves. Dr. Crow observed that the University of Wisconsin is a perfect example of an institution that has worked at this since its founding and through its evolution.

Explaining that ASU had taken these elements from other schools and then combined them together, Dr. Crow said that between 75 and 80 percent of the last 1,500 faculty members hired at ASU, since his appointment, were attracted to the institution's purpose.

Dr. Crow described his institution as a public enterprise offering in the public trust. Its charter will be implemented with or without the funding of the people of Arizona, and regardless of who the governor or legislators are. ASU is not a government agency and refuses to think or act like one. ASU's charter is its promise to the citizens of Arizona, and one way or another the institution will make it work.

This responsibility is not conditional upon the actions of the legislature, whose members come and go. Stating that ASU has a higher order function, Dr. Crow indicated that the notion of this charter, the public trust, and the operation of the university as a public enterprise changes the mindset.

Dr. Crow recalled that after spending 12 years as the executive vice provost at Columbia University, one of the first things he noted upon arriving at ASU was that everyone spent all their time talking about the legislature. He questioned why the university would do this, given that the legislature represents a fraction of the institution's support and is not likely to give any more.

Dr. Crow suggested that many universities are all the same, in that their design aspiration is to beat another school in the rankings. ASU has outlined a series of eight design aspirations representing what the university would try to do and how it would empower its faculty. These design aspirations are: leveraging ASU's place, transforming society, valuing entrepreneurship, conducting use-inspired research, enabling student success, fusing intellectual disciplines, being socially embedded, and engaging globally.

Dr. Crow stated that ASU wanted faculty to move away from being bureaucrats. He explained that he did not use "bureaucrat" in a pejorative sense, but rather as an organizational methodology. People want their agencies run by outstanding bureaucrats who can deliver services, but they do not want their universities run by bureaucrats; and faculty members should not act or think like bureaucrats, protecting and defending organizational turf.

After deciding that there were enough regular universities, Dr. Crow said ASU needed different methodologies and different ways of moving forward. It made a design aspiration to fuse intellectual disciplines, to move academic energy toward new areas of activity – not by abandoning disciplines, but by not being constrained by them. ASU eliminated 80 academic units: colleges, schools and departments. It also restructured 30 new units, 17 of which were transdisciplinary schools.

One example is the elimination of geology as a department, astronomy as a program, astrophysics as a program, and astrobiology as a program. Dr. Crow explained that students were not interested in these departments, and there was fighting among and between them that was of no merit to the success of the institution. These disciplines were then restructured around a new central theme called "Exploration."

Dr. Crow observed that, just like kids, people are interested in space and want to be explorers. The new School of Earth and Space Exploration now has four times the number of students and six times the level of research compared to the previous departments. Though far from perfect, he said that the restructuring is working in new ways.

In addition to adding a School of Sustainability, a School of Social Transformation, and a School for the Future of Innovation in Society, ASU has eliminated all 11 of its engineering departments and created six Grand Challenge engineering schools, five of which are built around themes established by the National Academy of Engineering. At the time it began that process in 2006, ASU had about 8,500 engineering students; at the end of 2016, ASU had 20,400 engineering students. The freshman retention rate in engineering increased from 68 percent to 90 percent during that time. Of these engineering students, 16,000 attend classes face to face and 4,400 are online – including 1,100 students in the country's first accredited online electrical engineering degree.

Dr. Crow suggested that these design aspirations are empowering mechanisms for ASU and its faculty. Pointing to the design aspiration to "conduct use-inspired research," he noted that in some institutions a social hierarchy exists that says more practical work is less important, and more curiosity-driven work is better. He asserted that use-inspired and curiosity-driven research are equal at ASU, and that this aspiration has had a huge impact on the institution's structure.

Scale of ASU's Assignment and Ambition

There are three public universities in Arizona – a state of 7 million people, larger than Wisconsin – and there are almost no private colleges. Arizona is rapidly growing and evolving, but is also extremely complex demographically. The state will soon have a non-majority population; this is already the case for new births and in the K-12 school community.

Dr. Crow explained that ASU receives its assignment through a negotiation with its board; the assignment covers total enrollments, total degrees, high demand degrees, and research expenditures. ASU increased its share in each of these areas from 2008 to 2015, and its assignment through 2025 is to continue to grow and expand enrollments, and to produce more degrees.

Dr. Crow said that when he took office ASU produced 8,000 degrees; in 2016 it produced 23,000 degrees; and by June 30, 2025, it will produce 32,000 or 33,000 degrees. He added that ASU did this while also enhancing its quality, expanding its research activity, deriving new revenue, and making things happen across all dimensions of the institution. He also noted that high-demand degrees include those in engineering and nursing.

As a former teachers college that did not become a university until 1960, ASU is a rapidly evolving research enterprise without a medical school. Dr. Crow said that ASU will raise its research expenditures at the same time it increases enrollments and degree production through the thought, energy, creativity, and drive of the faculty, and with the support of the staff.

Performance to Date

Next Dr. Crow displayed some data showing ASU's performance to date on its "assignment." Looking first at undergraduate enrollment, he explained that there was a large

expansion of international and non-resident student enrollments, based on the need to operate in a market and attempting to derive revenue to fund the institution.

ASU has seen a significant increase in the number of bachelor's degrees, and this expansion is expected to continue with no real anticipated increases in funding from the legislature. Reductions in funding from the legislature between 2009 and 2010, and then again in 2015, were 61 percent of ASU's support per student.

Recalling that those were painful moments for the institution, Dr. Crow made particular mention of 2009, when $100 million was cut and had to be paid back. He indicated that ASU was by that point already extremely agile in making changes, but it had to go through a metamorphic transition, and this was during the recession. He observed that there were similarities between Arizona's and Wisconsin's governors in their emphasis on balanced budgets, no new taxes, tax reductions, and the same kind of structured model.

Dr. Crow went on to indicate that dramatic increases to ASU's total graduate enrollment and total graduate degrees are expected by 2025. The metric goal for total undergraduate and graduate degrees combined is more than 30,000 by 2015.

Dr. Crow added that, although it does not have the same faculty, mission, culture, or technological tools, ASU's faculty is the same size as it was in 2002.

Looking next at changes in research expenditures, Dr. Crow said that ASU did not become a university until 1960, and had no funded research until 1980. In contrast, he noted that by 1980 UW-Madison was already a world-class institution and one of the original top research universities. In fiscal year 2016, ASU's research funding was $518.2 million of NSF-reported funding; this was without a medical school.

Dr. Crow suggested that this challenges the idea that kids from all families cannot have access to a research-grade faculty. He explained that ASU considers the institution to be a failure if its student body is not representative of the entire socioeconomic diversity of the state. It was not ever representative in the past, but ASU now has a student body with 45 percent minority students in its 12,000-student freshman class. The freshman class is 40 percent Pell-eligible students, and this figure is even broader among the community college transfer students. The institution is now representative, Dr. Crow said, and he queried why these students should not have access to a faculty that is scholarly active, and which has been re-engineered and restructured around ASU's design aspirations.

Dr. Crow said he did not know if any of ASU's future research goals are obtainable. The institution has hit all of its previous goals, but its fiscal year 2025 research goal is to achieve the highest level of research funding ever achieved by a non-medical-school-endowed university, similar to MIT. He suggested that a public university with ASU's mission can perform at that level, in addition to being an egalitarian institution. Although ASU is not the land grant university in Arizona, its goals are in line with Justin Smith Morrill's 1862 bill establishing the land grant universities as schools for "the sons [and daughters] of toil." That is what ASU is building in a modern sense, he said.

Dr. Crow said that when he became president in 2002, ASU had a 28.4-percent four-year graduation rate. In 2016, the four-year graduation rate for the freshman class of 2012 was 53.3 percent. This is higher than the four-year graduation rates at Iowa State (45.3 percent), Kansas (42 percent), Oregon State (32.3 percent), and Georgia State (23.4 percent). ASU's four-year graduation rate is also higher than those of Michigan State (51.8 percent) and Purdue (51.5 percent), both of which are Big Ten schools.

Of the universities he listed, Michigan State admits only A-minus or higher students, while the rest – including ASU – admit A- and B-average students. Dr. Crow said that it is simple to have a high graduation rate if an institution only admits A-average students from high school; in fact, he questioned why any of these students would not finish. He recalled that the four-year graduation rate at Columbia University was extremely high while he was on its faculty, but added that the institution admits only the upper 1 percent of the high school class.

ASU has dramatically altered its academic performance while enhancing rigor at the same time. Dr. Crow indicated that one of his "pet peeves" is that many people look at ASU's 53.3-percent four-year graduation rate and call the institution a failure. He argued that a list of America's greatest colleges based on high six-year graduation rates, where every school listed admits only A-students, is a flawed model.

ASU, Iowa State University, the University of Kansas, Oregon State University, Georgia State University, Michigan State University, Purdue University, Ohio State University, the University of Texas-Austin, and the University of Texas-Riverside are all members of the University Innovation Alliance, which is funded by seven foundations to accomplish four objectives:

1. Produce more college graduates;
2. Produce more college graduates from lower-income families;
3. Lower the cost to produce a degree; and
4. Innovate together.

As chairman of the University Innovation Alliance, Dr. Crow indicated that the eleven member universities have won many projects, started innovation clusters, and are learning from each other. He said the Alliance is making things happen, performance is improving, and its member institutions are all growing and evolving.

Dr. Crow compared the 2015 four-year graduation rates at the eleven University Innovation Alliance schools to the average four-year graduation rate of 62 percent for all nine undergraduate schools of the University of California. The University of California's average four-year graduation rate is higher, but includes three schools that admit only students with an A-plus average, and other schools that admit only A-minus and A students. (One of these schools, UC-Riverside, is also part of the University Innovation Alliance.)

Dr. Crow noted that the California State University System, which has 23 campuses, hundreds of thousands of students, and is an institution on the frontline of public change, has an

average four-year graduation rate of 19.1 percent – lower than all eleven University Innovation Alliance schools.

