

MINUTES OF THE REGULAR MEETING

of the

BOARD OF REGENTS OF THE UNIVERSITY OF WISCONSIN SYSTEM

Held in 1820 Van Hise Hall  
1220 Linden Drive  
Madison, WI 53706

Thursday, March 6, 2014  
9:00 a.m.

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-President Falbo Presiding-

PRESENT: Regents John Behling, Mark Bradley, John Drew, Michael Falbo, Margaret Farrow, Tim Higgins, Tracy Hribar, Chad Landes, Edmund Manydeeds, Regina Millner, Janice Mueller, Drew Petersen, Gary Roberts, José Vásquez, David Walsh, and Gerald Whitburn. Regent Tony Evers joined the meeting in progress.

UNABLE TO ATTEND: Regent Charles Pruitt.

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**APPROVAL OF THE MINUTES OF THE DECEMBER 2013 AND FEBRUARY 2014 MEETINGS**

President Falbo noted that the minutes of the December 2013 and February 2014 meetings had been distributed. Regent Roberts moved their approval and, after a second by Regent Farrow, the motion carried.

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**REPORT OF THE PRESIDENT OF THE BOARD**

President Falbo indicated that the day's meeting would be one of the Board's one-day meetings, where it has the opportunity to discuss significant issues in greater depth, without the pressure to act on them and with the purpose of informing future decision-making.

Foreshadowing the meeting content, President Falbo said that the major theme for the meeting would be how the University of Wisconsin can promote economic growth in the state and beyond. The Board would be taking a closer look at the changing economic and workforce trends in Wisconsin, as well as the University's role in anticipating and meeting those needs.

The meeting would involve a mix of presentations and panel discussions. The ongoing discussion of the 2015-17 biennial budget and Regent Academic Staff Excellence Awards were also planned.

### ***Update on Searches***

Providing an update on some ongoing searches, President Falbo noted that the UW-Stout and UW-Green Bay searches were in the recruitment phase. Both Chancellor Chuck Sorensen at UW-Stout and Chancellor Tom Harden at UW-Green Bay would be stepping down in mid-August, and the goal is to identify their successors before then. UW Colleges and UW-Extension also would be launching their chancellor search soon, President Falbo reported.

Finalist interviews for a Vice President for University Relations would occur on March 20, and final interviews for UW System's Chief Audit Executive position had occurred. The search process for the new Vice President for Finance was also beginning, with an appointment likely to be named in May.

### ***Capitol Update***

The state Assembly and Senate recently honored Chancellor Sorensen with a Joint Legislative Resolution. Introduced by Sen. Sheila Harsdorf and Rep. John Murtha, the resolution commended the chancellor for his many years of service and contributions to both UW-Stout and the state of Wisconsin. He and his wife, Toni, as well as his cabinet members, were invited to the respective floors of the Senate and Assembly chambers where they received resounding ovations from legislators.

President Falbo also mentioned the upcoming *Posters in the Rotunda* event, to be held the following Wednesday in the State Capitol. The annual celebration of undergraduate research was marking its 11<sup>th</sup> year. *Posters* is a wonderful showcase of the many and varied research endeavors taken on by UW student researchers and their faculty advisors across the UW System. The work being done is inspiring and humbling. The academic research done on UW campuses has an impact on the state's economy, and students are increasingly a part of that.

President Falbo announced that Regent Tim Higgins would be hosting a reception for the Economic Development Incentive Grant selection committee in the Capitol on the same day as *Posters in the Rotunda*. The reception would take place from 10 to 11 a.m. in the Senate Parlor. President Falbo said that legislative and business leaders from around the state were expected to be on hand to recognize the panel of experts who selected the grant winners.

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## RESOLUTION OF APPRECIATION FOR RICHARD TELFER'S SERVICE AS INTERIM PRESIDENT OF THE UW SYSTEM

President Falbo announced that the next agenda item was a resolution of appreciation for UW-Whitewater Chancellor Dick Telfer, who graciously agreed to serve as Interim System President while a successor for President Kevin Reilly was sought. Times of transition are challenging, but Interim President Telfer had been a joy to work with, bringing experience, wisdom, a calm demeanor, and a keen sense of humor to the role. Under his leadership, the transition time was both productive and smooth. Thanking Chancellor Telfer for his service, President Falbo read the official resolution of appreciation:

### **Resolution of Appreciation for Richard J. Telfer**

Resolution 10331      WHEREAS, Dr. Richard J. (Dick) Telfer provided exemplary leadership as the interim president of the University of Wisconsin System, between the tenures of President Kevin P. Reilly and President Raymond J. Cross; and

WHEREAS, to ensure a seamless presidential transition, Dick's leadership contributions and commitments began weeks before his interim appointment officially began, with much of his time and energies devoted to Cabinet and other leadership meetings; and

WHEREAS, Dick was helpful in providing orientation to President Cross at the beginning of his tenure, ensuring that the presidential baton was passed along smoothly; and

WHEREAS, Dick was instrumental in appointing the membership of two chancellor search and screen committees, to help identify successors to UW-Stout Chancellor Charles W. Sorensen and UW-Green Bay Chancellor Thomas Harden, which included travels to Menomonie and Green Bay to deliver the charges to the committees; and

WHEREAS, Dick's steady and capable leadership, collaborative style, and punctual running of meetings earned the admiration of his colleagues, and kept all the trains running on time; and

WHEREAS, Dick and his wife, Roni, made the move from UW-Whitewater Warhawk country to Madison for what was an unknown amount of time, graciously expanding their passion for 'all things Warhawk' to all of the UW institutions, with their many mascots, colors, and unique academic missions; and

WHEREAS, Dick and Roni relayed with good humor their warm (and cold!) welcome in their new home in the garage apartment of Brittingham House, waking to a sauna-like environment because of unabated heat from

the radiators followed by cold showers because of no hot water – an interesting immersion experience, to be sure, albeit not of the kind we typically refer to in the realm of public higher education; and

WHEREAS, Dick demonstrated his unwavering commitment to the UW System mission of access, excellence, and value within the UW System and across the state;

BE IT THEREFORE RESOLVED that the Board of Regents of the University of Wisconsin System hereby commends Dr. Richard J. Telfer for his outstanding service as interim president of the University of Wisconsin System, and thanks him for his continued service as Chancellor of UW-Whitewater.

Offered the opportunity to say a few words, Chancellor Telfer joked that the resolution was longer than his tenure.

President Falbo then noted that a Certificate of Commendation was in Regents' folders, recognizing UW-Whitewater Provost Beverly Kopper for her service as Interim Chancellor while Chancellor Telfer was serving in Madison. President Falbo thanked Provost Kopper on behalf of the Board.

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## **REMARKS BY NEW UW SYSTEM PRESIDENT RAY CROSS**

President Falbo invited President Cross to make some initial remarks at his first meeting as System President. *The remarks are reported here verbatim:*

Good morning. To be entrusted with serving as President of one of the country's most respected public university systems is truly an honor, and I sincerely thank the Regents for granting me this privilege.

It's been two and half weeks on the job, so forgive me if I don't have it all figured out. But I can tell you, I am energized by the passion, curiosity, and commitment to the pursuit of knowledge that I see and hear every day in the students who call our campuses their home, and in all those who work to make the University of Wisconsin a special place to live, work, and learn.

Let's start by talking about the difficult stuff. We face some big challenges. We all know that. Unfortunately, there is no magic formula to quickly solve these problems. What we can do is be open to ideas and suggestions and carefully listen to those around us. That's the key. Engaged listening. And that's my promise to you.

Many years ago, while working as a consultant to a GM supplier, I discovered how important it was to listen to all stakeholders. I had been tasked to find a way to reduce the wrinkling in the sewn edging around their sun visors – a small problem in the grand scheme of things, perhaps, but nonetheless vexing.

After spending hours analyzing the design and the tooling, I decided to head to the production floor to observe how the edging was actually being sewn in place. I watched a worker sew several edgings on visors and observed how she wrestled with this wrinkling issue. I asked her what *she thought* needed to be done to correct the problem.

“Why, we need the horn shaping the edging that’s fed from the spool to be more curved, and the wrap-around plates need to be tighter to the horn.” It was that simple. The point is, she immediately identified what was causing the problem, and better yet, she knew how it could be fixed. But no one had ever asked her or, worse yet, ever listened or paid attention to her.

I was talking about listening with my son a while back, and he suggested I check out the writings of the French philosopher Simone Weil. Ms. Weil, who lived and died during the Nazi occupation of France, was well known for her humaneness and her empathy. She once noted that, “Attention is the purest and rarest form of generosity.” Think about that. Giving attention to, or listening carefully to our friends and our critics, especially our critics, seems so simple – yet it is rarely practiced.

When you think about it, this is truly what the Wisconsin Idea is all about. Yes, providing the benefits of the university to all the corners of the state is our mission. But in order to really be effective, we need to better understand the needs of people throughout the state. Only then can we truly be engaged in helping to find solutions to their problems and, as our mission suggests, improve the human condition.

To accomplish this, we have to be really good listeners – not just good lecturers or researchers. We have to pay attention! This means strong two-way relationships and open, honest communication. It’s not just bringing the resources of the university to the people of Wisconsin, but bringing the problems of the people to the university. Listening, not just lecturing.

As you may have heard, I plan to practice what I preach and will begin a listening tour across Wisconsin. We hope to make our first trip later this month, and keep going until I’ve had a chance to visit with students, chancellors, business leaders, lawmakers, alumni, and citizens from across the entire state. These are our friends, our neighbors. We have shared interests. And we have a mutual interest in making Wisconsin a better place to live, work and raise families.

First and foremost, however, we need to better communicate our financial situation – fulfilling our pledge to create even greater transparency and openness. That’s fundamental. You shouldn’t have to be a CPA to have a basic understanding of the university’s finances. I mean, we are educators. If we can’t express and explain complex issues in a way that most people can understand them, then we need to try again, and keep trying until we find a way that works. It is vitally important that we succeed.

This is my top priority right now, today, and tomorrow, and next week, and next month, and the month after that. I want everyone in this room to “get” our finances. To understand how much money we have, where it is, and where it is spent. Does this sound possible? I think so. And we intend to demonstrate it. We have heard clearly from legislators, the public, and our colleagues within the university that this is important and necessary. And in fact, we are well on our way to addressing this in three key ways:

1. Fund balances: We intend to provide a breakdown of our fund balances by institution and then break that down further by the classifications identified by the Legislative Audit Bureau. This will allow the Board to more effectively implement the recently adopted program fund balances policy. It will also help all of us better manage our institutions while being clear about our “carry forwards.”
2. Regular financial reporting: We are in the process of developing a “performance vs. budget” financial report we plan to present to the Board on a quarterly basis. This should help all of us better understand our position throughout the year, not just once a year.
3. Re-design our annual budget development process: Currently, we ask the Board to approve an annual budget built almost exclusively from the previous annual budget. We now intend to include a “Projected Actuals” input piece along with a “Projection of Year-end Cash Balances.” These additional input pieces will provide all of us – and especially the Board – with a more complete financial picture of the University as the budget is being developed and adopted.

Later this afternoon, David Miller will share more details on some of these. We already have made significant progress. At the April meeting, you should receive our early projections of FY14 fund balances and an expanded “performance vs. budget” report. We will, of course, be using this new budget development process when we build the proposed annual budget for FY 2015.

Building trust in how we manage and communicate our financial interests is vitally important to all of our stakeholders – students and families, faculty and staff, lawmakers, the Governor, the people of Wisconsin, the people in this room!



With this solid foundation in place, we can consider how to move forward in other areas.

I hope to embed three main themes into everything we do: Innovation, Collaboration, and Communication.

Let me start with innovation. As you probably know, I love innovation. Innovation excites me. We are in a new era with new tools and new models. The learning experience of the future will be rich in project-based learning – internships, co-ops, undergraduate research, blended learning, flipped classrooms, collaborative projects, individualized learning strategies, capstone experiences, and an array of other things that haven't even been thought of yet. Many of these innovative approaches are already being used in some of our classrooms and labs. I hope to create an environment where innovation and experimentation are encouraged, analyzed, and embraced.

Secondly, we must find ways to be more collaborative. Collaborations and partnerships have never been more important. Success in this era requires working together internally within the System. We must celebrate our “System-ness,” our different missions and strengths, the uniqueness of our institutions that make the whole so much greater than the sum of the individual parts. Like an orchestra, we need more than just violins and trombones to produce a great symphony.

At the same time, we must collaborate externally with other systems and other entities. With businesses, with communities, with organizations around the state and, yes, even around the globe. As the world becomes more complex, collaboration and cooperation become more valuable – even essential. In a dynamic, ever-changing world, isolation can be very dangerous.

And to be innovative and collaborative, we must be good communicators. No one is a perfect communicator; however, that must be our goal. To inform our stakeholders and maintain a relationship built on trust, we need to improve our transparency. At this point, that includes providing simplified financial reporting models, dashboard indicators of performance metrics, and reporting our financial performance targets and trends. We need to implement measurement and management tools that will clearly and effectively communicate our business operations.