Dr. Crow presented data showing that ASU had 12,000 first-time, full-time freshmen in 2011; of these students, 6,000 came from high school with an A average, and 6,000 had a B average. Overall, the four-year graduation rate for this class was above 50 percent; for A-plus students it was 70 percent, and for A students it was about 60 percent. The B-average students had a 42-percent four-year graduation rate; this has increased since 2002, when the rate was 20 percent.

Dr. Crow explained that these graduation rates are meant to illustrate how ASU is doing compared to other institutions and how it is evolving, but also to counter elitist arguments about what makes a good university. He pointed to ASU's research activities, outcomes, and performance under its current set of admission standards, which are almost identical to those of UCLA or UC-Berkley in August of 1950. Dr. Crow stated that high school students who achieved a B average, and took college preparatory courses and achieved a B in those courses, are considered qualified to attend ASU.

Dr. Crow noted that while ASU has no ethnic diversity goals, it does set goals requiring the student body to be representative of the socioeconomic diversity of the state. He said this goal in turn captures the elements of ethnic diversity; he displayed data showing that ASU's undergraduate student body has been ethnically diversifying in recent years.

Next Dr. Crow displayed data from the 2015 National Science Foundation (NSF) Higher Education Research and Development (HERD) rankings. ASU ranked 48th among the 876 schools in the United States that had some kind of research expenditures, ahead of the University of Chicago, Brown University, and Princeton University. ASU also ranked 10th among the 724 institutions that had research expenditures but do not have medical schools, and 27th among the 876 schools in non-medical school research expenditures.

Looking at research activity in specific subjects, Dr. Crow pointed out that ASU ranked 5th in both the social sciences and political science, and 8th in electrical engineering. Noting that ASU's electrical engineering activity puts it ahead of the University of Texas at Austin, Stanford University, and Carnegie Mellon University, he emphasized that ASU's electrical engineering faculty is doing this level of research while teaching 2,000 students face-to-face on campus, with another 1,100 students online. He called this "an alteration of models."

The National Science Foundation gave money to 586 schools in 2015. ASU ranked 25th of 586 schools in NSF funding, ahead of Harvard University, the University of Chicago, Duke University, and Ohio State University.

Dr. Crow also looked at a comparison of what it costs to produce a degree at various research universities. In fiscal year 2014, combined tuition, fees, and state appropriations per degree awarded totaled $61,223 at ASU, compared to a median of $76,561. He noted that this method factors in the loss attributable to people who paid to attend but did not graduate.

Resources

Dr. Crow said that ASU has no state-based capital budgeting or financial aid. The state last invested in a campus facility in 2007, and the one time that happened before was in 2003. ASU has added 12 million square feet in the last 12 years through partnerships, alignments, and other mechanisms.

Displaying an overview of ASU's operating budget, both historically and going forward, Dr. Crow noted that the university's sources of revenue are the same as those for the University of Wisconsin System: state investment, university revenue, and enterprise revenue. Overall revenue in FY17 is currently slightly higher than $3 billion; the state's investment is around 10 percent of that amount, at $295 million.

At the time Dr. Crow assumed the office of president at ASU, the university was more than half funded by the state. He recalled that the institution was "suffering immensely," limited by its model, culture and design. He described it as a "weed-out school" which admitted lots of people and then kicked out those who could not make it.

Dr. Crow pointed out that ASU's online revenue is accelerating rapidly with a very significant margin or reinvestment in scholarships.

Over the last several years, there have been more than $200 million in reductions to state funding. ASU currently receives an investment of around $5,700 per student from the state. Dr. Crow explained that ASU had reduced its relationship with the state to two asks: an investment of $7,500 per in-state resident student per year, and an occasional investment in research facilities when ASU makes the case for one. The university does not need anything else – no building renewals, other revenues, discussions or interactions.

The state has conceptually agreed to this model, and ASU is moving toward its implementation. The goal is to keep ASU's costs as low as possible, and to have the state finance about half of those costs for resident students. ASU has many other activities that can generate other revenue.

Dr. Crow indicated that ASU's past tuition increases after the recession were dramatic, but the institution has since guaranteed that no tuition increase will be larger than 3 percent per year for a ten-year window, beginning five years ago. The proposed tuition increase for in-state students has been zero percent for several years, and will be close to zero percent in 2017.

Dr. Crow then explained how the altered tuition structure of the institution actually works for ASU's 45,000 in-state undergraduate students. On average, these students pay $1,800 in net tuition (after grants). There is no state-based financial aid. Students with family incomes under $50,000 essentially pay $0, while those with family incomes under $75,000 would pay $2,000. ASU has been able to structure a set of revenues and other financial mechanisms to make this work; the university has guaranteed that there will be no financial barrier to access, he said.

Dr. Crow observed that when universities begin to admit students that do not have any money, the complexity of the institutions grows dramatically. ASU had 2,600 incoming freshmen whose family incomes were under $40,000 in the fall of 2016; the enrollment of these students has increased since fall 2002. He added that these students are wealthier than ASU's 12,000 community college transfer students, and that the majority of ASU's student population is from rural families with incomes of less than $60,000.

Introducing ASU's market price model, Dr. Crow said he was not sure how well this model would be received in Wisconsin; he acknowledged that Wisconsin has historically been a politically complex state. He explained that the market price to attend Arizona State University as an undergraduate student is $30,000. (The Market Price Model to attend the University of Southern California is $50,000.) ASU enrolls many out-of-state students and international students, who pay roughly $30,000 on average. Although some financial aid is available to these students, the university aims to keep the average price at $30,000 because this is what the institution is worth in the market place.

In-state resident tuition is priced at $10,000; however, average net tuition for an in-state student is $1,800. Dr. Crow indicated that ASU has been trying to explain to its stakeholders in the legislature and elsewhere that the university either is a market-driven institution or is not. He argued that if ASU is a market-driven institution, the legislature cannot seek to set its prices or wages; or, if the legislature wants the state university to be funded by the state, it should control the university in every possible way. For ASU to operate in the market as it has been, Dr. Crow said the university has asked the state to invest in students from Arizona, provide the appropriate public governance system, and then "get out of the way."

Enterprise and Innovation

Dr. Crow said that ASU accomplishes all of this through enterprise and innovation. He indicated that ASU is seeing enhanced productivity, greater efficiency, and greater competitiveness as a result of its innovations. These include eAdvisor, an interactive and intelligent tutor-based system on ASU Online.

Another example is the Mayo Clinic partnership. When ASU decided not to build a medical school, it convinced the Mayo Clinic to move a second campus of its medical school to Scottsdale, Arizona. The campus will open in June 2017, and its first class is currently being admitted. ASU used all private money to build this medical school and its own parallel schools, and in return has a connection to a well-known medical school, clinic, and set of hospitals located in Rochester, Minnesota; Jacksonville, Florida; and Scottsdale and Phoenix, Arizona.

Dr. Crow explained that these partnerships do not require ASU to make any investments; the institution can build these relationship with seed funding and joint schools, initiatives, degrees, and activities.

Dr. Crow went on to describe ASU's teaching and learning realms, although he cautioned that these are a work in progress. He stated that knowledge is at the center of all that a real university holds dear, and this is stored in its faculty, centers, library, and other assets. "Realm

1" encompasses full-immersion, on-campus, technology-enhanced learning. ASU has 170 technology partners from the private sector who are building tools, devices, and mechanisms for the university, which has altered the institution's productivity, graduation rate, retention rate, and overall success.

Internal to ASU's own environment, "Realm 2" includes digital-immersion, online, technology-enhanced instruction. Dr. Crow suggested that ASU's faculty have enough energy left from on-campus activities to reach a few more people outside the university, particularly the tens of millions of people in the United States who started college and never finished (including half of the people who received a Pell Grant). Within this realm are ASU's 140 online degree programs with 26,000 full-time-equivalent degree-seeking students. Enrollment in these programs is growing at faster than 30 percent per year.

"Realm 3" covers digitally-immersed, massively-open, technology-enhanced instruction. Dr. Crow said that ASU learned some lessons by watching other schools that did the massively open online courses (MOOCs). After waiting to see how that technology worked, the university decided to try things a little differently, he said. ASU launched the "Global Freshman Academy" program, which currently has 11 courses (soon to be 30) and 400,000 learners from 192 countries.

One course in the Global Freshman Academy is college algebra. With 50,000 students enrolled, this completely adaptive course is built on individualized learning and individualized intelligent tutoring. The outcome, Dr. Crow said, is that those who stay in this self-guided course have a 90-percent probability of mastering college algebra, which is a predictive indicator for success in many other subjects, such as the social sciences. He suggested that the course is not about math so much as it is about learning to solve for unknowns.

Dr. Crow described the fourth realm, called "Education through Exploration," as the "most exciting realm." Upon deciding that there are ways to teach which are not boring, ASU decided to launch a series of projects, including one project funded by the Gates Foundation and another funded by NASA. Instruction in the fourth realm is entirely smart phone-based, allowing users to play games through ASU's School of Earth and Space Exploration, which can help them learn freshman-level chemistry or practice finding and assessing new planets. Dr. Crow reported that early indicators from the initial deployment of these programs in the community college sector are showing unbelievable upticks in biology, chemistry, and physics learning.

A fifth realm is unknown, but Dr. Crow predicted that it will be "cooler and better than anything that we've seen so far." Since introducing technology into ASU's instruction, 1,600 of its tenure-track faculty have been trained in digital education in addition to their regular interactive realm of activities, and 2,500 courses have already been deployed. He emphasized that ASU does not have multiple faculties; the same faculty is doing all of these activities.

Discussion

President Millner opened the floor to questions from the Regents, chancellors, and provosts.

Dr. Crow first briefly noted that ASU does not have a strategic planning committee or process, but instead articulates goals for where the institution is headed.

President Millner began by asking about the pricing model for the online realm. Dr. Crow explained that the current pricing model for the Global Freshman Academy is that the courses are free unless students want to take them for credit. All students will receive a grade, feedback, and evaluation of their work, regardless of whether or not they are taking the course for credit. The pricing for those seeking credit will vary depending on what country the student is in.