While I've been talking a lot recently about the need for better listening, I have already heard some clear messages. Let me share some thoughts on four broad issues that have been brought up with me over and over:

- Strengthening our state's economy and growing our businesses;
- Supporting a seamless pipeline between K-12 and higher education;

- Addressing the special challenges of our urban centers and some of our rural areas; and
- Focusing greater attention on future educational practices.

Clearly, Wisconsin needs to create more jobs and grow businesses. This is an area of vital importance, and the University could play an increasingly significant role in helping to improve the economic landscape of Wisconsin. Again, policymakers and citizens are telling us this is their number one concern, and we need to work to find solutions. I have some thoughts about how the university could be more engaged in this respect – things like greater support of Stage 2 business growth, where there is the highest job growth opportunity, and a focused effort on translating our incredible research into commercial products and services – but that is for a future meeting.

Second, the educational pipeline needs attention. There is a growing need for the University to be more engaged in K-12 issues. We all need to recognize – and act on – the reality that education is a grand continuum that starts even before little Susie or Charlie steps into their first classroom, and it continues long after their sheepskins are signed and tassels moved from right to left. All of us in this venture have a shared responsibility for the success of that entire continuum, not just our own little portion. We need to be more engaged in dual/concurrent enrollment efforts; in the process of improving and reducing the need for remedial education; and “plugging the holes” within the educational pipeline. We need to collaborate, cooperate and partner with our K-12 colleagues in new ways. This is not just their problem – we need to own it as well.

Third, we need to leverage our “system-ness” through collaboration to focus on our urban challenges. The poverty and dimmed dreams in urban centers like Milwaukee may not be so different, it turns out, from the underdeveloped potential found in remote rural regions of Wisconsin. But our approaches to meeting those needs might be radically different. We need to do something more to assure that “equal access to opportunity” isn’t just a lofty sounding cliché. We need to help the state find innovative ways to deal with these issues and collaborate with whomever we can to move the dial, to fulfill our mission – to improve the human condition for all the people of Wisconsin. This must be our problem, too – our challenge, our mission, and our commitment. Our state needs us! Our friends and neighbors need us. We can be the difference maker here.

Fourth, I also think we need to embrace more enthusiastically a future-oriented approach to education, one that allows greater experimentation, one that’s open to new delivery methods, makes use of the latest analytical tools, and applies rigorous analysis and assessment to ensuring the highest standards. From high-impact practices, to flipped classrooms, to the Flex option and so much more, we, at the University of Wisconsin, can and should be a leader in experimenting with, analyzing, and employing innovative learning practices that can make a real difference for our students and for our society.

In whatever we do, we must always remember that the University of Wisconsin needs to also be a university for Wisconsin. As a public university, the people of Wisconsin, the taxpayers, created and now support their university. The return on their investment has been significant and continues to grow. Now, they need us more than ever. We need to be even more responsive to their needs.

As I have said before – and you can count on me to repeat this – our colleges, universities, and extension networks are the pride of Wisconsin and the envy of this nation. I'm eager to work with the Regents and all of my UW System colleagues to enhance these assets in ways that will benefit the entire state, in keeping with the state's richest traditions.

The truth is, we don't know where the next important idea will come from, just like GM didn't know how to solve its visor problem until we listened to an assembly line worker. We can't afford to make that mistake here. Listening, reaching out, and paying attention can seem so simple, yet, as Simone Weil wrote, it is also so rare.

In the spirit of the *Wisconsin Idea*, we must honor the value of two-way dialogue about what this public university can and should be doing. Through that journey of mutual inquiry and revelation, I fully anticipate that a meaningful shared vision will emerge that can be embraced by this Board, our students, our faculty and staff, lawmakers, and the people of Wisconsin. Let us all remember who we are: not merely the University of Wisconsin, but the University for Wisconsin.

Thank you.

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## **REPORT AND APPROVAL OF ACTION TAKEN BY THE BUSINESS AND FINANCE COMMITTEE**

President Falbo called upon Regent Whitburn to present the report of action taken by the Business and Finance Committee. Regent Whitburn briefly mentioned pending business related to the carry-forward policy and the committee appointed by President Reilly to look at tuition distribution.

He then described Resolution 10332, pertaining to a one-year influenza drug research agreement with Japan's second-largest pharmaceutical company, which will bring the University \$1,150,000. He moved adoption of Resolution 10332. The motion was seconded by Regent Higgins and adopted on a voice vote, with Regent Walsh abstaining.

## **Approval of Contract Between UW-Madison and Daiichi-Sankyo Company, Ltd.**

Resolution 10332      That, upon the recommendation of the Chancellor of the University of Wisconsin-Madison and the President of the University of Wisconsin System, the Board of Regents approves the contractual agreement between the University of Wisconsin-Madison and Daiichi-Sankyo Company, Ltd.

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## **PRESENTATION AND DISCUSSION: DENNIS WINTERS, WISCONSIN DEPARTMENT OF WORKFORCE DEVELOPMENT: “THE ECONOMY HAS CHANGED -- ECONOMIC AND WORKFORCE TRENDS IN WISCONSIN”**

President Falbo reiterated that the main focus of the day’s meeting was to develop a stronger understanding of the many forces and trends driving the state’s economy, thereby providing a context for future decision-making. He noted that the university plays a key role in preparing students to be successful in an ever-changing work world, and also has a role to play in energizing industries and meeting the state’s economic and societal needs through innovative thinking and entrepreneurial know-how. The meeting included a strong line-up of presenters and panelists who would share their experiences and expertise.

President Falbo introduced the first presentation, by Wisconsin’s Chief Economist, Dennis Winters of the Department of Workforce Development (DWD). Mr. Winters has done extensive work on economic impact studies and workforce issues and is ideally positioned to help the UW System better understand the relationship between labor markets and other economic and demographic specifics. President Falbo said that Mr. Winters had been with DWD since 2006 and previously served as Vice President and Director of Research for North Star Economics, Inc., in Madison and as an advisor to private industry, government agencies, and elected federal, state and local officials. He invited Mr. Winters to the podium.

### ***Changes in the Wisconsin Economy***

Mr. Winters began his presentation by explaining that Wisconsin’s economy has changed, and while the change is not a new phenomenon, it is something being felt acutely in the state for a number of reasons. Referring to a slide illustrating all of the economic recoveries since World War II and real gross domestic product (GDP) growth, he noted that the current period of economic recovery had been the slowest growing recovery this country has experienced. He also noted that the most recent recession and recovery has been different in comparison to other post-war recessions and recoveries, in that both job losses and job recoveries have been more gradual.

Mr. Winters explained that all of the sectors that comprise gross domestic product—consumption, investment, exports, imports, and government—have been lagging in comparison to prior economic recoveries, in part because 70 percent of both the nation’s economy and Wisconsin’s economy are heavily based on consumption, and real wages have been essentially

flat for the last decade. He reviewed changes in personal interest income, mortgage equity withdrawals, revolving credit card debt, and savings, noting that all of these changes resulted in \$2.2 trillion less spending in the nation's consumption-based economy of \$14-15 trillion. It is difficult to increase consumption when people have flat wages and are losing wealth, paying down debt, increasing savings, and paying more for food and gas.

Mr. Winters also pointed out that corporate profits are at new record highs and doing very well, primarily due to cost cutting. He also noted that companies are managing their risk by not hiring and by hoarding cash. Corporations are not investing as much as in the past, and when they do, they are investing in equipment and software that leads to labor savings and increased productivity. Mr. Winters also pointed to a slide illustrating that banks are increasingly reticent to lend money and holding more than \$1.6 trillion in excess of their required reserves, representing fuel for the economy that is sitting idle.

Regent Farrow asked about the extent to which the Federal Reserve rules were responsible for banks being reticent to lend money. Mr. Winters indicated that the federal government is sending mixed messages by telling banks to lend money to get the economy restarted, but also telling them they have to pass a "stress test." He noted that while banks have money to loan, companies are not building out production lines, which would require borrowing. In response to an observation from Regent Whitburn that the rules for banks have changed significantly, Mr. Winters confirmed that rules have tightened up. He noted that the current state of the economy is such that it still feels like a recession in many quarters.

### ***Looking Ahead***

With respect to where the economy is headed, Mr. Winters referred to a slide illustrating the main drivers of an economic recovery: employment, industrial production, retail sales, and personal income. He explained that the current level of each of these drivers is back to, or very close to, pre-recession levels; but it has taken nine quarters, or more than two years, for this to happen, whereas such a change would usually happen in two or three quarters. Mr. Winters also noted that households lost \$7 trillion in real estate equity, which is where most people build their wealth, and have gained back nearly \$3 trillion in equity due to the rebounding real estate market. He added that household assets have increased due to increases in the stock market.

Mr. Winters explained that state and local government spending is a big economic driver in many places due to construction, and while spending continues to increase, the rate of spending increases has slowed since the recession and is now on a different trajectory. He expressed optimism about the economic recovery, as another big economic driver—domestic motor vehicle sales—is also increasing. He also noted that home sales and home prices are increasing along with equity, another sign of economic recovery.

Referring to a slide illustrating non-farm jobs in Wisconsin, Mr. Winters explained that the number of jobs was lowest in 2010, but has been incrementally increasing each year, which is good news. He also shared a slide illustrating the rate of non-farm job increases by sector and noted that manufacturing jobs have been growing at the fastest rate. He said that the manufacturing sector usually leads an economy into recession and out of recession, which is

what is currently happening. He also noted that the job increases in the construction sector had been fairly volatile and the retail sector is just starting to recover.

In response to a question from Regent Whitburn regarding Wisconsin's dependence on manufacturing, Mr. Winters explained that approximately 16 percent of the state's employment is based in manufacturing, second only to the state of Indiana. Nationally, about 9 percent of employment is in manufacturing. He also noted that Wisconsin's manufacturing employment peaked in the late 1990s, at approximately 20 percent. In response to a question from Regent Roberts regarding trends in public sector employment, Mr. Winters explained that public sector employment has decreased, mostly due to decreases in local government. Regent Walsh asked about the large decrease in jobs from the end of 2012 to the beginning of 2013, and Mr. Winters explained that this represented the annual decrease in seasonal jobs from December to January, primarily due to the construction sector.

Mr. Winters' next slide graphed the amount of time it took for jobs to return to pre-recession levels. He explained that in the 1991 recession, Wisconsin jobs were unaffected, but after the 2001 recession it took nearly four years for jobs to recover. He said that after the current recession it would likely take until July of 2015, or more than seven years, for jobs to return to pre-recession levels. In response to a question from Regent Whitburn regarding how Wisconsin is doing with regard to people withdrawing from the employment market because they are unable to find work, Mr. Winters indicated that he did not yet have enough data to know how Wisconsin compares to other states. He added that Wisconsin's labor force participation rate is higher than the national rate, mostly due to more women and children in the workforce as compared to the rest of the country.

### ***The New Economy***

Mr. Winters summarized by noting that the economy has changed. The recent recession was broad and deep, affecting all industries and geographies, and recovery has been hampered by a lack of confidence, higher risk, slow job recovery, and slow demand response. He also said that the economic outlook is positive but subdued, and the U.S. is once again the global economic driver.

In response to a question from Regent Bradley regarding how the U.S. economy compares to China, other Asian countries, and Europe, Mr. Winters explained that in relative terms, the U.S. was doing better than Europe, as some European countries are still in a recession. He also noted that China's economy had been growing at 7 or 7.5 percent. If it declines to below 7 percent, that is a slowing of the economy, an economy that is about 30% based on trade and supply. He added that in a relative sense, the U.S. economy had become more stable and more secure.

Regent Drew asked how Wisconsin's jobs recovery compared nationally. Mr. Winters explained that nationally, jobs recovery was ahead of Wisconsin. He also noted that within Wisconsin, there were a few locales that had recovered to pre-recession levels.

Regent Walsh commented that most of the economic indicators Mr. Winters had discussed, including real estate, autos, and bank restrictions, were tied to federal policies. He

asked if there is much that a state can do to affect these sectors. Mr. Winters said that generally, in the short run, most states are very much attached to the national economy, which is increasingly attached to the global economy. He said that in the long run, there are some things that states can do to gain a bit of a competitive advantage, and he said he would be discussing those.

In response to a question from President Falbo as to how long Mr. Winters' outlook had been "positive but subdued," Mr. Winters explained that he started viewing the economy more optimistically in the fourth quarter of 2013. He noted that some of the early workforce and industrial numbers in 2014 had been less than desirable, possibly due to the weather, and predicted that there would be a nice boost in the spring and summer. He said he was convinced that 2014 would be better than recent years, as there is stability and momentum.

Regent Whitburn noted that four years earlier Wisconsin ranked 42<sup>nd</sup> in terms of business climate in *CEO Magazine*, and today ranks 17<sup>th</sup>; he asked if this ranking matters. Mr. Winters said that it does matter because perception is reality. Regent Whitburn noted that Wisconsin's fiscal condition is under control and its tax policy is improving, adding that Wisconsin is the only state in the country with a fully-funded pension program. Mr. Winters agreed that these are all positives.

### ***Effect of Baby Boomers on the Economy***

Shifting gears, Mr. Winters said that "baby boomers" would be the biggest socioeconomic policy challenge in the next 20 years. He said that between 1946 and 1964, 83 million Americans were born; it caused a huge surge when they entered the workforce, and now they have started to leave the workforce. He turned to a slide illustrating the changes in Wisconsin's population and labor force, noting that from 1960 until the present, Wisconsin's population had been increasing at a fairly steady rate, and is projected to continue to increase in the future. However, the increase in Wisconsin's workforce had flattened out and may start to decline by 2035. From an economic perspective, if the workforce flattens out and productivity isn't raised, the result is economic stagnation. If productivity is not increased, and wages are not increased, workers will not have more to spend, which leads to decreased production and a downward spiral. He emphasized that for this reason, it is critical to raise productivity.

Mr. Winters explained that to increase productivity, it is necessary to have both equipment and talent to run the equipment. He said that Wisconsin's workforce growth started to level off in 1998, and in the current environment employers were unable to find enough talent.

### ***Effect of Technology***

Regent Mueller suggested that if technology is replacing human workers, this would offset the trend that Mr. Winters noted. He agreed that it would, to a large extent, but added that technology requires talent to operate it. Quoting Patrick Schillinger, former Wisconsin Paper Council President, he said, "The days are over when you could walk into a paper mill with a high school diploma and run one of the machines." Mr. Winters explained that more paper is being produced with fewer employees, but those employees must be able to run the machinery,

diagnose the problems, troubleshoot and fix the problems, and get the machinery up and running again.

Mr. Winters said that fifty years earlier, 60 percent of the workforce was unskilled; today, only 12 percent of the workforce is unskilled. In response to a question from Regent Walsh, Mr. Winters explained that a skilled worker is anyone who has had more than a year's worth of training. In response to a question from Regent Landes, Mr. Winters noted that farm jobs also require more sophistication and technology, and more product is produced with fewer workers.

Mr. Winters referred to a slide illustrating the changes in workplace skills from 1960 to 2000. He explained that the need for non-routine manual skills had been decreasing since the 1960s, as ditch diggers and farmhands had been replaced by backhoes, tractors, implements, and machinery. He also noted that the need for routine cognitive skills peaked in the 1970s and had been decreasing since then, as the proverbial "paper-pusher," or mid-level analyst, had been replaced by personal computers and software. The need for routine manual skills peaked in the 1980s, and had been decreasing since then as production line workers were replaced by lasers and robots. Mr. Winters noted that the need for two types of workplace skills had increased since the 1960s—non-routine analytical skills, which require workers to resource the information they need and troubleshoot, and non-routine interactive skills, which required workers to solve new problems and interact with others to do so.

### ***Occupations in Demand***

Turning to occupations in demand, Mr. Winters shared a projection of industry occupations or job openings that would exist in the future due to replacement or growth. He also shared a second list of occupations from the Job Center of Wisconsin, showing current posted job openings, and a third list of occupations that his staff and others have identified as difficult to fill. He explained that among the three lists there are 40 different occupations, but five occupations appear on all three lists—food preparation, customer service, registered nurses, heavy truck drivers, and health care aides. Three occupations appear on two of the lists—welders, material movers and retail sales.

Regent Whitburn observed that higher skills and higher income are everyone's goals, and the goal of the UW System is to award degrees and improve middle class standing. He asked how the state was doing in terms of expanding the middle class. Mr. Winters explained that Wisconsin's per-household income was even with the national per-household income because in Wisconsin, more households have multiple people working. In terms of wages and personal income, Wisconsin is about 4 percent below the national average.

Referring to a slide illustrating the essential skills in today's workplace, he noted some of the skills—locating information, reading for information, and applied mathematics. He said that when he was in high school, there were two tracks; graduates were either going to work or to college. He said that today, that distinction does not exist, as the same level of basic skills is needed for both the workplace and for college.

Regent Bradley observed that the occupations in demand, to which Mr. Winters had referred, mostly required high school diplomas. Mr. Winters agreed, if the intent is only to fill



those jobs. He indicated that most of those jobs offer below-average incomes, and Wisconsin will never raise its average household income if the focus is only on those occupations. Regent Mueller observed that the information provided by Mr. Winters suggested that most of the job openings in Wisconsin are in those lower-aid, unskilled positions. Mr. Winters agreed and explained that in most states, the dominance in job openings was at the cashier/food service/retail level because there is significant turnover in those jobs. He also noted that even in the jobs that pay low wages, technology is now shifting the labor and the risk to the consumer. He provided the example of a grocery store checkout line, which used to include two employees—one to checkout and one to bag—for every one person checking out. Now there is one employee for every six people checking out, as customers are expected to check out themselves, and if they make a mistake an employee will help out.

Mr. Winters explained that with respect to skilled jobs and talent, if the talent exists but there are no appropriate jobs, the talent goes away; and if the jobs exist but there is no talent to fill them, the jobs go away. Both the talent and the jobs have to match at the same time. He then showed a graph of the state's educational attainment and economic growth and said that there is a positive relationship between the two. (Educational attainment is often used instead of skills, because educational attainment data exist, while skills are difficult to quantify.)

He also pointed to another slide showing the gross domestic products (GDPs) of Minnesota and Wisconsin for a 15-year period. He noted that in 1997, the GDPs of the two states were nearly identical; but in 2012, Wisconsin's GDP was \$30 billion less than Minnesota's GDP, due to the higher income levels in Minnesota, which contribute more money to the state's economy and provide more income, property, and sales tax revenues for state and local governments. Regent Whitburn observed, and Mr. Winters agreed, that the state of Minnesota also has greater levels of academic achievement than the state of Wisconsin.

Mr. Winters' next slide illustrated the widening gap in educational attainment between Wisconsin, and Minnesota and Illinois. While all three states have increasing levels of talent and education, Minnesota's and Illinois' are increasing at a faster rate than Wisconsin's. He emphasized that more skills lead to higher wages, and higher incomes lead to a higher gross domestic product for the state. He also noted that the jobs of tomorrow will require more skills.

Vice President Millner suggested there is a definitional problem that needs to be considered. She explained that when referring to the essential skills in the workplace, there is a tendency to refer to these skills as something specific, but the skills described in Mr. Winters slide were general academic skills. She said that the UW System and its institutions need to have a better way of communicating this information.

Mr. Winters referred to another slide that included DWD's job projections by level of education. He emphasized the large number of future job openings that will require bachelor's degrees. He noted that while there would be many openings that require a high school degree or less, those types of jobs do not help to raise income levels or help with the state's macro-economy. His next slide illustrated average earnings in Wisconsin by occupation and training, and he emphasized that those with higher educational attainment have higher annual earnings.

Mr. Winters said that if an individual wants to make more than \$30,000 a year, they have to have some kind of post-secondary education.

Regent Farrow noted that Wisconsin has a quality technical school system, particularly in comparison to some other states, and suggested that many of the state's talented and capable people end up obtaining a one- or two-year degree or certificate rather than a bachelor's degree. She asked if that might be part of the reason why Wisconsin is lagging behind other states in bachelor's degree attainment. Mr. Winters said that might account for some of the difference, as Wisconsin has some of the best community colleges; but he noted that Minnesota's community colleges are similar.

### ***Old vs. New Economy***

In summarizing the changed construct of the old economy versus the new economy, Mr. Winters said that the economy has gone "from backs to brains" and is no longer based on raw materials but on brain power. He also emphasized that in the new economy, businesses chase talent, and the quality of life of an area attracts talent. Workforce development and economic development are interrelated and interdependent.

Mr. Winters emphasized that skills are important because individuals can earn more if they have more talent. Education is necessary for economic development. Individuals with more education have lower rates of unemployment. Mr. Winters also identified two problems with the new economy: the loss of the middle class, or the bipolarization of income, and talent not keeping up with technology. He added that if someone has talent, they will do well; if they do not have talent, they will be a burden.

Mr. Winters noted that there is a growing earnings gap based on educational attainment. With respect to earning power, Mr. Winters said that if an individual does not have some sort of post-secondary education, from an economic perspective, they are falling behind.

Mr. Winters also addressed manufacturing wages and skills, noting that manufacturing workers continue to have less talent than the general workforce but the talent is increasing. He also said that manufacturing wages are not keeping pace across all levels of talent, as those with less talent are losing out in what has always been considered a high-paying sector. The wages of talented workers will keep manufacturing wages at a higher level. Also, states with the highest concentrations of manufacturing have been the states that have been growing the slowest.

With respect to a model for the new economy, Mr. Winters referred to a slide developed by NorthStar Economics when he was employed there. The model requires equal parts of technology assets, knowledge assets, human resources, business/financial assets, and quality of life, which if applied with equal force will ignite high growth. He concluded his presentation by emphasizing that the workforce is the cornerstone for the new economy.

Complimenting Mr. Winters on his presentation, Regent Petersen made an observation about the juxtaposition of: (1) all of the job openings in customer service, customer care, and retail, and (2) the knowledge that over the long term, these jobs do not produce the desired income levels. He noted the importance of getting people employed and perhaps encouraging

more education to increase their economic profile, coupled with the recognition that there needs to be investment in a new technology workforce, with soft skills. Mr. Winters indicated that because technology is changing quickly, the key is for people to have lifelong learning embedded in their lifestyle.

Vice President Millner indicated that she wanted to restate the importance of basic academic skills, as they are relevant to employers, along with applied skills for the types of work done in specific disciplines. She also said that the UW System must educate more high school graduates, underscoring the importance of President Cross's earlier discussion of his interest in collaborating with the K-12 system. She said that it is important that the K-12 students are prepared to be successful in the UW System's two-year and four-year institutions. Mr. Winters expressed agreement, but also stressed the importance of pre-kindergarten and early childhood education, noting that the returns are unduplicated. He said that efforts in this area are low risk and long-lived; it is necessary for children to be reading by the 3<sup>rd</sup> grade, and this ability is a big indicator of future academic success.

President Falbo thanked Mr. Winters for his presentation, noting that he provided the Regents with a good foundation for their first panel discussion. He also introduced Senator Jennifer Shilling, who was seated in the gallery, and said that the Board appreciated her presence at the meeting.

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## **PANEL DISCUSSION: WHAT WISCONSIN EMPLOYERS NEED FROM THE UW SYSTEM TO HELP THEM BE MORE COMPETITIVE**

To begin the panel discussion on employers' needs, President Falbo introduced the three panelists, starting with Dr. Jeff Cernohous, founder, Chairman, and Chief Technical Officer of Interfacial Solutions, based in River Falls, Wisconsin. He said that the company was named one of the Wisconsin Companies to Watch in 2010 by the Wisconsin Entrepreneurs Network and was presented with the Innovation Award in 2013 by the Wisconsin Business Development Center. Dr. Cernohous earned a bachelor's degree in chemistry from UW-River Falls and Ph.D. from University of Minnesota.

President Falbo then introduced Tom Watson, Vice President of Design Analysis and Systems Engineering with Johnson Controls Power Solutions. He said that Mr. Watson also spent 18 years with Ford Motor Company and was named Engineer of the Year in 2005 by Design News for his efforts in leading the Escape Hybrid team to deliver Best in Class for fuel economy and emissions for a sport utility vehicle. President Falbo said that Mr. Watson has an undergraduate degree from the University of Illinois and a master's in business administration from the University of Michigan.

President Falbo also explained that UW-Madison Chancellor Rebecca Blank was scheduled to participate in the panel discussion but was not able to be at the meeting; substituting for her was Charlie Hoslet, Associate Vice Chancellor of Government and Corporate Affairs at

UW-Madison. He explained that Mr. Hoslet is responsible for managing and coordinating the university's efforts related to federal, state, and local governments, community relations and corporate relations. He serves on the Advisory Boards of University Research Park; the Center for International Business Education and Research; Competitive Wisconsin, Inc.; and the Wisconsin Technology Council. Prior to that, he served as Managing Director of the Office of Corporate Relations, which is responsible for promoting company growth and economic development by facilitating relationships among companies, organizations, and entrepreneurs and university faculty and staff.

President Falbo invited Regent Petersen to facilitate the panel discussion. Regent Petersen said that he was looking forward to the panelists' providing an assessment of what the UW System can do better. He suggested that each of the panelists include in their opening remarks a recommendation for the Regents to consider.

### ***Dr. Jeff Cernohous, Interfacial Solutions***

Mr. Cernohous began his remarks by thanking the Board of Regents for inviting him to participate in the panel discussion and Chancellor Van Galen for recommending his participation. He then shared information regarding his background and company, noting that he is a "hometown person" who grew up on a dairy farm near River Falls and who believes in building local, high-paying jobs. He explained that he obtained his Ph.D. from the University of Minnesota, as it was the largest institution closest to River Falls; three years into his Ph.D. program he was hired by 3M Corporation to work on basic research and development, and he realized the challenges of working with technology transfer. He said that even though 3M is a well-respected company, he believed there were systems and processes that stood in the way of taking innovations to market. He said that he left 3M in 2003 and started his company in his garage, incubated by Bob Cervenka, the former owner of Philips Plastics Corporation.

Mr. Cernohous explained that his business is an idea-to-production entity that works with companies, primarily in the plastics industry, bringing technologies to market. He said his organization, which includes his core business and a spin-off, has roughly 40 people and a payroll of \$4.5 million last year, which is an average of \$100,000 per person. He noted that his company's facility is state-of-the-art and throughout the economic downturn, the company launched a spinoff business, expanded the facility twice, built a greenfield, and completed \$11 million of investment in the spinoff business.