For the general public, Dr. Crow indicated that regular degree programs are priced at slightly above in-state tuition, as part of a market-driven, market-derived pricing mechanism. Alternatively, ASU has a program with Starbucks, a company that employs 70,000 people who went to college and never finished. To help enhance employee retention and community success, Starbucks made a deal to have ASU produce 25,000 college graduates from that group. The flexible pricing model for this program will allow those students to graduate with no debt.

President Millner commented that it was interesting that ASU is collaborating with a corporation to do this, and developing a price based on the aggregate of students.

Regent Whitburn complimented Dr. Crow on a wonderful and stimulating presentation. Noting that the state of Arizona does not do ASU's building, Regent Whitburn asked about the institution's debt. Dr. Crow answered that ASU has its own debt of $1.4 billion, with a bond rating of AA.

Regent Whitburn observed that Dr. Crow has been at ASU for 15 years, is a student of higher education, has been on the national stage, is data-driven, and has acted as a change agent. He asked Dr. Crow for his advice on the top three things the UW System ought to do differently, based on his expertise.

Dr. Crow indicated that the Wisconsin is a very successful state by nearly every indicator: its economy is more stable and broader compared to Arizona. He said that the best advice for the board of a university system of the UW System's scale is that all things of the past are simple compared to what lies ahead.

Using the example of autonomous vehicles, Dr. Crow noted that some people believe that the implementation of autonomous vehicles means that all truck drivers are going to lose their jobs; he stated that this would not be so. Of a group of ten truck drivers, one will become a logistics master with a college degree, and with a salary that goes from $50,000 per year to $250,000. This person will manage the entire life of a fleet of trucks.

Of the nine people who are no longer employed as truck drivers, three will find some way to advance their education, though not quickly enough. These three will become part of the new economy by building the robots, servicing and advancing the software, and providing other support.

Three of the former truck drivers will not advance their education, and their wages will go down. Dr. Crow said the nation is already seeing this happen: most truck drivers in the United States have a high school diploma or less, and the number of jobs for people with high school diplomas or less in the American economy has declined by 20 percent since 2007.

The final three truck drivers, who are currently happily employed at $50,000 a year, will have no access to work or opportunity for employment after the implementation of autonomous vehicles, and will never be employed again. Dr. Crow warned that this would be enough to cause social disruption at a scale that no one wants to see; the country is seeing early signs of that disruption right now.

Dr. Crow said the University of Wisconsin is uniquely equipped, given the scale of its institutions and the operations of the state, to take on this issue. However, the scale of educational access and engagement are nowhere near where they will have to be, and many things will work against improving that.

Though he said that he did not know enough to be precise, Dr. Crow indicated that the ability to enhance the speed with which an institution like the UW System can advance into a changing economy will be significant. The impacts will be great, and few institutions will be able to figure this out, he added.

Dr. Crow concluded that this will mean implementing online and lifelong education ubiquitously. Research universities must engage with the forming of new industries and the training of people at a scale unlike anything seen in the past. Scale, speed and innovation are going to be critically important in the future, he said.

Regent Erickson expressed appreciation for Dr. Crow's efficient presentation of his data. Following up on his response to Regent Whitburn, she asked Dr. Crow to provide some more information about the wave of change that is rapidly approaching.

Dr. Crow explained that the fifth wave in higher education will require some American universities to move to a different scale. He acknowledged that the UW System has in some ways already increased its scale, but explained that what he was describing would be structured a little differently.

By embracing scale, ASU is moving towards having 100,000 online students in addition to 100,000 on-campus students, for a total of 200,000 students in a college degree-seeking environment with a faculty that is not much larger than when ASU had only 45,000 students. This innovation and change also applies to ASU's doing research at the levels he previously discussed.

Dr. Crow observed that, in some ways, the for-profit universities are an example of a failed effort to deal with a market problem. Demand for higher education exceeded the capacity of public universities to provide it, so other businesses stepped up and advanced. He noted that most for-profit universities have not been very successful up to this point; some have been very unsuccessful.

Dr. Crow said that the United States has dropped from #1 to #13 in producing college degrees. The income gap between the top one-third of the population and the rest of the country is growing and growing; for the middle third, all indicators are stable; and in the bottom third of the population, with more than 100 million people, there are no positive indicators. Lifespans for women of European origin with a high school diploma or less are going down in the United States, which has never occurred before. Addressing all of these issues means that single institutions or a network of institutions, such as the University of Wisconsin System, need to become technologically empowered.

The for-profit sector became delusional because of greed; this sector believed it did not need the faculty, the libraries, or other higher education resources. He indicated that universities do need these things, but some universities also need to couple them with technology that will allow them to operate at scale. Referring again to ASU's Starbucks program, he suggested imagining some universities being able to operate at that level with huge elements of the workforce; operations would be at a large scale, but still be connected to a real university.

ASU's library is being reshaped and restructured as a resource for both full-immersion, on-campus students and every other learner that the university has, with no lack of access. Dr. Crow cautioned that some, but not all, universities need to be able to do this, in the same way that only some institutions became research universities. Out of thousands of colleges and universities, only a few schools evolved into research universities; similarly, a few schools will move into this next realm.

Dr. Crow warned that deploying these elements can be very hard to do organizationally; ASU had to make a number of organizational changes because there was too much arguing. The arguing was redirected to arguing about goals. The next wave is important and will require a different kind of institution.

Sharing that he was the first person in his working-class family to attend college, and that some of his siblings and their children did not graduate from high school, Dr. Crow also pointed out that even within a single family there can be highly differentiated educational outcomes. The general public increasingly does not understand what the university sector is doing, and this is one of the reasons that public investment in the universities has gone down. Universities can argue that this is illogical, but Dr. Crow said it is nonetheless politically real. Universities have not yet figured out how to engage more people in a respectful way.

UW Colleges and UW-Extension Chancellor Sandeen asked Dr. Crow to address how he managed ASU's culture change, particularly related to getting faculty to engage in the new vision.

Dr. Crow explained that ASU did this by evolving its design aspirations and empowering the faculty to be designers rather than bureaucrats. He reiterated that he was not using bureaucrat in a pejorative sense, but instead as a literal organizational theory model. He said that Anthony Downs, the best scholar of bureaucracies, observed that the principle objective of a bureaucracy once it reaches a certain age is the conservation of the bureaucracy itself, the maintenance of the status quo. ASU broke that status quo and told the faculty that they are free to design whatever they want.

The university also decided that no small group of faculty members was going to keep the rest of the faculty from doing something. For example, ASU had three marginal biology departments under its teacher college model – biology, plant biology, and microbiology. None of these departments was good enough, he said, mostly because they were arguing about nothing.

He recalled giving the faculty one shot to reconstruct what they thought the departments should look like, and said that they came back with a brilliant idea for an integrated School of Life Sciences, with a self-assembling faculty who could vote on which subgroups they wanted to be in. This new concept included having ethicists, philosophers, and policy analysts on the faculty, making the school more transdisciplinary, and having multiple degree programs.

At the penultimate meeting with 120 faculty members, Dr. Crow said that 105 were ready to move forward with this plan, but 15 were being "obstreperous curmudgeons." Eventually, the administration told those who disagreed with the plan that they had three choices: 1) quit or retire; 2) move to another unit at ASU; or 3) stay in the School of Life Sciences, but wait to provide any feedback on the new unit for three years. Dr. Crow said that two people quit, four went to another unit, and the rest stayed in the same unit – but the administration did not hear from anybody again, and the unit has since "taken off like a rocket."

Dr. Crow indicated that after going through this process many times, the faculty now believe they are in charge instead of administration.

He added that another strategy he had for engaging the faculty was to offer to retract his ideas if the faculty were able to suggest and agree to a better idea. The only restriction was that they could not put any ideas on the table that involved protecting their existing positions or the status quo, unless they could demonstrably produce a better series of outcomes related to the retention and graduation of students, the quality of students, or the funding of research. He said that making this offer changed the nature of the discussion to focus on the achievement of goals; once people figured this out, there was culture change.

Dr. Crow recalled that there were other forms of resistance, including committees that were against him. He reached out and met with these committees, and reported that he was able to convince some and not convince others. In the same timeframe, ASU built new campuses with municipal partners such as the city of Phoenix, a $300 million investor, in addition to private-sector matching investments and university investments. By moving four colleges to downtown Phoenix, those colleges were completely transformed, though everything is operated as a single institution.

Regent Tyler asked Dr. Crow to characterize ASU's relationship with employers and how they fit into the institution's resources.

Dr. Crow said that ASU spends a lot of time connecting to employers. For example, the university is the largest global supplier of college graduates to the Intel Corporation, and it was recently announced that the company will be making a $7-billion investment for a new advanced microchip fabrication plant about 20 miles from ASU's main engineering campus. In Ho Chi Minh City in Vietnam, ASU runs the national Higher Engineering Education Alliance Program (HEEAP) in partnership with the Intel Corporation and others.

ASU also works intimately with companies on customized degree programs, resulting in large numbers of STEM and business majors. These include 20,000 engineering majors, 12,000 science majors, and 15,000 business students.

Dr. Crow said that the university tries to listen more about what is needed, and has launched a series of "iProjects" where companies present challenges to groups of students who then advance solutions. These students are not only in engineering and science, but also in innovation, nursing, teaching, and all kinds of areas.

He indicated that ASU is looking to enhance the speed with which the institution can communicate what a student has learned, and so launched an e-Portfolio program. Students have about 75,000 of these e-Portfolios, which are a way to express what they have learned. Dr. Crow said that employers are finding the e-Portfolios to be fantastic tools, particularly when looking at less technical people for their writing, analytical, and problem-solving skills, which are becoming much more valuable in the marketplace. ASU does the e-Portfolio program for all of its students, including online students.

Another program called "me3" is a gaming tool for high school students to plot a course through high school into the university, possibly through community college, that is built around careers. The me3 quiz asks 60 visual questions, requiring users to pick one picture over others. This allows the tool to build a very simple psychological learning model of the user's interests. Dr. Crow shared that his own me3 results indicated he should be a talent scout or movie producer; this is pretty accurate, he said, because he actually is scouting talent and producing something.