Dr. Cernohous explained that accessing capital has not been a problem. He said that he looks at 3M, the UW System, and the Wisconsin Alumni Research Foundation (WARF) in the same way—as a war chest of technology—and wonders how his organization can work with them. He indicated that working with an academic institution can be challenging at times due to the existence of certain dogmatic principles; these principles are not particular to the UW System institutions or WARF, as he has tried to work with many other universities.

With regard to commercialization or innovation of technology, Dr. Cernohous said there is a lot of heavy lifting that has to happen after an invention or patent has been filed or issued and that is where most of the investment and the work have to go. Champions, including

entrepreneurs and companies like his, are needed to work with the university in a more flexible and seamless way.

Dr. Cernohous commented that incubators need to be more than just a building; people are needed to act as champions or mentors for the companies that are coming into the incubators. Creating a successful incubator starts with attracting the right entrepreneurs and entrepreneurial staff to act as mentors for the companies and people working there, and the rest will follow. Successful entrepreneurs find a way to raise money to hire the right people, and once there is some success, people come out of the woodwork.

Mr. Cernohous also offered suggestions relating to curriculum. He said he thinks there should be greater emphasis on team-focused problem solving. He said it is important to have entrepreneurs and individuals willing to take risks, but for day-to-day problem solving and working with people throughout the United States and the world, he needs people with a STEM background who have problem-solving and team-focused soft skills. He also suggested more intermixing of the business curriculum with the STEM curricula. He said that often someone who is going into chemistry or physics does not think about business skills.

Finally, he suggested that universities look at creative partnerships with businesses such as the one he and Chancellor Van Galen are developing. Their possible partnership would be cost-sharing of a position—a hybridization of an academic and industrial position—in which someone would spend 50 percent of their time working at his organization, and 50 percent of their time teaching. He said they might be able to target high-performance individuals, coming out of graduate school, who are uncertain whether they want to go the academic or the industrial route. He said this is just one example of a hybrid model that offers the possibility to do things differently.

### ***Tom Watson, Johnson Controls Power Solutions***

Mr. Watson thanked the Board for inviting him to talk about Johnson Controls. He provided background information regarding his company, noting that Johnson Controls is a \$43 billion company headquartered in the state of Wisconsin. He explained that he leads the design of the company's lead acid and lithium battery systems. Last year the company built 135 million batteries for automobiles and has a 36-percent global market share of starter batteries for cars.

With respect to how Johnson Controls works with universities and how the company can work with the UW System, Mr. Watson said that there is a large gap between the new innovation that comes out of the research lab and how it gets into high volume manufacturing. He referred to this process as ITP, or Innovation to Proposal.

Mr. Watson said that Johnson Controls has been partnering with the UW System for a few years. He explained that the company has a dry room laboratory at UW-Milwaukee, where they do research on lithium ion materials, and has Johnson Controls scientists working on site at the university, interacting with faculty. He also noted that the company hires students as part-time employees to work in the lab, gain experience, and help with innovations. The company has worked with Chancellor Lovell to qualify each of the on-site scientists as an adjunct professor so they can help teach classes and mentor students to help create a bridge into the

business world. Referring to Dr. Cernohous's mention of the need for STEM-related education to be partnered with business experience, Mr. Watson said that Johnson Controls does that through internships.

Mr. Watson explained that Johnson Controls also sponsors a laboratory at the Wisconsin Energy Institute and funds research projects for students at UW-Madison and UW-Milwaukee. He added that when the company scores and evaluates the student proposals every year, they award bonus points to proposals that involve multiple campuses within the UW System.

With respect to competitive challenges, Mr. Watson explained that Johnson Controls built 135 million batteries during the prior year using a very high volume manufacturing process that cannot to be interrupted by engineers who want to come up with something new. He said that the company's challenge, and the UW System's challenge, is how to create new levels of energy storage that have been unseen before, at an affordable cost, and have near-term production viability. He explained that cost must always be factored into innovations that are developed, starting with the basic materials used to develop the innovation.

Referring to how the UW System can help with this, Mr. Watson said that the partnerships between institutions and Johnson Controls have to be mutually beneficial. Reiterating what Dr. Cernohous had said, Mr. Watson said there is still a lot of heavy lifting, after the initial invention is created, to turn an idea into a product. He explained that his company wants to commercialize an idea, while the UW System's researchers and scientists also want something from the partnership, and it is important to find the best way to do that efficiently.

Mr. Watson said that Johnson Controls hires from many different universities within the UW System, including UW-Madison, UW-Milwaukee, UW-Whitewater, UW-Parkside, and UW-La Crosse, and many of the lead acid engineers based in the Milwaukee Tech Center come from UW-Madison. In addition, the Johnson Controls building efficiency business recently opened an innovation center at the UW-Whitewater campus, named after the company's founder, Warren Johnson. He said that it is important for graduating students to understand the business aspects of what they are going to be doing. He said that in a sense every engineer has to be a salesman; they cannot just sit in their lab developing an idea. He said they have to be able to sell that idea to their management and to customers, and they have to be able to wrap a business case around it.

As for recommendations for the UW System, Mr. Watson returned to an issue he mentioned previously: mutually beneficial partnerships. He emphasized the importance of Johnson Controls' being able to commercialize and make money on a product, and the importance of scientists and researchers also benefiting from the process. He said the two entities have to be able to sit down, be flexible, define the nuggets of gold that each organization wants, and work toward those together. He concluded by encouraging more industry/academic partnerships, much like what Johnson Controls is doing with the UW System.

## ***Charlie Hoslet, UW-Madison***

Mr. Hoslet began by thanking the Board for allowing him to stand in for Chancellor Blank. He also offered Chancellor Blank's apologies for missing the meeting for medical reasons. Noting that he served as Office of Corporate Relations Director for ten years, prior to his current position, he indicated that his presentation would address how universities are increasingly important to economic development. He said that the two main factors in how universities can help Wisconsin companies be more competitive are education and innovation.

Mr. Hoslet said that the core mission of the university is to produce an educated workforce that is needed to build, run, and work in the innovation economy. This happens by educating not only undergraduate and graduate students, but also by providing continuing education opportunities to those already in the workforce. He said that each year the UW System has approximately 26,000 students who receive bachelor's degrees and another 7,500 students who receive graduate and professional degrees. He said that many of those graduates are looking to enter the workforce, and approximately 80 percent stay in Wisconsin, with approximately 13 percent of nonresident graduates staying in Wisconsin after graduation. He also noted that the top five degrees that students are graduating with are in the areas that Mr. Winters had indicated are needed in the new economy—business, biology, psychology, communications, and nursing. He also noted that more than 7,000 STEM degrees and 3,000 health degrees were conferred in the 2013 timeframe, accounting for almost 30 percent of all degrees conferred. He added that one-third of the degrees conferred at the graduate level were in the STEM or health care areas.

Mr. Hoslet explained that UW-Madison provided professional development to more than 30,000 people in the workforce in each of the past five years coming through its College of Engineering professional development program, School of Business Executive Education Program, and health sciences programs. He emphasized the importance of increasing the productivity of each worker and of the university's working more closely with employers to provide the education and the skilled workforce that are needed. Recalling Mr. Winters' statements about the increasing importance of non-routine analytical and non-routine interactive skills, Mr. Hoslet said he would argue that a university education, more so than any other type of education, is going to teach those skills that are needed in the new economy. The "soft skills" that are needed in today's market can be acquired at a university and may be an area that needs more focus.

Turning to the issue of the university's involvement in innovation, Mr. Hoslet said that the state and the nation are increasingly driven by the innovation economy. Large research universities like UW-Madison, UW-Milwaukee, and others are essential to innovation; they can use their research prowess to create new ideas and technologies that can have an economic impact and can actively work to move those new ideas into the marketplace. He explained that the Wisconsin Alumni Research Foundation, WiSys, and the UW-Milwaukee Research Foundation are all set-up to do just that; in fiscal year 2011, these three organizations looked to patent and license out to existing companies more than 400 disclosures that came out of UW System institutions.

With regard to joint university-industry partnerships, Mr. Hoslet said that Mr. Watson described the fabulous relationship that exists between Johnson Controls and UW-Madison and UW-Milwaukee, and there are a number of Wisconsin companies working closely with the universities, including MillerCoors and GE Health Care. He added that while the UW institutions can do more, it is important to not lose sight of the fact that many partnerships already exist.

Offering suggestions for what can be done to ensure that the university is meeting the needs of employers and providing students with the education and skills they need to help grow the state's companies, Mr. Hoslet said that many campuses have advisory boards to assure closer conversations between businesses and industries hiring UW graduates. He explained that participation on these boards allows business leaders to provide specific input to colleges and programs on priorities; to learn about potential research partnerships; and to strengthen relationships among students, alumni, and industry. He added that these boards can serve as an ongoing conduit of information about critical gaps in workforce talent, difficulties in recruiting, and the need for ongoing executive education opportunities. He provided several examples of advisory boards at UW-Madison's College of Engineering, School of Business, and College of Agriculture and Life Sciences, noting that many advisory boards exist at other UW institutions. He suggested that UW institutions look for more opportunities, either formally through advisory boards or informally, to connect with employers that are hiring UW students and seek their feedback.

Secondly, Mr. Hoslet suggested that it is important for campuses to have good relationships with regional economic development entities, such as the relationships that UW-Madison has with MadREP, the Madison Region Economic Partnership, UW-Milwaukee has with the Milwaukee 7, and UW-Oshkosh and UW-Green Bay have with New North. He said he was not sure these relationships existed across the state, and it was only recently that the UW-Madison chancellor was added to the board of MadREP. Mr. Hoslet also shared several examples of possible efforts to coordinate with MadREP, such as including campus representatives in site visits for companies looking at possible locations, or working with alumni and existing companies to identify opportunities for locating or relocating facilities to the area. He also highlighted the importance of UW institutions' working with regional economic development entities to grow industry clusters within their regions.

Finally, Mr. Hoslet referred to start-up companies and entrepreneurs, indicating that much job growth comes from companies that are less than five years old; he said that paying particular attention to how UW institutions can support and grow new companies is important. He said that the UW System's Small Business Development Center network around the state has been helpful, as will be UW-Madison's new D2P initiative, in identifying technologies around which a new company can be built and creating a support structure to help companies get off the ground. He also said that supporting private-sector efforts to connect with fledging entrepreneurs is also important.



## ***Discussion***

Facilitating the discussion, Regent Petersen thanked the panelists for their commentary and said he wanted to discuss the need for those in STEM fields to also have business acumen and soft skills. He said that curriculum adjustments, as well as partnerships that provide opportunities for internships and co-ops, may be something to consider to ensure graduates have the skills that businesses are seeking. He asked the panelists what else the UW System can do.

Mr. Watson responded by emphasizing the importance of not losing focus on the STEM fields while thinking about how to broaden the capabilities of these students. He said that the last thing he would want is to dilute STEM efforts in order to give people opportunities to learn more soft skills. He said there has to be a way to integrate the STEM disciplines with these other skills, which is why Johnson Controls is primarily focused on internships and co-ops. He explained that at the end of every summer, Johnson Controls holds an intern symposium in which interns from different universities across the country come to Milwaukee to work at Johnson Controls' headquarters and spend a whole day presenting their results. He said that the expectation is that the supervisors of these interns provide on-the-job training to teach interns how to prepare and present a presentation in such a way that it essentially becomes their job interview in front of a large group of people.

In response to a question from Regent Farrow, Mr. Watson explained that the presentations are done individually but something interesting happened last summer. He explained that in addition to having individual job assignments, a lot of time was spent coordinating all of the interns as a group—they stayed in the same dorms, bussed back and forth from headquarters to campus, and planned social events. He said that when the interns gave their presentations at the symposium, they created a schedule for the day, and every presentation tied to the previous one. He said he would call it a success story of the students coming out of a programming having learned to work together as teams.

Asking about gaps, Regent Whitburn asked if there are areas that the UW System needs to shore up or scale up, or areas in which the UW System is lacking such that Johnson Controls looks elsewhere to get key people. Mr. Watson said that in looking across all of Johnson Controls' businesses, new material development is a key part of many of the businesses, whether it is their interiors business making seats and interior systems for automobiles, sustainable products and materials, or energy-efficient production and processing of materials. He said that in their battery business there is a need for new levels of energy storage capability; and within their building efficiency business there is a need for data mining, which is something on which UW-Madison focuses. He also said that in the battery business, lithium ion is an energy storage chemistry that will be around for a long time. Advancements in the area will continue, and there is a large manufacturing base around the globe for lithium ion. Mr. Watson said the same can be said for lead acid batteries. He suggested that there are opportunities for continued focus on lithium ion research and related systems, similar to what is being done at UW-Milwaukee, UW-Madison, and the Wisconsin Energy Institute.

In response to a question from Regent Whitburn about whether the universities are listening to the input provided, Mr. Watson indicated that universities are “getting to getting it.”

He provided an example of a sponsored research project in which bonus points were awarded for project proposals involving multiple UW System campuses. He said he did not think that submitters of ideas recognized how serious Johnson Controls was about wanting proposals that involved multiple campuses, but that has been made clear and they understand it now.