Regent Klein thanked Dr. Crow for an inspiring presentation, and also thanked President Cross for inviting him. Saying she was impressed with the volume and depth of transformation that he was able to achieve at ASU, Regent Klein asked Dr. Crow about how he created a team with the right mindset.

Dr. Crow said that all of his office staff at Columbia University came with him to ASU, including two of his former students: Dr. Mariko Silver, who became president of Bennington College at age 36; and Kimberly de los Santos, now an endowed director at Princeton University. He was also able to bring in different individuals from the private sector, public sector, and university sector, including the executive vice-provost of NYU, the CFO from Purdue University, and flag officers from the military.

ASU hired many new faculty members, including "a bunch of disruption faculty," who were not found through normal faculty searches. These disrupters included the former president of the Mayo Clinic, the president of SmithKline Beecham, and the president of BP Asia – all academics with Ph.D.s or M.D.s. Some of them took on regular positions and some took on leadership positions. Dr. Crow added that a mix of deans and directors were hired from all sectors, and were kept in their roles as long as they continued to make progress and move things forward.

Responding to another question from Regent Klein, Dr. Crow said that the University Innovation Alliance has been very powerful for ASU because of what the institution is learning from other places. For example, one of the schools in the Alliance, Michigan State, learned that part of the reason it was losing lower-income freshmen was the overpowering interactions of the university with those families – there were hundreds of email messages between the time of admission and arrival, which overwhelmed these families. The rest of the schools in the Alliance looked at themselves and discovered that they were just as guilty of that.

Dr. Crow indicated that there are other opportunities for ASU to learn from the Alliance. Georgia State graduates African American students and white students at the same percentage; not many universities are able to do this. The University of Texas has tools to enhance freshmen retention. Within the innovation cluster, financial aid officers, admissions officers, and big data analytic officers are all working together.

Regent Mueller thanked Dr. Crow for his presentation. She noted that ASU's very significant growth in revenue – a four-fold increase – helped fuel the innovation that he had discussed; this includes a large percentage of ASU's online tuition revenues, which are a bigger share of ASU's budget than those from in-state students. She said the UW System unfortunately does not have the same opportunity to increase tuition revenues as ASU did in the early years of its transition.

Dr. Crow observed that the University of Wisconsin is a vastly more mature institution than ASU, with superior recognition among the general population and a brand that is in the top tier of universities.

Saying that ASU's online programs are intended to reach out nationally, Dr. Crow indicated that there are only two other universities moving into online education at any significant scale – USC, which only offers online programs to graduate students, and Penn State. He added that the market for online education on a global basis is insatiable.

In response to a follow-up question from Regent Mueller about additional enterprise funding in ASU's budget, Dr. Crow explained that ASU Enterprise Partners includes, among other services, the ASU Foundation, the university's real estate business, and a technology transfer business similar to, but smaller than, UW-Madison's WARF.

ASU's real estate business is the result of an agreement with the state and county to charge fees in lieu of property taxes for land and property that the university co-develops with private developers.

The first project was a $750-million, 2-million-square-foot office project by State Farm. Dr. Crow said the university then built an intellectual relationship with State Farm, which would be hiring a net 8,000 new jobs for that site; he added that the revenue to the university from that land transaction is significant. Indicating that the State Farm project took place on about 16 acres of land, he said that ASU has about 350 additional acres that will be developed in this way.

Dr. Crow said that ASU also convinced the Air Force to give the university 750 acres of an old Air Force base in Mesa, Arizona. There are currently 5,000 students at that site, and half of the land has been set aside for the same kinds of development activity.

Another project involved getting the City of Scottsdale to invest in clearing an old shopping mall and giving the university a lease on that site through the ASU Foundation for 198 years (two 99-year leases). ASU found private sector developers to build four buildings, taking anchor tenancy in some. Those buildings are now filled with software companies and incubating companies that are developing; ASU also holds an equity position in the development through its foundation.

Dr. Crow concluded that ASU Enterprise Partners allows the university to operate in ways that can secure substantial additional revenues by leveraging its assets and partnerships.

In response to another question from Regent Mueller about ASU's expenditures as compared with its revenues, Dr. Crow acknowledged that ASU's expenditures have increased with its revenues, but said the university's net position has been greatly improved. It has improved its reserves, and is spending everything else on new initiatives. He added that if ASU were to slow its initiative spending and grow its assets and reserves faster, people would likely question why it was acting like a bank.

He concluded that ASU's financial position is solid, with aggressive investment by both the university and its partners. For example, ASU has partnered with third parties to spend $250 million on building a 50-megawatt, multi-campus solar energy system that produces about half of the university's daytime electricity. ASU buys the electricity and hosts the facilities, for which its partners pay. Dr. Crow said the institution has literally hundreds of projects like this going on at the same time.

Chancellor Blank commented that Dr. Crow's slides showed the vast majority of ASU's projected growth in the next ten years coming from both domestic and international enrollments in online programs. She noted that the sort of results ASU has achieved in graduation rates and other metrics are hard to deliver with online courses, and asked how Dr. Crow's goals for the online programs compare to those for ASU's residential students.

Dr. Crow explained that ASU is approaching this issue through its Action Lab unit, which is led by someone hired from the private sector and which spends about $4 million a year looking at the efficacy of learning outcomes associated with online learning. He said the Action Lab is finding highly unpredictable and positive outcomes from online learning, mostly derivative of the age differentials of the students.

Dr. Crow said that ASU does not suggest that a person go to college online as a recent high school graduate. Though their education can be augmented by online learning, the university thinks that the socialization, maturation, and learning processes that happen on campus need to occur for students at that age. He added that those who enlist in the military, for example, would be the exception to this rule.

Nevertheless, Dr. Crow indicated that the goals for the outcomes of ASU's online programs are undifferentiated from its on-campus programs, which is why only certain online degrees have been allowed to go forward. One of these is the electrical engineering degree.

ASU's electrical engineering faculty, who are research capable, highly engaged, and interact with large numbers of face-to-face students, spent three years building an online degree program with insight and perspective. Dr. Crow said the faculty built laboratories, tools, and collaboration devices using every asset that ASU has.

ASU's EdPlus unit has a staff of about 170 people who provide technological assistance to the faculty. The EdPlus staff, which includes educational designers, instructional designers, knowledge navigators, and knowledge curators, helped put together the online electrical engineering degree, had it accredited, and then launched it out to older students working with an associate's degree in electronics technology, many of whom are in the Navy serving on ships and have no access to traditional electrical engineering degree programs.

Dr. Crow reported high semester-to-semester retention of about 80 percent in ASU's online programs, as well as extremely high performance in all of the measured exams and tests. He acknowledged that online students have a different educational experience, but added that they are given access to ASU's library, learning environment, and tools.

The university now has more philosophy and history majors online than it does on campus; Dr. Crow indicated that the faculty of these departments are proud to be able to interact with so many interested students outside the face-to-face environment. He shared the story of one 29-year-old participant in the Starbucks program; this student went to private college and dropped out after one year with a bunch of debt, and was unable to return to college for many reasons. He dreamed of being able to study philosophy and tried to teach himself by going to the library, but this did not work. Dr. Crow recalled that this person became extremely emotional about having the means to receive guided instruction for the first time in his life, having found a pathway with ASU.

Dr. Crow said that the success of an online course depends on how it is delivered. ASU is adding adaptive learning courses which produce learning outcomes superior to any face-to-face environment. Implementing these courses on campus has greatly lowered costs and enhanced outcomes.

Of the roughly 20,000 courses that ASU offers, perhaps a few hundred are technologically intensive on campus; Dr. Crow explained that these are concentrated around "gateway" or "killer" courses, which used to cause many students to drop out of school. For example, 50 percent of ASU students who took the Math 142 course would get a grade of C or

worse; half of these students then dropped out of the university. Using these technologies, ASU has altered the course and reduced the non-completion rate to 10 percent.

Dr. Crow concluded that online programs are not suitable for every degree; ASU currently offers 140 of its 400 degrees online, and might not have many more. However, expectations for online and on-campus programs are the same; ASU measures learning outcomes against all standards for whatever the sector happens to be, including every post-graduation learning assessment that can be applied.

Regent Whitburn reflected on Dr. Crow's explanation of the waves of change in higher education, and how existing institutions continue even after each new wave. Referring to a recent Harvard study, which indicated that private institutions have smaller endowments and that 30 to 40 percent of these institutions could be expected to disappear in the coming years, he asked Dr. Crow if he would reject these findings.

Dr. Crow said he would not reject those findings. Noting that small, liberal-arts-oriented colleges are often Wave 1 institutions, he indicated that historic institutions like Bowdoin College, Williams College, or Amherst College would all be fine; the problems will arise at places with fewer resources. He added that in the public and private college sectors there are hundreds of smaller entities with very low graduation rates. These underperforming institutions are likely to either consolidate with others or go away, but the total productivity of the Wave 1 class will continue to increase.

Responding to a question from Regent Whitburn about the source of doctors in Arizona, Dr. Crow explained that there are two osteopathic medical schools in Arizona and two regular allopathic medical schools. The University of Arizona has a two-campus medical school system, and the Mayo Clinic will open its medical school in partnership with ASU in June. Creighton University is expected to expand from Omaha to Phoenix in another hospital relationship. He added that doctors are recruited to Arizona.

Dr. Crow said that ASU is concentrating huge amounts of energy on expanding nurse practitioner education, as well as biomedical informatics and a range of other programs to train the bulk of the workers needed for health care going forward.

ASU's partnership with the Mayo Clinic included building its own parallel school, the School for the Science of Health Care Delivery, which is meant to prepare students to think about their health care interactions differently. While the Mayo Clinic will grant the medical degrees, all graduates from both Rochester, Minnesota and Scottsdale, Arizona will receive certificates from the parallel school. Degrees will be granted in the science of health care delivery, nutrition and health promotion, biomedical informatics, nursing and health innovation, and many other areas that reflect oncoming changes in the way health care is delivered.

Regent Whitburn asked if the strength of ASU's relationship with its governing board and the state legislature was the result of the continuity of leadership at ASU.

Dr. Crow agreed that continuity could be part of it. He said that the University of Arizona had just announced the appointment of its fifth president since his own appointment at ASU. There have been three presidents at ASU since 1980, each of whom has been assigned to "take the ball" as far as they could. Dr. Crow said that, when he is replaced, he will hand over to his successor an ASU that has morphed into a different kind of institution, but it does take time to do that.

Regent Steil remarked on ASU's significant enrollment, particularly online. He asked Dr. Crow to comment on the impact of ASU's "brand" from an academic perspective and from the perspective of potential employers or the business community.

Dr. Crow indicated that ASU was ninth on the Times Higher Education World University Rankings relative to the quality of graduates; the University of Florida was the only other public university in the top ten. He indicated that the ASU brand has no issues with employers in the market. In academia, however, the university carries a reputation for being a party school, in addition to not having been a research institution until recently. The fact that ASU's faculty have recently won Nobel Prizes is a new development.

Dr. Crow expressed no worry about ASU's brand relative to its online activities because the world is shifting quickly from old-style thinking, particularly among employers and students. He acknowledged that this may be different at more elite universities, or among those who consider themselves more elite faculties; but he indicated that this was not a concern. Elite opinions will have no effect on ASU's level of research achievement or its ability to win grants, produce 26 Fulbright students per year, or have one of its students win a Rhodes scholarship, as happened this year.

President Millner invited President Cross to make a few comments to close the discussion. President Cross said that he had been keeping an eye on Dr. Crow for a few years, after he hired Betty Phillips (née Capaldi) to be ASU's provost and gave her the difficult task of implementing many of the ideas that Dr. Crow had discussed.

President Cross said he was intrigued by Dr. Crow's confidence, commitment and support for innovative leaders. Risk inherently has failures, not just successes; he suggested that Dr. Crow could talk at length about the failures as well. The power of Dr. Crow's vision and his confidence that the institution was still moving in the right direction are important.

President Cross said it was interesting to learn how ASU was able to remove the constraints or barriers that entangle a lot of public higher education, as the university system in Wisconsin is more encumbered by government than in any other state he has been in. The freedom with which Dr. Crow has been able to operate with his board related to property, partnerships, and contracts, as well as with the faculty, is expressed by how ASU has been able to innovate. President Cross challenged the state of Wisconsin to think about this, and to free the UW System to operate at the speed and scale of change described by Dr. Crow.

After joking that some of the ASU's online revenues were clearly used to pay off the referees in the 2013 football game between Wisconsin and ASU, President Cross personally

thanked Dr. Crow for coming to the UW System to share his thoughts and to challenge the System to look at itself differently.

Dr. Crow expressed appreciation for the opportunity to be in Wisconsin, one of America's great laboratories for democracy. He said the UW System is a role model in many ways in terms of its values, achievements, and scale. He added that this was mentioned in a book he had authored.

President Millner thanked Dr. Crow. Saying that he was correct that the UW System has all the elements needed to address the issues that were touched on in his truck driver scenario, she indicated that both the Board and the state need to think about the speed this change will require, and the courage necessary to accept the challenges.

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The Board recessed for lunch at 11:45 a.m. and reconvened at 12:45 p.m.

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"A SYSTEM-WIDE BIOTECHNOLOGY COMMUNITY OF INTEREST, LEARNING, AND PRACTICE," BY DR. SUSAN BAXTER, EXECUTIVE DIRECTOR, CALIFORNIA STATE UNIVERSITY PROGRAM FOR EDUCATION AND RESEARCH IN BIOTECHNOLOGY

Introduction

President Millner noted that Vice President Henderson spoke at the Board's February meeting about the value of establishing consortia to focus on a research topic of common interest to the state. President Millner said the Board was now pleased to welcome a guest speaker who has considerable experience in leading similar efforts in California's biotech world.

Dr. Susan Baxter is the Executive Director of the California State University Program for Education and Research in Biotechnology (CSUPERB). In this role, she is responsible for strategic planning and new initiatives related to life sciences across the 23 campuses of the CSU System.

CSUPERB was created in 1987 to support multi-campus collaboration and to foster active learning system-wide. Today, the program provides seed funding for researchers, emerging academic entrepreneurs and curriculum designers. It convenes an annual biotechnology symposium and partners with industry on workforce development projects.

President Millner introduced Dr. Baxter, saying that Dr. Baxter would explain how CSUPERB is structured, how campuses benefit, and how the community plays a role in strategic

initiatives. Following Dr. Baxter's presentation, the Regents would again have an opportunity for questions and discussion.

System-wide Program Structure

Dr. Baxter thanked President Cross and Vice President Henderson for inviting her to share what she has learned in California and also to learn how things work in Wisconsin.

The California State University (CSU) System is the largest four-year public institution in the nation, with 23 campuses and 474,000 students enrolled across the state of California. CSU graduates about 100,000 students per year, and has 3 million alumni across the nation. Across the 23 campuses, CSU brings in about $540 million in research expenditures.

CSU is made up primarily of regional comprehensive universities and undergraduate institutions, which Dr. Baxter said would be the focus of her talk. Specifically, she was asked to talk about CSU's system-wide community for biotechnology.

Dr. Baxter's presentation was titled "A System-wide Biotechnology Community of Interest, Learning, and Practice." She explained that community is a structure or framework for a collaborative entity that will cross campuses and involve students and faculty from across a region, such as the state of California or the state of Wisconsin.

Referring to "Cultivating Communities of Practice," by Wenger, McDermott and Snyder, she said this instructive book actually reflects her learned experiences over the last decade. The book is based on scholarship from the world of cultural anthropology and organizational management theory. She noted that this is nothing new – people have been talking about communities of practice for a long time.

A community of practice might provide faculty support, incubate new programs and ideas, and bring together faculty and students across different disciplines. It can serve as an "on ramp" to reduce learning curves for faculty or administrators anywhere in the state around a particular domain.

Dr. Baxter cautioned that what CSUPERB has done may or may not work in a different context. CUS's community of practice started 30 years ago, with different motivations than the UW System has today as it considers starting one for its own strategic reasons. However, some promising practices may be relevant for Wisconsin.

Dr. Baxter stated that the point of a community of practice is to build an organization's overall capacity for learning, not necessarily doing. CSUPERB provides seed grant funding for researchers and educators at all 23 of CSU's campuses. The program also convenes an annual symposium, which brings together industry experts, legislators, and professors working in the biotechnology field from different places around the country and the world.

CSUPERB sponsors industry-responsive curricula. Dr. Baxter explained that hands-on learning in the STEM disciplines has been exceedingly important for student learning and

engagement, but is equally important to employers because graduates can hit the ground running in research and biotechnology.

In bringing industry together at its annual meeting to discuss trends in the industry, CSUPERB helps inform how to put together new curricula, new projects, and new research directions. The program also serves as a liaison for CSU with government and educational partners across the state and the nation.

Dr. Baxter said that CSUPERB defines the domain of biotechnology in a way that reflects the industry as a whole. It is not only molecular biology or DNA science. It ranges from molecular devices involving bioengineers and physicists; to molecular biologists; to people working in business or the clinical sciences, which is especially important for product development in the biotechnology world. CSUPERB's domain spans many disciplines and is not focused on any one particular aspect of biomedical science.

As an example of how these activities are related, Dr. Baxter said that she serves on two industry association boards – the California Life Sciences Association in Northern California, and Biocom in Southern California – working on labor market analysis.

A report from the 2016 National Academies of Science, Engineering, and Medicine, called "Promising Practices for Strengthening the Regional STEM Workforce Development Ecosystem," recommended that universities and industry work together to look at workforce development and what coming needs will be; Dr. Baxter said that CSUPERB has been doing this for the last eight years in California.

CSUPERB has published "The Talent Integration Report" on workforce trends for the last two years, and has found that both policy leaders and employers think that universities are doing a good job providing subject matter training, but also that new graduates need cross-disciplinary communication, teamwork, critical thinking skills and collaboration skills.

Dr. Baxter said that undergraduate and graduate students are guaranteed to develop these skills while working on inclusive, well-designed, authentic research and entrepreneurship experiences and internships. These are high-impact practices that are known to engage students and help them persist towards degrees, but they are also something that employers want. Adding these lifelong learning skills into undergraduate education is "a win" for everybody in the state related to biotechnology, which in turn informs what CSUPERB funds.

Motivation

Dr. Baxter indicated that the motivations for starting CSUPERB 30 years ago were due to the employment landscape in California. Biotechnology is one of the largest industries in the state, today employing almost 300,000 life science professionals. It is a multi-disciplinary field ranging from medical devices to pharmaceutical development to environmental monitoring, but 30 years ago biotechnology was changing very rapidly from a pharmaceutical to more of a biopharmaceutical focus.

CSU also had a critical mass of faculty and students in the university who were already doing research or were interested in biotechnology-related areas of expertise. The problem, she said, was that they were spread out across 23 different campuses.

Dr. Baxter also suggested another reason for CSUPERB's beginning: that CSU microbiology faculty banded together to get a purchasing discount on pipettes sold by Gilson, Inc., a company created by UW Medical School researcher Dr. Warren Gilson.

Stating that CSUPERB is a community motivated by a faculty-driven grassroots effort, Dr. Baxter shared the story of one of its founding faculty members, Jill Adler-Moore, who is still involved in the program.

Dr. Adler-Moore has partnered with small and large California biotechnology companies throughout her career. She co-invented AmBisome, a liposome-encapsulated antifungal drug, and works as a professor at Cal Poly Pomona, a primarily undergraduate institution. Dr. Adler-Moore receives National Institutes of Health (NIH) and National Science Foundation (NSF) funding to do microbial and vaccine development in her lab, is listed as an inventor on 16 patents, and is an AAAS Fellow. However, Dr. Baxter reported that Dr. Adler-Moore is most proud of the hundreds of students that she has trained at the bachelor's and master's levels who have gone on to biotechnology companies.

Dr. Baxter indicated that Dr. Adler-Moore epitomizes the spirit behind the founding of CSUPERB, which is that a very engaged faculty, along with a very engaged set of students, can come up with incredible inventions, innovations, and scientific breakthroughs.