Regent Drew asked Mr. Watson if, given Johnson Controls' location in Milwaukee, its partnership with UW-Milwaukee, and the need in Milwaukee for family-supporting jobs, he had given thought to a production facility in Milwaukee. Mr. Watson explained that Johnson Controls has given thought to many different areas but because their products do not ship very well, they tend to place manufacturing close to where the customers, primarily automotive manufacturers, need the products.

Regent Higgins asked Dr. Cernohous if he had any specific examples of how it had been difficult to work with academic institutions. Dr. Cernohous explained that he had worked with the University of Minnesota, WARF, and WiSys on licensing and technology; typically, what was asked of his organization up front made it difficult to justify the investment. He also noted that WiSys has been a bit more flexible than the others. He explained that this might not be a barrier for a larger company such as Johnson Controls, but it is challenging for a smaller business such as his. He said his personal opinion is that the university needs to think about ways to attract entrepreneurs and think about how it can market to successful entrepreneurs and get technology into their hands. Dr. Cernohous also provided another example in which his company was trying to pay for a piece of equipment at one of the institutions and could not do so due to administrative barriers. Regent Higgins thanked Dr. Cernohous for identifying the issues and said that if he had any others, the Board would be happy to hear them.

Regent Petersen asked Dr. Cernohous if, from an outreach perspective, the university is doing enough to foster growth and development. Dr. Cernohous said that outreach is starting to happen at the executive levels of the universities, but he could not say if it was happening as much at the ground level. He commented that academic departments still have their focus. He recalled that Mr. Watson made the point that scientists and engineers need to be able to sell. He also said that the universities have this enormous capability and infrastructure that can be utilized by companies throughout Wisconsin and the United States, and there is room for improvement.

Mr. Hoslet commented that in 2003, when UW-Madison started its Office of Corporate Relations, faculty were less likely to work with companies interested in sponsoring research because there was a lot of research funding available from the federal government. Five years later, faculty and researchers were calling the Office of Corporate Relations looking for companies interested in sponsoring research because federal research funding was no longer available. He predicted that a similar change is coming, and it will be driven as much by funding considerations as anything else.

President Cross remarked that every state in which he has worked has had difficulty taking basic research, even applied research, and translating it into commercial products; there has always been some sort of difficult transition. Noting that partnerships are critical, he recalled that Mr. Watson said it was necessary to develop a business plan for a research idea; he queried who should develop such a plan. President Cross reflected back Mr. Watson's comments that

the business plan should be developed together, with both the business and the university sitting at the table and understanding what the other party wants, identifying those things that are important, and being willing to give up on some of the other things that are not as important.

Mr. Hoslet explained that with D2P, the idea is to put a team in place that includes an entrepreneur-in-residence who has connections to industry, WARF, and the investment community; who looks for technologies “farther upstream;” and who helps to provide guidance through the process, working with corporations to determine the direction the research might take.

Dr. Cernohous opined that the parties involved have to start by speaking the same language, and a big part of the problem is that academic and industrial priorities and language are not the same. He added that systems, processes, and bureaucracy get in the way of a successful partnership. He also suggested that people or faculty who want to launch products or technology should know how to write a business plan and know what a profit-and-loss statement is. He said that STEM students are extremely intelligent and can handle the extra work, and giving them that perspective would be extremely beneficial.

Regent Bradley commented that, with respect to curriculum and helping to develop more well-rounded graduates for the new economy, the good news is that the work done by the chancellors and provosts at UW-Madison, UW-River Falls, UW-Oshkosh, UW-Milwaukee and other campuses throughout the UW System is probably ahead of the game from a national perspective. He observed that the Board and the legislature probably have not given campuses enough support for the innovation they have introduced in their curricula; he said that the takeaway message is that the UW System needs to redouble its efforts in this area.

Closing the discussion, Regent Petersen thanked the panelists and said that there had been a decided turn, during his short time as a Regent, in the UW System’s focus on the business economy in the state. He said that the UW System is working with the Wisconsin Economic Development Corporation and regularly reaching out to businesses. He also agreed with Regent Bradley and said that the UW System is making great investments, but can do more, and can advocate for getting more accomplished.

Regent Petersen said we should not lose sight of the fact that the chancellors are really the Board’s evangelists at the local level—they see things firsthand, bring it to the attention of the Regents, and point out the pitfalls that they hear when meeting with advisory groups of local businesses. He indicated that it is incumbent upon the Board of Regents to help facilitate solutions and put some of the recommendations into action.

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The Board recessed for lunch at 12:10 and reconvened at 12:40.

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## **PANEL DISCUSSION: HOW THE UNIVERSITY IS ANTICIPATING THE STATE'S FUTURE NEEDS TO BECOME MORE COMPETITIVE**

President Falbo began the afternoon portion of the meeting by introducing the panel of speakers. He said that the panelists would address how the UW System is anticipating the state's future needs and growing the leaders and innovators of tomorrow. He explained that following the panelists' presentations, Regent Higgins would facilitate additional discussion. He welcomed the following panelists: Beverly Kopper, Provost at UW-Whitewater; Mitchell Fiene, a student at UW-Whitewater; Mike Lovell, Chancellor of UW-Milwaukee; Ryan Hickey, a student at UW-Milwaukee; Aaron Brower, Interim Chancellor of UW Colleges and UW Extension; and Mark Lange, Executive Director of Entrepreneurship and Economic Development, UW-Extension.

### ***Provost Beverly Kopper, UW-Whitewater***

Provost Kopper began by thanking President Falbo and the Board of Regents for allowing her to share some of UW-Whitewater's experiences. She said that UW-Whitewater has created an entrepreneurial ecosystem that is firmly rooted on the campus but has grown beyond the campus borders and into the city, the region, the state and across the globe.

She explained that UW-Whitewater is keeping Wisconsin competitive through business incubation, grants, and applied learning experiences for students and by responding to industry needs. These activities keep academic programs and initiatives relevant to employers, the community and students. She also explained that there are intangibles and principles that have helped UW-Whitewater to cultivate this ecosystem:

- Be nimble—when an opportunity or challenge presents itself, UW-Whitewater acts proactively, embracing innovation, change, and risk.
- Think differently—creating the ecosystem meant rethinking what entrepreneurship looked like and who participated.
- Collaborate effectively—a competitive spirit and dedication to serve drives UW-Whitewater to innovate, and the campus has accomplished a great deal more by working with others.

Provost Kopper said that in 2008, UW-Whitewater, the city of Whitewater, and the Community Development Authority recognized the need for a regional business incubator; under the leadership of Chancellor Telfer the idea went from the drawing board to reality in only two years. She said that the Innovation Center at Whitewater University Technology Park is thriving. Its newest tenant, iButtonLink, chose Whitewater over a location in Illinois because of the collaborative opportunities with the Whitewater Incubation Program (WhIP), which provides coaching, mentoring and support services to businesses linked to the Innovation Center. She explained that UW-Whitewater faculty and staff experts and students assist with growth opportunities, business plans, marketing, and branding. She noted that one of those experts, Graphic Design Associate Professor Renee Melton, has received international recognition for the logos she created for fledgling enterprises at the Innovation Center.

Provost Kopper explained that at UW-Whitewater, entrepreneurship is not limited to businesses and business-related fields, as those in the sciences, humanities, and arts also have great ideas. She highlighted the work of artist and art professor Dan McGuire, who started a company at the Innovation Center called Foundry Solutions. Dr. McGuire and Emeritus Professor Charlie Olson have developed ways to create molds using a 3D printer, and their work is highly sought after by industries looking to test new parts and products. She noted that Foundry Solutions has four patents and four provisional patents that are already generating royalties. She also highlighted the work of UW-Whitewater's Choton Basu, an Information Technology professor, whose product, GoStrive, is a revolutionary parks and recreation application for smart phones; the product has 100 clients in 22 states. She said that these efforts require flexibility in adjusting faculty and staff workloads.

Provost Kopper also provided examples of grants and applied learning experiences at UW-Whitewater. These efforts include:

- \$5.9 million in funding provided by the U.S. Economic Development Administration to help regional businesses affected by floods, auto plant closures, and layoffs to diversify and tap into new markets.
- Campus outreach centers, which have provided business consulting for more than 30 years.
- Partnerships with the Wisconsin Economic Development Corporation and the Whitewater Community Development Authority to provide \$300,000 in early-stage capital to area entrepreneurs.
- The campus's Fiscal and Economic Research Center, which under the direction of Professor Russ Kashian, works with companies, governments, trade groups and nonprofits.

Provost Kopper added that UW-Whitewater has developed a strong pipeline with companies to place students in internships, undergraduate research opportunities, and jobs throughout Wisconsin.

Provost Kopper noted that the UW System has some of the best and brightest on its campuses to anticipate industry needs and grow tomorrow's innovators and leaders. She said that competitive salaries and benefit packages are critical to attracting and keeping the best and brightest. She also noted that universities play a key role in building technology and innovative economies and providing students with a strong liberal arts education that prepares them for the 21<sup>st</sup> century.

Provost Kopper said that at UW-Whitewater, they listen to the needs of industry and have heard from employers looking for employees with strong, broad-based educations—students who write and speak well, think critically, know about other cultures, get along with people who are different from themselves, and are prepared to handle “whatever comes their way.” She explained that UW-Whitewater is integrating essential learning outcomes into every division on campus and focusing on high-impact practices, such as undergraduate research. She noted that UW-Whitewater listened to industry leaders regarding what they need from business graduates, and as a result, completely redesigned the MBA curriculum in the College of Business and

Economics. She also added that every college at UW-Whitewater receives feedback from an advisory board of business, community, and disciplinary leaders, as well as a council of students. Provost Kopper said that UW-Whitewater answered the call to make Milwaukee the freshwater capital of the world by investing time and resources to create an Institute for Water Business located in Milwaukee at the Global Water Center; faculty and staff can network, generate new ideas, and conduct research.

Provost Kopper attributed UW-Whitewater's thriving entrepreneurial ecosystem to driven faculty, staff and students, who had embraced the principles of being nimble, thinking differently, and collaborating effectively. She then turned to UW-Whitewater student Mitchell Fiene, who would speak next.

### ***Student Mitchell Fiene, UW-Whitewater***

Mr. Fiene introduced himself as a sophomore at UW-Whitewater studying entrepreneurship, and cofounder of DMZ Aerial, a company that provides technology to the agricultural sector. He shared his background and interests, explaining that his company grew from observing his father's experience and from his own internship experience in high school; they were involved in crop scouting, which involved walking farmers' fields looking for nutrient deficiencies, insect pressure and disease. Mr. Fiene and his cousin, fellow intern and cofounder, Zach Fiene, realized that crop scouting is an extremely inefficient process, as they could walk only 20 to 30 acres per hour. In response, they developed the AIMQ, or Aerial Intelligence Modified Quadcopter, which is an aerial scouting vehicle. He explained that the AIMQ includes a high definition camera which takes photos as it flies over fields. The images are then sent to an agronomist who diagnoses the field and sends a report to the farmer. Mr. Fiene said that AIMQ systems are now being used in 15 states and Canada.

Mr. Fiene explained that at UW-Whitewater he is learning the basics of how to generate business. He also identified three ways in which his UW-Whitewater experience is helping him to develop and grow DMZ Aerial: involvement in student organizations that lead to collaborating with other students in business competitions; use of campus resources such as the Innovation Center, which among other things, provides a nice place for him to meet with clients; and accessibility of faculty at all hours of the day to provide recommendations regarding the operation of his business.

### ***Chancellor Michael Lovell, UW-Milwaukee***

UW-Milwaukee Chancellor Mike Lovell joked that it is tough to follow students who bring really cool toys to the presentation! He started his presentation by stating that while he is not sure universities can anticipate future needs, universities can work in collaboration with industry to understand the needs, help address them, and work with industry to help them be successful. He explained that the state has identified cluster areas of focus where the state can be nationally competitive, and one of the key things the UW System can do is to be part of helping those clusters become nationally competitive. The UW System can do this in three ways: by helping with workforce development, known as the talent pipeline; by working on technology development that helps companies to be more globally competitive; and by serving as conveners, the synergistic organizations that bring the clusters together on common ground to meet and talk

about their needs and to help the whole sector move forward. He said his presentation would focus on one of these clusters—the energy power and controls (EPC) sector.

Chancellor Lovell explained that the EPC sector in Wisconsin includes more than 900 companies, with more than 100,000 total employees and revenues of \$38 billion each year. Historically, Wisconsin is a global leader in this area, and the EPC is a foundational sector on which the state's economy has been built. The UW System needs to provide these companies with talent and with the technology to help them be more competitive.

Chancellor Lovell suggested that there is huge opportunity for the state of Wisconsin, as the global power and energy market is projected to grow \$1.9 trillion over the next five years, providing many Wisconsin companies the opportunity to be more successful. He said that a recent study by the Political Economy Research Institute showed that based on this growth, Wisconsin could attain \$2.8 billion in clean energy investment revenue and create about 35,000 jobs. Wisconsin currently ranks 26<sup>th</sup> among states for venture capital investment in developing clean energy technologies.