Noting that the literature on communities of practice says that they need to be rooted in an intrinsic motivation, Dr. Baxter said that in CSUPERB's case this was the professional pride and passion of being an engaged scholar and teacher. These engaged faculty started sharing and learning from each other, and the learning community idea became the nucleus for the program. CSUPERB was the first system-wide program chartered at CSU; there are now more than 20 different system-wide groups across the system.

Dr. Baxter indicated that the tipping point for CSUPERB was probably in 1999, when the state recognized the organization as a statewide entity and added a focus on maintaining and enhancing the biotechnology workforce.

Typically, the short-term goals for a community practice begin around improving how the organization works. Evolving over time, programs become more strategic and can foster professional development and solve bigger problems as they mature. CSUPERB began adopting three-year strategic plans which are approved by the chancellor every three to five years. Dr. Baxter said the ability to execute a strategic plan is one of the hallmarks of a successful community of practice.

She added that in the long term, communities of practice also should be able to foresee developments and take advantage of emerging opportunities. A community comes together around a shared interest, but it evolves because people see professional advantages in sharing

with their colleagues and learning from each other. This in turn can evolve into identifying problems and mobilizing together to address them.

Governance

Dr. Baxter stated that the way CSUPERB works is rooted in its grassroots history as a faculty-run organization. The first level of governance is the Faculty Consensus Group, which she described as a sort of congress. Four representatives from each of the campuses are appointed by the presidents to serve on the group. From this group, a Strategic Planning Council involving both faculty and deans is elected.

The highest level of governance is the Presidents' Commission, with seven of the 23 CSU presidents appointed to serve by the chancellor. As Executive Director of CSUPERB, Dr. Baxter reports to the chancellor through the Presidents' Commission. She noted that communities of practice prefer "coordinator" to executive director; her job involves coordination across the state.

The governing structures work together around CSUPERB's mission, which is "to develop a professional biotechnology workforce by mobilizing and supporting collaborative CSU student and faculty research, innovating educational practices, and partnering with the life sciences industry." Dr. Baxter pointed out that the program has intentionally involved industry in its mission.

She said that CSUPERB pays attention to state, national and system-wide strategic priorities, working with proven partners to foster multi-disciplinary collaborations and projects. The program also seeks to promote high-impact practices – including research, entrepreneurship, education, and internships – because they have a real effect on graduates' careers and lives beyond the university.

Noting her program's focus on student-centeredness, Dr. Baxter said that most higher education institutions approach high-impact practices with an equity or access motivation; in other words, will all undergraduate students at a university have an undergraduate research experience?

Indicating that student success is often defined simply as completing a degree, Dr. Baxter explained that CSUPERB also looks at whether graduates went on to use their degree post-graduation in STEM fields (e.g, graduate school, medical school, or industry).

A final focus area is effective STEM education practices. Dr. Baxter said that the name of the program, "Education and Research in Biotechnology," reflects old conversations about research versus education. Previously these two pillars did not cross over very often; now they are completely enmeshed, reflecting the National Science Foundation's recommendations to bring research into the classroom and engage students with cutting-edge scholarship.

Dr. Baxter said that CSUPERB has moved past "gateway attitudes" toward remediation and student preparedness, instead focusing on where the students are and engaging them in

research as early as possible. When students are engaged and see themselves as scientists and engineers, they recognize that the gateway courses will help them make progress toward those careers.

Indicating that conversations about pedagogy and student engagement are common, Dr. Baxter said that CSUPERB faculty across the system have a view beyond the laboratory. They tend to be more connected to their communities, doing community-based service or service learning, and are more likely to do partnered research projects and work on real problems. She suggested that this is a generational change from an inward, PI-focused culture to a more multi-disciplinary, collaborative, community-facing culture.

The key to a successful community of practice in the long term, she said, is that governing bodies are not just advisory. CSUPERB's Faculty Consensus Group meets annually in August to determine what to fund in the coming year, formulate requests for proposals, and also review proposals. The President's Commission board reviews the program's annual budget and operating plans, and presents them to the chancellor for approval. There is also feedback from the community, as a means of engagement.

Budget

Dr. Baxter stated that CSUPERB's budget has been relatively flat since she has been at CSU, operating with about $1 million per year on average over 30 years. The program's budget varies depending on the external grant funds it brings in to pilot new ideas, such as the I-Corps entrepreneurship education program.

Noting that support for the program has been reliable over time, Dr. Baxter said that this is the most important element of a vibrant community of practice. Coordinated investment in infrastructure, with consistent support over a long period of time, has led to a culture change that otherwise could not have been achieved.

How Individual Campuses Benefit

Dr. Baxter said that if it is not clear to members how they are going to benefit from a community of practice, they will not participate. (Participation is voluntary.) She went on to explain how individual CSU campuses benefit from participating in CSUPERB.

CSUPERB uses a competitive seed-grant model, which incentivizes participation for those who otherwise might not come to the table. The program's strategic goal is to build research capacity and involve more students, so the hope is that the proposals awarded will go on to become institutionalized, sustainable, or grant-funded by a different agency.

Dr. Baxter reported that the program is able to fund about 30 percent of the peer-reviewed proposals it receives each year from all campuses across the system, which are primarily undergraduate universities. Applicants and recipients change year to year; on average, 30 to 40 percent of applicants are applying to CSUPERB for the first time. The awards are

published in the program's annual report, as transparency in how money is spent is another key to a vibrant community of practice, she said.

Coming from the business world, Dr. Baxter said that the return on investment for the seed-grant program has exceeded any expectations she had at the beginning. The seed grants that CSUPERB awards are only $15,000 each. For every CSUPERB dollar invested, principal investigators (PIs) have won $13.6 million from external funding agencies over the last two years. She noted that some projects do fail, but a vibrant community will take risks.

Dr. Baxter said that financial return on investment cannot be the whole story; CSUPERB is more about accrued impacts on the faculty, community, and students. For example, benefits to community members might include help with challenges they are facing, access to expertise, confidence in their professional identity, a sense of belonging, enhanced professional reputation, and an opportunity to expand skills and expertise. The greatest values are the intangibles.

Other benefits of the CSUPERB program include new research discoveries, new courses, new collaborations, new innovative pedagogies, new partners, a new student-founded company, new community partnerships, new publications, and new joint ventures. Dr. Baxter indicated that the relationships are the most important benefit.

Communities of practice come together to share experiences and expertise and to improve themselves professionally. She explained that when new PIs enter the system, their deans direct them to apply for a CSUPERB grant to augment their start-up funds. These PIs are included in the peer review process, providing opportunities for them to learn how to be a reviewer on a grant cycle before they move on to the NSF or NIH. The PIs learn how to write proposals, and CSUPERB aligns them with researchers. An annual symposium brings everyone together, fostering collaboration and sharing of practices, without worries about tenure or promotion.

CSUPERB has a workforce development focus, and 83 percent of the grant funds it awards support undergraduates working in research labs, on community-based projects, or in clinics around the state. The program surveyed about 700 students that received funding over the last five years, and found that about 90 percent continued on in a degree-relevant career path.

The faculty have learned how to be good mentors and work with students and their families to help them succeed in college; and students have engaged in extracurricular or co-curricular activities that will increase their changes for employment or admission to graduate or medical school.

Supporting Strategic Initiatives

Stating that a vibrant system-wide program can support strategic initiatives, Dr. Baxter said that some of CSUPERB's strategic initiatives are embedding research across the curriculum, involving undergraduate researchers, and working with the community on partnerships. These strategies can come from the top, middle, or bottom of the organization; an engaged system-wide program can creatively respond to ideas from all different directions.

Presenting a case study of a "community of inquiry," Dr. Baxter said that California wanted to be the leader in stem cell biology. The problem presented to CSUPERB was how to train people in these new emerging stem cell programs. Recognizing that CSU's primarily undergraduate comprehensives did not yet have a very deep bench of stem cell scientists, CSUPERB partnered with Research I universities across the state and submitted a proposal to the California Institute for Regenerative Medicine (CIRM) to start a new training program.

CSUPERB advocated for this program with the CIRM and California legislators and hosted proposal-writing workshops for institutions in the CSU, University of California, and California Community Colleges systems. The program brokered partnerships between Research I institutions and CSU campuses, and raised awareness of California's workforce needs in the stem cell field.

The CIRM Bridges to Stem Cell Research Internship Program has been in place for about seven years and has trained nearly 1,000 students in stem cell research techniques. These students go on to graduate schools all over the world, including Wisconsin. Dr. Baxter said that CSUPERB was successful in identifying a need and producing the workforce in a new field.

Next Dr. Baxter presented a case study of a "community of action" focused on bringing about change. One of the large changes that stakeholders on the national level have been discussing is a reform of how undergraduate biology is taught, she said. Engaged and active learning, which allows students to act as scientists and engineers in their first year or second year instead of waiting until their capstone experience, are concepts pulled from the 2009 "Vision & Change in Undergraduate Biology" report.

Dr. Baxter indicated that CSUPERB leadership decided to embrace this idea by implementing changes in approaches to instruction and working core competencies into the curriculum. CSUPERB's efforts were later highlighted in the 2015 "Vision & Change" report as an example of how community practice can actually influence and change how subject matter is taught at the university level. At the annual symposium, CSUPERB hosts four different workshops on how to put high-impact practices into the undergraduate curriculum so all students have access to those opportunities.

Finally, Dr. Baxter gave an example of a student stakeholder strategy: about seven years earlier, students approached CSUPERB to say they wanted to learn more about the business of biotechnology and entrepreneurship. CSUPERB partnered with the University of Texas's I2P (Idea to Product) to develop a program that involved student teams taking research-based ideas and exploring the market for those ideas. While the answer is oftentimes no, the experience is priceless. This high-impact practice gives students a project that they can talk about in interviews or at graduate schools, and provides a much more realistic view of the gap between undergraduate education and the workplace in the biotechnology field.