Chancellor Lovell said that the state has a significant challenge in that 62 percent of the energy workforce will retire over the next decade. The university can play a role in technology and reducing the number of workers needed in a certain areas, and also in talent development. He explained that UW-Milwaukee is helping Wisconsin to be successful in the EPC field in two different ways: by serving as a convener and forming a new consortium, the Midwest Energy Research Consortium, which includes nine academic institutions and more than 60 corporations in eight states, and by developing a new model for university-industry engagement with Johnson Controls.

Chancellor Lovell indicated that the Midwest Energy Research Consortium is important because it provides a platform for all of the companies and universities to be in the room together, to talk about issues and about how to move the entire state forward. Discussions focus on workforce development, technology innovation, market strategies and industry expansion, understanding public policy support, and strategic collaboration.

Chancellor Lovell also summarized UW-Milwaukee's model for working with specific industries by focusing on the institution's relationship with Johnson Controls. He said that when industry works with a university it can be challenging and the speed at which they work is the speed of trust—the more the two parties trust each other, the faster and more they can accomplish. He said the easiest way to start working with a company or an organization is to start talking about joint curricular developments, addressing specific skills gaps and skills that companies need. This begins by determining what is lacking, working with the company or cluster to build a curriculum, and inviting the company or cluster experts to help teach. The next level of engagement involves turning some of the undergraduate students' attention toward the needs of the company or cluster by setting up undergraduate student projects. Eventually, faculty members start working with corporations to develop joint research proposals. He said that as this dialogue deepens, faculty members begin working with corporations on developing their technology roadmaps. The highest level of engagement happens when the university and the company or cluster can find a way to co-locate. He touted the Johnson Controls model,

saying that there are scientists from around the world working for Johnson Controls who are working side-by-side with UW-Milwaukee faculty and students, which benefits all involved.

Chancellor Lovell highlighted some of the benefits that Johnson Controls is gaining from its partnership with UW-Milwaukee. The university is creating a talent pipeline of future employees, and every student that has worked in the Johnson Controls partnership has graduated and been hired by Johnson Controls. In addition, the partnership has attracted 16 world-class scientists to Milwaukee, who are working on the UW-Milwaukee campus with adjunct appointments and teaching and mentoring students. These scientists come from countries like Israel, China, Korea, Canada, and Japan; they have come to Milwaukee because they want to be on a college campus and have an adjunct appointment, which is something unique and that other companies cannot offer. Another benefit is that the intellectual talents of UW-Milwaukee faculty and students are used to solve Johnson Controls' technical challenges.

Chancellor Lovell summarized the benefits of the partnership for UW-Milwaukee: faculty and staff have world-class facilities; students take unique leading-edge courses, obtain internships, and learn directly from industry mentors; faculty have scientific partners who make them more competitive nationally for funding; and direct Johnson Controls research funding to support faculty and students.

Chancellor Lovell also identified several benefits of the partnership for the state, including Wisconsin's becoming renowned nationally, joint grant proposals that have a 92-percent success rate and have been awarded \$35 million in federal funds, and activities that are attracting new companies and talent into the region.

Chancellor Lovell then introduced UW-Milwaukee student Ryan Hickey, noting that he was accepted to Duke University and some other high-profile universities, but he chose to attend UW-Milwaukee because he recognized the value of the partnership with Johnson Controls and what it could offer him.

### ***Student Ryan Hickey, UW-Milwaukee***

Mr. Hickey introduced himself as a third-year student at UW-Milwaukee, studying Mechanical Engineering. He recalled that when choosing colleges, he chose UW-Milwaukee because it provided an opportunity to work in the engineering building with the world's leading scientists and obtain work experience and real-world industry experience, which is something that no other university could offer.

He shared some of his experiences at UW-Milwaukee and his internship with Johnson Controls, such as living in Los Angeles and working on a project to develop a battery system for anti-missiles and designing materials related to solar cells. He said that because of these experiences, along with his first publication, companies were now reaching out to him for summer internships. He said that the opportunities are endless and include traveling around the country and possibly to Europe, while getting paid to be an intern. He attributed his new opportunities to the work he did at UW-Milwaukee and Johnson Controls.



## ***Interim Chancellor Aaron Brower, UW Colleges and UW-Extension***

After thanking the Regents for the opportunity to address them, Interim Chancellor Brower said that would speak about his work related to education innovation, student success, and student learning outcomes. He said he wanted to talk about the questions that had been raised throughout the day: Assuming higher education is as important as we see it is, what should it really look like? What kinds of content, delivery methods, and educational activities should be at the center of it?

He noted that this was a significant time of transition time in higher education, partly driven by economics. He said that state funding for public higher education had declined since the late 1970s and early 1980s, regardless of which political party was in power and the economic health of the nation. He said that in his view, this was a nonpolitical issue and instead just the reality of trying to rebalance the role of public and private funds that finance education.

Interim Chancellor Brower also said the demands on higher education could not be higher, with more than 18 to 19 million people, or 70 percent of those with a high school degree or equivalent, entering higher education, with the biggest growth occurring among nontraditional students. He noted that another driver in the transition of higher education is technology, which is changing the focus from access to information to application of information.

Interim Chancellor Brower said that there are several components of what higher education can and should look like in the UW System. First, higher education needs to be accessible to new populations, such as nontraditional students. It is important to develop curricular structures that are flexible to the biggest proportion of students seeking higher education. Flex Option is one example of that type of flexibility, but there are many different ways of thinking about flexible modes of delivery that better match the enrolling population.

Second, education should be focused around projects, or project-based learning, starting with a student's first year, when he or she is learning math or writing in the context of a project such as undergraduate research, co-ops in the community, or coordinated curricula. Interim Chancellor Brower continued by saying that technology needs to be used in smart ways, such as through blended learning and maximizing face-to-face interactions. He also pointed out that the UW System needs to build in more collaborative degrees that build on the diverse strengths of the UW System institutions.

Finally, Interim Chancellor Brower said, there are many examples of UW institutions doing good things, but the institutions are not always doing things in a coordinated way. He said the system does not think very strategically about how it should develop collaborative degrees, what degrees to develop, or whether to encourage blended learning and use of technology. He also suggested that the Board consider incentivizing institutions by providing easy access to processes that allow collaboration and easy access to the generated revenue. He concluded by stating that it is intentionality, coordination and incentivization that need to be pushed forward. He then introduced Mr. Lange, Director of Entrepreneurship and Economic Development at UW-Extension.

## ***Director Mark Lange, UW-Extension Entrepreneurship and Economic Development***

After expressing his appreciation for the opportunity to speak to the Board, Mr. Lange expressed his belief that the issues the Board was reviewing are critical to the university system and to the state. He explained that UW-Extension's Division of Entrepreneurship and Economic Development is actually a collection of numerous organizations and initiatives inside UW-Extension that share two common goals: to increase the success rate of Wisconsin's new companies, and to improve the performance of Wisconsin's existing companies.

Mr. Lange started his presentation by addressing shifts in the economy over the last 10 to 12 years. He said that while the headlines have focused on changes due to 9/11, the banking crisis, the housing meltdown, the war, budget deficits, and election cycles, the economy has been quietly shifting in a very dramatic way. He referred to his presentation slide that included three graphs illustrating changes in employment at public firms in the U.S., changes in the average size of stand-alone start-up companies, and changes in the average jobs per business establishment. He pointed out that the trend since 2000 is that the average employment size of public companies is decreasing, as is the total number of people employed at those companies. He also noted a similar trend among the smallest companies—stand-alone start-ups. He said that the average number of jobs per business establishment is decreasing, and this is not a temporary adjustment to business cycles.

Mr. Lange shared some national statistics that illustrate a shift in the country's economy, concluding that there has been a dramatic decrease in the number of employees; the country is moving from a large-company economy to a smaller-company economy. He also noted that the economy has been good at launching establishments, but those establishments have not been growing. He suggested that this presents an opportunity for the state of Wisconsin and for the university.

Mr. Lange turned to the issue of changes in the distribution of job growth in Wisconsin over two time periods, 1995 to 2003 and 2004 to 2012. He said that between 1995 and 2003, Wisconsin jobs grew by 11.7 percent, and companies of all sizes contributed to this growth. In contrast, between 2004 and 2012, Wisconsin jobs grew by only four percent, and there was a shift away from job growth at larger companies, to job growth among the self-employed and companies with fewer than ten jobs. He suggested that UW System strategies should address more job growth at companies of all sizes, which is a healthier distribution of job growth.

Mr. Lange suggested that the UW System, through funding and support, serves the economy in several ways, including small business development, workforce development, business attraction and retention, and entrepreneurship. However, the missing piece is growth-company development. He said the state's economy has to be as good at growing companies as it has become at launching them, and there is a role for the UW System in helping to grow companies.

Mr. Lange identified three strategies for growing individual businesses:

- Identify and support high-potential companies inside Wisconsin's economy;
- Engage with companies on a regular basis to teach them how to grow and manage their growth;
- Work and interact with companies by assisting with strategic intelligence and sophisticated information, which are key building blocks for growing companies.

He concluded by sharing two recommendations with the Regents: (1) incentivize faculty and train students to engage more directly with smaller high-potential companies; and (2) build the next generation of business-development services for high-potential companies, focusing on delivering strategic intelligence and market information.

### ***Discussion***

Facilitating the discussion, Regent Higgins thanked the presenters and highlighted the importance of incentives, specifically mentioning: rethinking compensation constraints for faculty; working and consulting with private sector partners; including or enhancing the role of undergraduate research in considerations for advancement, promotion and tenure; providing scheduling flexibility for short-term appointments to allow faculty to do research and work temporarily with a private sector business; enabling flexible teaching loads to accommodate the time demands for research; and making allowances for sponsored research projects to buy out teaching loans, when needed. He said that these are only some examples of areas where the university could align its incentives within the university, but discussions have also touched on aligning institutional incentives with the local business communities.

Regent Higgins noted the importance of campuses' maintaining their identities because they are not homogeneous, and they meet the needs of their respective communities. He also pointed out that the UW System needs to continue to focus on educating undergraduates. He asked Provost Kopper how the System could go about aligning incentives for these differing objectives and what challenges would be posed in doing so.

In response to Regent Higgins' question, Provost Kopper emphasized the importance of communication, listening, and partnering; she also noted that continuous improvement and a tradition of excellence are part of the university's mission. She stressed the importance of giving serious consideration to university partnerships, whether through collaboration with sister institutions or with businesses. She also emphasized the importance of regular meetings with community, business, and industry leaders to hear what is on their minds; listening to what their needs are; revising curricula; providing applied learning experiences for students; and being proactive, moving quickly, and doing some things differently. She said that having the flexibility to do many of the things Regent Higgins mentioned is important. She also said that faculty workload looks different than in the past because faculty are doing this type of work.

Interim Chancellor Brower commented that workloads look different than in the past, as the standard metrics of workload—time in class, credit hours, or number of student contacts—no longer apply well. He suggested thinking about what types of activities the Board wants to see and then working backwards to establish the metrics.

With regard to incentives, Interim Chancellor Brower said that one of the difficult things for UW Colleges, and probably for every UW institution, is that the budget is so slim that there is little room to try something new without first having to give up something. He suggested that the UW System consider establishing an innovation fund that could be used to help institutions.

Regent Whitburn indicated that he recently saw a news report referring to a national Gallup study pointing out the massive disconnect between the perspectives of academic leadership and corporate leadership. He recalled that the Gallup poll reported that 96 percent of college and university chief academic officers said they were extremely or somewhat confident in their institution's ability to prepare students for success in the workplace. The same poll also found that only 11 percent of business leaders nationwide strongly agreed that today's college graduates have the skills and competencies their business actually needs. He noted the existence of a perception gap, and suggested this is an issue to further explore. He then asked the panelists if they had any reaction. Regent Higgins added that Regent Whitburn was referring to the 2014 Inside Higher Education Survey of College and University Chief Academic Officers.

Provost Kopper said that as a chief academic officer, she would try to respond. She said that one of the things UW-Whitewater does to ensure there is not a perception gap, or to at least close the gap, is to have advisory boards for every college, including leaders from the community, businesses, industry, and disciplines; the input of these boards is considered very seriously. UW-Whitewater's College of Business and Economics totally redesigned its MBA program to make sure that graduates are prepared, and this redesign was based on the input received from the advisory board.

Provost Kopper also provided another example of continually inviting and having on campus industry, community and business leaders. She said that not only does UW-Whitewater place students in internships and receive feedback about those situations, but the institution also has business and industry leaders on campus mentoring, speaking and involved in campus life. She said this is a way to stay attuned to what their needs are, and campus leadership takes the feedback seriously and responds to it.

President Falbo asked Mr. Hickey about his experience in Los Angeles, and the biggest hurdle he faced while doing his work there.

Mr. Hickey said that before his internship, he saw the relevance of this classwork, but after his internship he had a deeper appreciation for the finer details and the things he needed to know. He said that now his class content is more important to him because he realizes it is something he needs to master because he will use it in the real world. He contrasted that with the experience of some of his friends who have not had formal internships, and who view the class material as homework they need to get done.

President Falbo asked him if, in hindsight, he felt prepared for the experience in Los Angeles, and if what he learned there made him more prepared for the next experience. Mr. Hickey said that he was prepared for the experience because of Johnson Controls, where he learned about conducting experiments and about batteries.

Regent Vásquez suggested there might be an opportunity for a more focused discussion between the UW System and the Wisconsin Technical College System regarding STEM education, not only from the perspective of students transferring from the technical college system to the university system, but also of students transferring from a university to a technical college. He said that right now it seems as if the two systems are trying address transferability issues in every conceivable program, which might be too big an effort to tackle; they might instead focus the discussion around STEM programs in an effort to jointly help Wisconsin's economy. He also suggested that if a model can be developed, it could then be replicated in other programmatic areas.

Regent Higgins invited Regent Farrow to ask the final question of the panel. Regent Farrow said wanted to make a strong statement in favor of systematic co-ops every other semester. She noted that one of her sons attended Purdue University and through an effective co-op experience discovered a new career path. She asked if any of the universities have co-op structures within their offerings for students.

Chancellor Lovell said that all of the universities with engineering schools have co-ops, and UW-Stout has co-ops in other fields as well. Regent Farrow said she wanted to make sure co-ops were part of the conversation because they provide great benefits in terms of a learning experience, while also allowing students to earn credit and income.

Interim Chancellor Brower said he completely agreed with Regent Farrow on the importance of co-ops and considered project-based learning, co-ops and internships all variations on a theme—students are doing the work and academics are built in. He said that students learn what it is they need to learn because they see the value of the application.

Regent Farrow also commented that she has had many conversations verifying the value of “Project Lead the Way,” high school- and middle school-based programming that takes students out of theoretical math/science into application. She said that many of the things the Board was discussing reach back into K-12 education, and the Board needs to think seriously about how to better connect with K-12 education.

Mr. Hickey commented that he was involved in “Project Lead the Way” in high school, and it led him to mechanical engineering. Regent Farrow asked Mr. Hickey to go back to his school district to represent the program's success.

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## KEY TAKEAWAYS AND NEXT STEPS

President Falbo said that he had planned to initiate a discussion of the presentation and panels; however, noting that President Cross had been taking notes, he asked President Cross to first provide a summary, after which discussion would follow.

President Cross said that he would try to draw out at least six or seven key points and translate them into action statements. He apologized, saying that the thoughts might not read smoothly, and he asked for a critique of the points. President Cross suggested the following:

1. He wants to be on a first-name basis with the 25 to 50 top CEOs in this state. The purpose would be to identify issues, ask where a company is going strategically, ask about its long-term goals, and ask what the university needs to do. President Cross said that this would be his own action assignment.
2. He would ask each chancellor to meet with CEOs and business leaders in their communities to ask the same questions as above, and to identify their needs and build relationships.
3. He would ask each provost to explore how basic business and business-finance principles, such as how to read a financial statement, might be incorporated into nonbusiness majors. He stressed that he was not asking them to do it, but rather, to think about it.
4. He would ask chancellors, provosts and business officers to work to identify the barriers and challenges, mentioned by several presenters, which make it difficult for entrepreneurs and businesses to interface with the university. It should be easy; he suggested exploring and trying to find solutions.
5. UW staff currently working on D2P-type projects should evaluate and expand the research-to-commercialization process.
6. Curriculum analysis should be explored. Examples from the discussion were data mining, a collaborative graduate degree in data science or predictive analytics, and the development of sustainable soft materials. There are tremendous opportunities that need to be considered more carefully.
7. Meetings with the Wisconsin Technical College System should continue, to examine how to partner most effectively.

President Cross asked for feedback on these ideas.

Regent Bradley commented that underlying all of this is the issue of faculty compensation. “The troops,” not the generals and officers, are needed to deliver on the proposed ideas. President Cross acknowledged that this is fundamental principle.

Regent Vásquez, referring to collaboration with K-12, suggested keeping in mind the charter schools and the successful choice schools. It is important to reach out to these schools, as

well as public schools. They are producing some of the brightest, most well-educated children, including children coming from poverty and children of color. This definitely applies in Milwaukee.

Regent Mueller offered a comment on what she said was not discussed. She said that not much time had been spent focusing on areas of economic distress. The Legislative Audit Bureau did audits of what used to be a very fragmented economic development program. Very little of the money or attention was given to the areas of economic distress, including some small communities up north or inner cities. This needs additional attention, Regent Mueller suggested.

Regent Mueller said she also was struck by a comment about the value of positive public relations. Wonderful success stories had been discussed during the day, and advertising what is happening in economic development is a good thing and should be encouraged, she said.

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## **BOARD OF REGENTS ACADEMIC STAFF EXCELLENCE AWARDS**

President Falbo introduced the 2014 Academic Staff Excellence Awards as the next agenda topic. He said that there are more than 14,000 academic staff throughout the UW System, representing the university's largest sector of employees. He asked Regent Hribar, chair of the Academic Staff Excellence Awards Committee, to lead the awards presentation.

### ***Introduction***

Regent Hribar said that when something works consistently well, it is easy to take it for granted. This might be said of the hard-working UW System academic staff. Saying that the Board is determined not to take for granted the efforts of these staff, Regent Hribar said that she was honored to help recognize how important all academic staff are in meeting the educational mission. She said that chairing the selection committee was both gratifying and challenging because there are so many academic staff doing exemplary work. She expressed appreciation to her fellow selection committee members, Regents Higgins, Mueller and Petersen, for their insights and input.

### ***Bonnie Isaacson, UW-Eau Claire***

Regent Higgins introduced the year's first award winner, Bonnie Isaacson, the Nontraditional Student Coordinator at UW-Eau Claire. Regent Higgins said that Ms. Isaacson is very good at helping and advising nontraditional students, because she was one herself. She earned her associate's degree from UW-Barron County and, 14 years later, when she was married with four children, she enrolled at UW-Eau Claire to work on her bachelor's degree. She later received her master's degree from UW-Stout.

Ms. Isaacson understands the needs of nontraditional students, Regent Higgins said. Among her accomplishments, Ms. Isaacson: developed a separate orientation program to meet the needs of nontraditional students and collaborated with the campus library to create a separate

space for them to meet and study; used UW-Extension grants to support veterans and military families studying at UW-Eau Claire; and served on the UW System veteran's committee and created new support organizations, including a group for students with children.

Nontraditional students cite her ability to make them feel comfortable and her calm demeanor. Regent Higgins said that when the level of appreciation is so consistent, the academic staff member is doing an outstanding job, well-deserving of recognition. Regent Higgins presented the first 2014 individual Academic Staff Excellence Award to Ms. Isaacson, who received a standing ovation from all present.

Saying that she felt honored to receive the award, she expressed her thanks to Regent Higgins for the introduction, to the Board for sponsoring the award, and to the selection committee. She also expressed her thanks to UW-Eau Claire Chancellor Schmidt and Provost Kleine; to the cabinet for nominating her; to her boss, Debbie, and right-hand assistant, Kathy; and to the colleagues and friends who wrote recommendation letters. She thanked them for her support. She also thanked her husband for being with her at the awards ceremony.

Ms. Isaacson said that she would comment briefly on what it takes to be an outstanding academic staff member. She mentioned her wonderful parents, who instilled a strong work ethic in her; her journey as a nontraditional student; and the adult students that she had served over the years. She then referred to her friend and author, Joan Fleming, who writes about zestful living in her book, *Fuel Stop*, as well as about the 3 P's; purpose, passion and perseverance. She said that from her perspective, working with adult students and veteran students helps outstanding academic staff members find purpose in their work. They find passion in their work, knowing that they are making a difference in people's lives. They persevere when budgets are cut and they are asked to do more with less. They find ways to run their programs and support their students, helping them to find their own purpose and passion and to persevere to their graduation day.

Ms. Isaacson said that she would add 3 M's: mission, mentors, and meaning. Mission means keeping her eye focused on why the Office of Nontraditional Student Services exists at UW-Eau Claire; it is all about student success. She said she had learned from mentors along the way, and now she was guiding younger colleagues and other students. Her third "M" is meaning, finding joy in her work. Ms. Isaacson mentioned the life-changing experiences of several adult students who returned to school after lay-offs, military service, or severe health issues.

Ms. Isaacson said that whether P's or M's, she loves what she does, and this is a big part of being an outstanding academic staff member. She expressed her appreciation for the Regent Award, saying it was very humbling.

### ***Ronald Zimmerman, UW-Stevens Point***

Regent Petersen announced that the second individual award winner was Ron Zimmerman, who directs the Schmeckle Reserve at UW-Stevens Point. In his 35 years as Director, Mr. Zimmerman had grown the center from a two-person staff to a large, nationally-recognized environmental learning center with 65 staff and student interns. He developed the



reserve center into a world-class community nature center, making it the largest university-based environmental, interpretation, and education program in the nation. Under his leadership, the center has grown from 157 acres to 280 acres, and it welcomes more than 2,000 visitors a year.

Regent Petersen said that Mr. Zimmerman co-founded the environmental interpretive program at UW-Stevens Point and created the Interpretive Handbook Series now used by universities, parks, nature centers, zoos, aquariums, and many other organizations world-wide. He also established the unique Academic Environmental Interpretation program at the UW-Stevens Point's College of Natural Resources.

During Mr. Zimmerman's tenure, the center received millions of dollars in grants. He created the Wisconsin Conservation Hall of Fame, which includes Aldo Leopold, John Muir, and Charles Van Hise among the environmental giants whose roots are in Wisconsin. Regent Petersen quoted Christine Thomas, is Dean of the College of Natural Resources at UW-Stevens Point, who praised Mr. Zimmerman's ability to "establish local, state and national collaborative networks." Regent Petersen presented the second 2014 individual Academic Staff Excellence Award to Mr. Zimmerman, who received a standing ovation from all present.

Mr. Zimmerman said that he had thought about what to say, and then the previous day something happened that changed what he planned to say. He said that Mike, the man who co-founded a lot of the natural resources programs, came into his office; he retired 12 years earlier, but has continued working, although he is not paid much. He brings in a lot of consulting money to keep the place running. He was composing a letter, and he was in the middle of writing out a check. He had decided to donate to his alma mater in Iowa in memory of an older janitor who had comforted him when he was being treated for polio in Iowa City Children's Hospital as a young child of 3½ or 4 years. He was in a little crib on the floor, on a ward with older, noisy children; and the janitor took time every night to talk with him and comfort him. This was 68 years ago. Mr. Zimmerman said that Mike decided to take a significant amount of money (significant for someone who taught at the university all his life) and send it to the hospital, donated not in his own name, but in the name of Claude the janitor; Claude had gone above and beyond his job description to do something extra. Mr. Zimmerman said that there is a parallel to state employees, many of whom operate above their pay grade.

Mr. Zimmerman said that employees all want to be trusted and respected, to have a little bit of autonomy, and to have recognition that their job is important and is more than just a way of making a living. He said that it is important to make sure we empower all of our employees, although during tough economic times we often do the opposite, tightening the parameters for what employees are allowed to do. That is exactly the wrong thing, he said. Trust and respect are necessary to inspire growth and entrepreneurial behavior.

Mr. Zimmerman attributed his accomplishments to partnerships. He said he was allowed to go out and meet other people, to work within the community, to work with student groups, to find allies. He said that he was fortunate to operate under the supervision of people who encouraged him to go beyond the job description. He again stressed the importance of respect, trust, and empowerment.

Saying that the award was very humbling award, Mr. Zimmerman expressed thanks for the existence of the award and for the honor of receiving it.

### ***Registration and Records Office, UW-Stout***

Regent Mueller announced the Academic Staff Excellence Award for a program. This year's winner was the Registration and Records Office at UW-Stout. Regent Mueller said that over the past three years, the office had undergone a complete transformation to better respond to the changing needs of students, graduates and the public. The office earned two Models of Efficiency awards from *University Business Magazine* because it enhanced the level of services it provides.

In addition to the timely awarding of degrees, the Registration and Records Office capitalizes on performance excellence, innovation, and achievement to consistently further UW-Stout's mission. Initiatives include hiring a full-time military education benefits coordinator and improving services for veterans. One example of the new efficiency is a 75-percent reduction in the volume of in-person registration cards. Not long ago, UW-Stout's registration and records office provided consulting for a newly formed university in Azerbaijan as it implemented an integrated student information system modeled after the new system at UW-Stout.

Regent Mueller quoted Mary Hopkins-Best, Dean of the College of Education, Health, and Human Sciences, who praised Registration and Records' "customer service orientation, innovative approach to problem solving, and proactive anticipation of needed improvements." Regent Mueller presented the program award to Registrar Scott Correll, who was joined by his colleagues, Joshua Lind, Associate Registrar; Jennifer Swoboda, Assistant Registrar; and Lystra Yates, Business Automation Specialist. They all moved to the podium and were met with a standing ovation.

Mr. Correll expressed appreciation for the recognition. He also acknowledged Senior Associate Vice President Al Crist, who had hired him 21 years earlier, after graduation from the Indiana University System.

Mr. Correll said that he had been asked recently what type of leadership books he keeps his repertoire. Saying that he was not a fan of reading a book on how to be a manager or leader, Mr. Correll said that he had read and re-read *First, Break All the Rules* by Marcus Buckingham. The book is subtitled, "What the World's Greatest Managers Do Differently." The book talks about hiring for talent and training for skill.