Dr. Baxter reported that CSUPERB won NSF funding for this I2P program, now called CSU I-Corps. As part of the National Innovation Network, these programs are spread out all over the nation: the NIH, NSF, Department of Defense, and USDA all are sponsoring entrepreneurial education for researchers nationwide.

Referring to a study which showed that biotechnology or biomedical research-based ideas usually take about $7 million and 10 years to become commercialized, Dr. Baxter said that it is not necessarily realistic to have an undergraduate student's idea be taken all the way to the production stage. However, entrepreneurial education reduces the gap in awareness of how research is done in a university versus the pharmaceutical or biotechnology industries.

She added that this strategic change which came from students is also raising awareness among faculty and changing the culture on CSU campuses. CSUPERB is seeing more faculty engagement and interest in partnering to advance ideas, which she said is exciting for primarily-undergraduate comprehensives.

Challenges to System-wide Programs

Dr. Baxter stated that the ongoing challenges to sustaining a system-wide community like CSUPERB relate to communication. As the program's coordinator, she communicates with people one on one by phone or email, and by the hundreds through CSUPERB's annual symposium, the peer review process, or through grant funding. She said that one can never communicate enough to keep everybody in sync; there still will be someone who comes to a meeting never having heard of a high-impact practice, or a new president who wants to know why the program is doing entrepreneurship education.

Dr. Baxter emphasized that system-wide programs have to repeatedly justify and make sure people understand their strategy and goals, as these can change over time. This is also important because administration is ever-changing; if a program's value to the organization is not understood, it becomes difficult to justify investing resources in it.

She indicated that she has many conversations about CSUPERB's activities, motivations, and impacts. This requires a big-picture, strategic, long-term perspective. She added that she also seeks to avoid getting stuck with a fixed definition of what CSUPERB is, because the program needs to evolve.

Dr. Baxter advised the UW System to let the community it forms in Wisconsin evolve naturally, and to welcome various levels of participation, interests, learning, practice and action. She said that sustainability over a long period of time comes from support and energy from within; without that interest or passion, communities will die and go away. She added that most communities of practice last only about ten years; CSUPERB has lasted 30 years because it has evolved to solve different problems. A community of interest allows people to make sense of complex issues by creating a place for them to share ideas and compare notes.

Discussion

President Millner thanked Dr. Baxter for her presentation and invited questions.

Regent Mueller observed that CSUPERB has been very successful in securing funding from external funding agencies. She asked if these were primarily federal or state grants, or if this included funding from the private sector. Dr. Baxter responded that the external funding

comes from all of the sources Regent Mueller had mentioned, but about 86 percent is from federal NSF or NIH grants.

In response to a question from Chancellor Sandeen about other communities of practice within CSU, Dr. Baxter said that the very successful Council on Ocean Affairs, Science & Technology (COAST) works mostly with state agencies and focuses on the coastal issues of water levels and quality, algae blooms, climate change, and other types of research and regulation.

Another community, the Water Resources and Policy Initiative (WRPI), does less research and more policy work with the state. Dr. Baxter indicated that the group had just won a very large contract to help inform water policy related to the Water Bond that was recently passed in California. She added that there is an agricultural research initiative, as well. The activities of CSU's research-based communities may overlap, depending on the project and the personnel involved, and as the science evolves and the problems change.

In addition to the research-based communities, Dr. Baxter said that there are 22 different system-wide programs overall, including the Strategic Language Initiative, a partnership with the Armed Forces and the State Department. Some of these communities persist and grow, and others have gone away after accomplishing their projects or short-term goals.

Replying to a follow-up question from Chancellor Sandeen about external funding, Dr. Baxter indicated that these efforts have enhanced CSUPERB's ability to bring in external funding for biotechnology. COAST also has a seed-grant funding strategy, while WRPI's strategy is more focused on informing policy and solving some joint goals with the state.

Dr. Baxter suggested that part of a successful community practice is to define its domain and goals at the beginning and then evolve from there. She added that these communities cannot be only about the money; the partnerships and multidisciplinary activities that are the reasons a community is successful are also engaging to faculty and students.

In response to a question from President Millner about the origin of a community of practice, Dr. Baxter indicated that communities of practice can be initiated internally or externally; the only commonality for building a community is passion as a coalescing force. She said that her example of the "Vision & Change" report demonstrates how common interests or needs identified by an outside source can be a motivating factor for bringing people together in response to ambitious or urgent goals.

President Millner then invited President Cross to make a few comments. President Cross noted that the UW comprehensive universities have a number of undergraduate research activities, which is one of the high-impact practices that Dr. Baxter described. The role of the UW System is to expand and facilitate those practices, and to interact with the needs of the state and other outside pressures without interfering with the activities happening at the Research I institutions. He indicated that the question the UW System is grappling with – and the impetus for inviting Dr. Baxter to speak on this topic – is how to work on this from a system perspective.

President Millner thanked Dr. Baxter again for her presentation.

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UNIVERSITY OF WISCONSIN SYSTEM FEDERAL PRIORITIES FOR 2017

President Millner turned to the annual presentation of the UW System's federal priorities. She indicated that there are several key issues that could impact the UW System in the coming year, including student financial aid, the reauthorization of the Higher Education Act, constrained resources for research and development, competency-based education, and the growing regulatory burden on colleges and universities.

President Millner welcomed Kris Andrews, Associate Vice President for Federal Relations, to present an overview of the UW System's key federal priorities for 2017.

Introduction

Associate Vice President Andrews began her remarks by explaining how the UW System puts its federal priorities together.

Every year, the UW System Office of Federal Relations prepares a report outlining the System's agenda on federal priorities for the upcoming year. The purpose of the report is twofold: 1) to update the Board of Regents on the federal landscape and where the UW System is focusing its efforts and attention; and 2) to proactively articulate to Wisconsin's congressional delegation the System's position and agenda relative to key issues that are likely to come before the U.S. Congress.

Associate Vice President Andrews said that, prior to being submitted to the Board for adoption, this agenda goes through a fairly thorough review at several levels throughout the System. Federal Relations staff look back at what the System's priorities were for the previous year; solicit input, advice and recommendations from System institutions, as well as UW policy experts; and work with national associations to ensure that the UW System's agenda aligns with those of the national higher education organizations, wherever possible.

She added that Federal Relations staff also take into consideration the political landscape, present and future, and determine what some reasonable expectations would be and where the best opportunities lie for the University of Wisconsin System to make a difference in public higher education.

Following the Board's March meeting, Associate Vice President Andrews said that the next step would be to deliver these priorities to members of Wisconsin's congressional delegation and staff, as well as other external stakeholders.

UW System's Activity in 2016 Priority Areas

Associate Vice President Andrews next provided a review of the UW System's activities in 2016. She noted that little tends to happen legislatively during election years, and that this was true in 2016.

Although Congress left unfinished business, Associate Vice President Andrews said that it did pass a continuing resolution providing government funding at current levels to all government agencies through April 2017, after only one of its annual appropriations bills, Military Affairs and Veterans, was approved through regular order. The bill included significant funding for the National Institutes of Health to begin implementing the 21st Century Cures Act, and also included investments to help states address the opioid epidemic. However, because the continuing resolution only runs through April, the new Congress and administration still have to finalize the previous year's spending plans, while also working on appropriations measures for the coming year.

The 2017 National Defense Act which was signed into law included the Manufacturing Universities Act. Associate Vice President Andrews noted that President Cross and Kurt Bauer, president and CEO of Wisconsin Manufacturers and Commerce, cosigned a letter asking Congress to include this provision in order to strengthen engineering programs and partnerships. This measure currently awaits funding.

The American Innovation and Competitiveness Act was also signed into law, and included a new section on improving undergraduate STEM experiences. Associate Vice President Andrews indicated that this addition was the result of efforts by the Council on Undergraduate Research (CUR) and the UW System to improve STEM retention and grow the STEM workforce.

Ms. Andrews said that much of the UW System's time was spent lobbying on a U.S. Department of Labor overtime rule that would have significantly raised the salary threshold under which employees would be eligible for overtime pay. The UW System filed public comments on the matter and worked with the Wisconsin delegation and a national coalition to express concerns that the regulations made the change too quickly and placed challenging fiscal burdens on public institutions. She reported that an injunction was ultimately issued on the eve of the deadline for compliance; if the rule proceeds toward implementation, the System will recommend that the automatic indexing of the salary threshold to inflation be removed.

The UW System also weighed in on the U.S. Department of Education's proposed regulations for teacher preparation programs, which were part of a slate of new regulations advocated by the previous administration. Stating that Wisconsin has the best and oldest reputation for strong teacher education and preparation, Associate Vice President Andrews said that the System voiced its concerns in opposition to a federally-prescribed rating system, which marked a significant policy shift in evaluating teacher preparation programs. She reported that both the House and the Senate have already approved resolutions to block implementation of the new teacher preparation regulations, and the White House has indicated that President Trump intends to sign it.

Associate Vice President Andrews indicated that the previous administration also worked hard to shed light on campus sexual assault, an issue that has long been very important to the UW System as well. At the Board's December meeting the UW System Task Force on Sexual Violence and Harassment unveiled a series of initiatives, including mandatory training for all students and employees in the System. Ms. Andrews said that this initiative has been widely applauded.

At the federal level, it is anticipated that another version of the Campus Accountability and Safety Act (CASA) will be introduced in Congress.

Looking back at 2016, Associate Vice President Andrews concluded that the UW System dealt with a rise in federal regulation that would likely be reduced going forward.

Looking Ahead at the Federal Landscape

Looking at the federal landscape, Ms. Andrews expressed pride in the influence that Wisconsin holds at the federal level, with Wisconsinites serving as Speaker of the House, Chairman of the Committee on Homeland Security and Governmental Affairs, leaders on both the Senate and House Education Committees, representatives on both the Senate and House Appropriations Committees, and in positions in the new administration.

She noted that the new administration and Congress have a lot on their plates. The administration still has hundreds of appointed positions to fill, in addition to getting a nominee for Supreme Court Justice confirmed. The President has made clear his intention that there would be a new health care plan, as well as some sort of tax reform.

Other significant factors at play include President Trump's stated intention to focus on immigration and his call for significant reinvestment in the nation's infrastructure. At the same time, the United States is reaching the nation's debt limit, and the federal budget proposes to add more than $15 billion to base defense spending. From a higher education perspective, she noted that the increase in the defense budget will have to be funded from cuts in discretionary spending, which is also the source of the majority of funding for higher education and research programs.

During his address to Congress President Trump made a strong pitch for education, calling it the civil rights issue of our time. However, Associate Vice President Andrews pointed out that he has said little to date about higher education, leading many to believe that the Republican-led Congress will have to be the driving force in formulating higher education policy. The chairs of both the House and Senate education committees have indicated that they want to complete a Higher Education Act reauthorization bill by the end of the year, but given the magnitude of all the other issues on their agendas, Ms. Andrews said she was hesitant to say how quickly that would be done.

Associate Vice President Andrews suggested that one area where there is agreement is in rolling back regulations enacted under the previous administration, including regulations impacting higher education, as well as the rollback of the teacher preparation regulations.

UW System's 2017 Priorities

Moving on to the UW System's proposed priorities for 2017, Ms. Andrews explained that these fall into three categories: 1) priority for funding for federal financial aid for students, including extension of the Federal Perkins Loan Program, which is set to expire in September 2017; 2) sustained funding for research and development; and 3) relief from burdensome regulations on higher education. She gave a brief overview of each of these areas:

Federal Financial Aid

Associate Vice President Andrews stated that the UW System will continue to advocate for sustaining funding for the Federal Pell Grant program, which is the largest federal need-based program providing financial aid for UW students.

In 2015-16, almost 37,000 Wisconsin resident undergraduate students received a Pell Grant, with an average award of about $3,800. Without this aid, many low- and moderate-income students may be priced out of a college education.

To address the growing number of non-traditional students, as well as the push in Wisconsin for three-year degrees, the UW System supports the return of the year-round Pell Grant, also known as the Summer Pell. This would permit students to receive a third semester of Pell Grant funding in an academic year, providing them with greater flexibility and increasing the likelihood of on-time graduation.

Associate Vice President Andrews reported that a bipartisan majority of the Senate Appropriations Committee voted to restore the program as part of its education funding bill in the last fiscal year. The House Appropriations Committee did not include restoration of the year-round Pell in its funding bill, but she said this was not necessarily because the committee was opposed to the idea.

The UW System also advocates for extending the Federal Perkins Loan Program, which is set to expire this year. Ms. Andrews warned that this program could potentially get lost in the shuffle, because the chairs of both Education Committees have indicated that their higher priority is to reform the overall student financial aid system by simplifying it into one loan or grant.

Finally, Associate Vice President Andrews said that the UW System supports consolidation efforts; single plans make it easier for students and their families to understand and navigate the complex financial aid system. However, if that reform is not completed by September 2017, the UW System's position would be to urge Wisconsin's delegation to extend the Perkins program, which serves more than 13,500 UW System students, with loans topping more than $25 million annually.

Federal Funding for Research and Development

Turning briefly to research and development, Ms. Andrews noted that the UW System was ranked by Reuters as 13th among the 100 most innovative universities in the world in 2016.

Associate Vice President Andrews indicated that the National Sea Grant Program is very important in Wisconsin; this federal program is dedicated to research, outreach, and education on the nation's oceans, Great Lakes, and coastal resources. In Wisconsin, the UW Sea Grant Program receives nearly $2 million annually in federal grant funding, which is also matched by contributions from the states and the private sector.

The Great Lakes are the largest freshwater system on earth and support a $62-billion economy and 1.5 million people. In Wisconsin, the UW Sea Grant program has served the state for 50 years and is recognized nationally as one of the leaders in the National Sea Grant Program. UW Sea Grant's impacts include assisting and opening the largest on-land, indoor salmon-rearing facility in northwestern Wisconsin; helping the National Weather Service refine nationwide severe weather warnings; and saving the world's largest freshwater port millions of dollars in infrastructure costs.

According to recent media reports, the President is proposing a 17-percent reduction in funding to NOAA and elimination of the Sea Grant program, which Ms. Andrews said would be devastating for Wisconsin's thriving coastal ecosystem and communities.

She pointed out that the Sea Grant program is just one example of many research endeavors that take place throughout the UW System that are largely made possible through federal investments. While decisions have not been made related to the National Institutes of Health, the National Science Foundation, or the Departments of Agriculture and Energy, Associate Vice President Andrews observed that these decisions are going to be made in a challenging fiscal environment. Cuts to funding would potentially put significant UW research at risk, with detrimental effects on faculty's ability to do groundbreaking research, as well as the university's ability to help students engage in research.

She concluded that America's path forward in the global economy is heavily contingent on research and development, and said that the UW System needs to carry that message to maintain our country's competitive edge.

Regulatory Reform

Associate Vice President Andrews stated that the need for regulatory reform is profound. Heeding the call of the new administration to reduce mandates, regulatory reform and mandatory relief have been added as a new area to the UW System's federal priorities. The costs of federal regulation on business are the same for higher education, she said; compliance costs on colleges and universities nationwide are overwhelming.

Ms. Andrews referred to national data on compliance recently collected as part of a study of 13 higher education institutions, including public, private, nonprofit, for-profit, four-year and two-year institutions. The study estimated that higher education institutions report to approximately 18 different federal agencies, comply with about 30 different areas of regulation, and follow more than 200 federal laws and guidelines. In the North Carolina system, for example, compliance activities accounted for 7 to 8 percent of total campus operating expenses; she suggested similar figures could apply in Wisconsin.

Associate Vice President Andrews indicated that these regulations affect a university's bottom line and also hinder innovation. Wisconsin has a national reputation for leading public institutions in competency-based education, but because the federal statutes and regulations that have arisen since World War II assume a traditional classroom-based approach to learning, and because federal statutes governing Title IV student financial aid programs still revolve around the traditional credit hour and time-on-task, providing financial aid to students in competency-based programs has been difficult.

The UW System has approached the U.S. Department of Education to obtain waivers for its UW Flex Option program, but continues to hear from legislators at the federal level who want more innovation. As Congress is reauthorizing the Higher Education Act, statutes and regulations must evolve to foster that innovation and provide for faster, less expensive, more affordable pathways to employment. To address this issue, Ms. Andrews said that the UW System strongly recommends streamlining, consolidating, and even eliminating federal reporting and regulatory requirements.

In closing, Associate Vice President Andrews indicated that the UW System's federal framework for 2017 aligns with what is expected to be a new era in American higher education. The System's focus is on: regulatory reform; reauthorization of the Higher Education Act, including producing faster, more affordable, more innovative pathways through higher education; support for university research and development; and, as always, ensuring higher education access, persistence, and affordability.

As other issues arise, the UW System will work with its higher education partners and Wisconsin's Congressional delegation to respond accordingly. Associate Vice President Andrews promised to keep the Board involved.

Discussion

President Millner noted that UW System Administration is taking the federal priorities very seriously. She encouraged Board members who might be speaking with any of Wisconsin's federal representatives or traveling to Washington, D.C. to connect with System Administration in order to coordinate a unified and strategic approach.

President Millner emphasized that now is the time to have conversations about support for student financial aid, research grant funding and regulatory reform, which presents an opportunity for both cost savings and time savings for students. She thanked Ms. Andrews for her presentation.

In response to a question from Regent Higgins about the Board's process for approving the federal priorities, President Millner confirmed that there is a passive review process. Regent Higgins then asked about the UW System's position on the Federal Pell Grant program, and whether the System's request is to shift the federal Pell Grant program from regular re-authorization to full mandatory funding, similar to a Social Security- or Medicare-type entitlement program.

Associate Vice President Andrews explained that the program is currently supported by both mandatory and discretionary funding. During a time of significant deficits, cuts to discretionary funding can create uncertainty for students, who must often make enrollment decisions earlier than the appropriations bills get funded. Similar to the Social Security program, shifting to completely mandatory funding for the Pell Grant program would give students and families certainty that the funding will be there during that decision-making period.

Regent Higgins suggested that in the future the process should include an opportunity for Regent discussion of the System's federal agenda prior to the presentation of the federal priorities report. President Millner thanked Regent Higgins for this suggestion.

Regent Whitburn observed that the number of UW students receiving Pell Grants has decreased over recent years. Bob Jokisch, Special Assistant in the Office of Academic and Student Affairs, explained that this was not due to a decrease in federal funding, but instead reflects the fact that the economy has improved, reducing the number of students eligible for the Pell Grant program.

President Millner thanked Mr. Jokisch for the point of clarification.

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CLOSED SESSION

President Millner called upon Vice President Behling to offer the resolution to move into closed session. The motion was seconded by Regent Manydeeds and adopted on a roll-call vote, with Regents Behling, Delgado, Erickson, Evers, Farrow, Grebe, Hall, Higgins, Klein, Langnes, Manydeeds, Millner, Mueller, Steil, Tyler, and Whitburn voting in the affirmative. There were no dissenting votes and no abstentions.

Closed Session Resolution

Resolution 10839 That the Board of Regents move into closed session to: (a) consider a UW-Parkside honorary degree nomination, as permitted by s. 19.85(1)(f), Wis. Stats.; (b) consider a UW-Oshkosh honorary degree nomination, as permitted by s. 19.85(1)(f), Wis. Stats.; (c) to confer with legal counsel regarding pending or potential litigation, as permitted by s. 19.85(1)(g), Wis. Stats.; (d) consider an annual personnel evaluation, as permitted by s. 19.85(1)(c), Wis. Stats.; and (e) to consider personal histories or disciplinary data of specific persons and the investigations of charges against specific persons, which, if discussed in public, would be likely to have a substantial effect upon the reputation of such persons, as permitted by s. 19.85(1)(f),Wis. Stats.

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The Board recessed at 2:10 p.m. to relocate to the Concerto Room and reconvened at 2:20 p.m.

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The meeting was adjourned at 3:07 p.m.

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Submitted by:

/s/ Jane S. Radue
Jane S. Radue, Executive Director and Corporate Secretary
Office of the Board of Regents
University of Wisconsin System