Mr. Correll said that one of the things that he had been able to do over the past three years at UW-Stout, through a series of retirements and expansions, is to realign some of the job duties to best match the skill set of the individual doing the job. He said he had also been afforded the opportunity to hire "one of the greatest Associate Registrars known to man" in Josh Linde.

Expressing his thanks, Mr. Correll said that the award would not have been possible without the senior leadership at Stout, Provost Bessie and Chancellor Sorenson, as well as the

eight other team members in the office. He said that the \$5,000 award would allow him to continue training for skill and improving operational efficiency.

President Falbo thanked Regent Hribar and the committee members for selecting such a strong slate of award winners.

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## **BIENNIAL BUDGET DEVELOPMENT**

President Falbo, referring to President Cross's earlier statements about placing a high priority on making sure the UW's financial situation is clear and understandable, turned to Senior Vice President David Miller to introduce an aspect of 2015-17 biennial budget development.

### ***Financial Aid***

Mr. Miller said that the conversation would begin with financial aid because it is the bedrock of serving students. The first action the Board will take in the biennial budget cycle in June is to make a recommendation to the Higher Educational Aids Board on a request for financial aid for the Wisconsin Higher Education Grant, which is the staple of state funding for financial aid in Wisconsin. He said that Bob Jokisch of Academic and Student Affairs, Senior Special Assistant to Senior Vice President Nook, would lead the discussion.

Mr. Jokisch said that he would talk about the need for additional funding for the Wisconsin Higher Education Grant Program (WHEG). He said that he works on financial aid issues with a small group of UW System Administration staff, including Cody Loew in the Budget Office, Kevin Welch in the Office of Policy Analysis and Research, and Kris Frederick in Sr. Vice President Miller's office. He said that in addition to their other responsibilities, these staff work with the financial aid offices across the UW System which award financial aid and provide financial aid counseling and support to students to enable them to attend college. Mr. Jokisch said that he was also joined by Susan Fischer, Director of Financial Aid at UW-Madison, who would help to answer any questions.

The focus of the presentation would be on the Wisconsin Higher Education Grant-UW Program (WHEG-UW), which is a state need-based grant program that serves students in the University of Wisconsin System. WHEG-UW is located and managed in the Higher Educational Aids Board (HEAB). There are similar programs in HEAB serving students in the other sectors: Wisconsin Technical College System, Wisconsin Association of Independent Colleges and Universities (WAIC), and the Tribal Colleges.

### **Financial Aid Overview**

Mr. Jokisch started by providing a general overview of financial aid, how aid is awarded, and financial aid packages for students in the University of Wisconsin System. He said that the majority of student financial aid for Wisconsin resident undergraduates comes from the federal

level. This would include both grants and loans. A smaller portion of aid comes from state funding, notably programs such as WHEG, as well as state funding for the Wisconsin Covenant and the Academic Excellence Program. Institutional grants provide a smaller amount of financial aid, and other grants provided by private scholarships include the Wisconsin Covenant Foundation Grants from Great Lakes Higher Education Corporation, Fund for Wisconsin Scholars from the Morgridges, and other smaller private scholarships.

Referring to a slide showing the proportion of students receiving financial aid, Mr. Jokisch said that 78 percent of Wisconsin resident undergraduates receive financial aid. Loans represent 62 percent of financial aid, grants 37 percent, and work study 1 percent.

The two main need-based grant programs serving UW resident undergraduates are the Federal Pell Grant program and WHEG. Pell provides \$158.6 million in grants to almost 43,000 Wisconsin undergraduates. The average grant is about \$3,600, and grants range from \$555 to \$5,550. WHEG, in contrast, provides \$58.3 million to 31,767 UW resident undergraduates, with an average award of 1,837 and a range of \$764 to \$2,324. The reason for the difference in total funding for these two programs is that Pell provides larger grants, and Pell funds all eligible students.

The federal methodology is used for the state financial aid programs. FAFSA is the Free Application for Federal Student Aid, the standard process used to determine eligibility for federal financial aid programs. Most states and institutions, including Wisconsin and the UW System also use this information to determine eligibility. Students and families complete the form and submit it to the Federal Department of Education. Using the information from the FAFSA, such as income, assets, number of children and number of children in college, the student's expected family contribution (EFC) is calculated. The EFC is the amount that, according to the federal formula, the student is considered able to pay toward their college education in that year.

The EFC is subtracted from the cost of attendance to determine the student's financial need, which can be addressed with a variety of financial aid. The cost of attendance includes items such as tuition, fees, room, meals, books and other estimated costs associated with college.

### **Sample Financial Aid Packages**

To illustrate what a financial aid package might look like at a UW System institution, Mr. Jokisch provided an example for UW Eau Claire. At UW Eau Claire for 2013-14 the cost of attendance is \$18,980. Subtracting a student's EFC determines student need, which is the amount of aid for which a student is eligible. A zero-EFC student (representing a family of four with approximately \$37,000 in income) will receive the maximum Pell of \$5,645, the maximum WHEG of \$2,324, a Blugold (UW-Eau Claire) Grant, a Covenant amount (for students who applied), and a small federal Supplemental Educational Opportunity Grant (SEOG). Even with these grant programs and \$2,000 in work study, a zero-EFC student would be eligible for \$5,100 in loans to cover their need. Not all students take out these loans; some may decide to work more or find other resources to meet total need.

Mr. Jokisch next illustrated a financial aid package for a \$3,500-EFC student, roughly equivalent to a \$58,000 income for a family of four. A student would receive lower awards for

WHEG and Pell and be eligible for almost \$8,000 in loans. The WHEG plays an important role in student affordability.

Across the UW System, the number of students with need has been increasing. One measure of this need is the increasing number of students with debt. Mr. Jokisch showed a table illustrating that the percentage of graduates with debt increased from 63 percent of undergraduate resident degrees to 73 percent in the past ten years.

As the example aid packages illustrated, students with the most financial need are those with zero EFC. Mr. Jokisch pointed to a slide showing that the number of zero-EFC students has increased dramatically from 2001, from \$8,904 to \$22,836 in 2012-13. The biggest increase occurred from 2008-09 to 2012-13. However, the funding for WHEG has stayed flat, at 58.3 million for five years, including 2014-15.

### **WHEG Funding and Capacity**

Mr. Jokisch reiterated that the number of students with need has increased, particularly since 2008-09 when the impact of the recession affected students' EFCs. In 2009-10 the WHEG program faced a dramatic increase in the number of WHEG-eligible students and did not have enough funding to provide needed awards. As a result, there was a dramatic increase in the wait list, with more than 7,400 students unable to receive WHEG awards. To address this issue, the UW financial aid directors and the staff at UW System Administration looked at the WHEG formula, which is used to determine the amount of awards provided to students at various EFCs. (UWSA staff work with the financial aid directors to recommend a formula to the President, and the President's recommendation is then forwarded to the Higher Education Aids Board for approval.)

In 2010-11 the UW System recommended decreasing award amounts in order to provide more awards and address the wait list. WHEG awards decreased from \$2,980 in 2009-10 to \$2,324 in 2013-14, and the average WHEG decreased from \$2,161 to \$1,837 in 2012-13. Over the past four years, award amounts were decreased by 22 percent, and the number of awards was increased by more than 6,000. However, the UW is still faced with a waiting list of more than 5,000 students who are eligible for WHEG but unable to receive awards because of a lack of funds. Moreover, award amounts are now lower than they were in 2009-10; Mr. Jokisch said there was a desire to return to the 2009-10 award levels.

With respect to the effect of the WHEG awards on students, Mr. Jokisch illustrated with the UW-Eau Claire example; wait-listed WHEG-eligible students in this instance may need to fund \$2,300 a year in costs through some combination of work, loans or other resources. Another measure of the impact of WHEG awards is student retention; retention rates for WHEG recipients were 10 percent higher than for wait-listed students.

## **Alternatives for Consideration**

Mr. Jokisch described options to consider as the Regents make their recommendation to HEAB for WHEG funding for the 2015-17 biennial budget. He offered three options:

- Option 1 would eliminate the WHEG wait list, which was 5,096 in 2012-13. The annual cost of addressing the wait list is \$9.35 million annually, or \$18.7 million over the biennium.
- Option 2 would increase WHEG awards to 2009-10 levels. The average award would increase from \$1,837 to \$2,161, the average award in 2009-10. The annual cost would be \$10.3 million, or \$20.6 million over the biennium.
- Option 3 would both eliminate the WHEG wait list and increase awards to the 2009-10 level. The annual cost is \$21.3 million, or \$42.6 million over the biennium.

Asked for an opinion about whether Option 1 or Option 2 is more likely to produce graduates, Mr. Jokisch said that eliminating the wait list, Option 1, would be most likely to have an impact on retention and graduation. Option 3 both eliminates the wait list and brings awards up to 2009-10 levels.

Regent Walsh asked about the effect of the Wisconsin Covenant ending. Mr. Jokisch said the program would exist for another seven years; fall 2014 high school seniors are in the last cohort that is eligible for Covenant awards, and students are eligible for four years of Covenant over five years. Regent Walsh asked if the loss of the Covenant will worsen the financial aid picture, and Mr. Jokisch said that it would, because there are no plans to fill the gap.

In response to a question from Regent Whitburn about the potential complications of changes in Washington, Mr. Jokisch said that Pell funds may potentially be tied to institutional performance. Regent Whitburn commented that would take a federal law change, and Senior Vice President Miller said that this was true and that there had been little change in state policy in reaction to changes in federal funding. Regent Whitburn commented that the loss of federal dollars would have a massive impact on students' families. Mr. Miller indicated that, given historical trends, if there were a significant decrease in federal grants, it is unlikely that state funding would fill in the gap. Regent Whitburn observed that if the federal government changes the distribution formula, there will be winners and losers; it is important to pay attention to possible distribution-formula changes.

## ***Budget Process***

After responding to several detailed questions about the financial aid slides that were presented, Senior Vice President Miller spoke about the biennial budget process.

## **Changes in Financial Reporting**

Mr. Miller spoke about ways in which financial transparency in the UW System is being increased. Cash balances will be categorized according to the format of the LAB audit. Also, the Board's Business and Finance Committee will be provided with quarterly management

updates of performance compared to budget, revenue and expenses, actuals compared to budget, and year-end projections. An expanded report will be provided in April.

### **Annual vs. Biennial Budget Request**

Mr. Miller explained that, with respect to the annual budget, the Board will be asked to adopt an annual operating budget in June for FY 2015 that has revenue and expenses. The annual budget is based on FY 2014 actuals and projections, whereas the biennial budget for 2015-17 is not an operating budget and will be based entirely on estimates. By law, the biennial budget must be requested in September.

It is now required by law that the Board look at its prior year carry forward in setting tuition for the next fiscal year, Mr. Miller said. Since audited numbers are not available at that time, projections of the current fiscal year and actuals for the prior fiscal year, as well as enrollment projections, are also key to building the annual budget.

### **Categorization of Fund Balances**

Mr. Miller commented on carry-forward balances, indicating that the Legislative Audit Bureau identified several reporting categories: obligated, planned, designated, reserves, and undocumented funds. The Audit Bureau considered funds in the categories of tuition and fees, general operations, and federal indirect. (This does not include auxiliaries, which are separately reported to the legislature, or other program revenue, which includes thousands of business enterprises at UW institutions.) Categorized information will be available for each UW institution, along with an indication of those institutions that are below the 10-percent targeted minimum or above the 15-percent reporting threshold.

### **Issues to Address in Biennial Budget**

Turning to the biennial budget, Mr. Miller described several issues to be addressed in the biennial budget request:

- unfunded obligations and the UW structural deficit—costs for which no fixed revenue stream exists, including the base cut from the current biennium and compensation funds that need to be transferred from the state;
- fixed cost increases, commonly called cost-to-continue and debt service;
- budget-versus-actual and carry-forward balances;
- tuition policy;
- financial aid; and
- new initiatives that mesh with the state's priorities.

### **Discussion**

Mr. Miller responded to several questions from Regent Whitburn, seeking clarification of the budget process; Mr. Miller indicated that it is difficult to predict what to recommend for tuition in the biennial budget, and the tuition share has in the past been built on the amount of

state funding requested. President Falbo suggested that a two-year budget is possible, but would be based on a greater number of assumptions.

Regent Whitburn said that a critical component is the status of the carry forward. He asked whether a good projection would be available at the time of the next Board meeting. Mr. Miller responded that a predictive model was being prepared, based on the first three quarters, in consultation with the UW institutions. Mr. Miller also commented, with respect to the Board-adopted policy on balances, that the policy had not yet been formally considered by the legislature. However, UW System staff had a productive meeting with the co-chairs of the Audit Committee, their staff, and the Legislative Audit Bureau staff; a new draft was being developed.

In response to a question from Regent Walsh about unfunded prior-service liability and where this fits in the budget, Mr. Miller said that this was in the annual operating budget at a level of more than \$50 million per year. Regent Walsh commented that this amount had been increasing. Associate Vice President Freda Harris indicated that prior service is considered part of fringe benefit costs, and the state pays a portion, just as it pays for other fringe benefit costs; and part is paid by tuition.

President Cross, referring to the factors considered in preparing the annual budget, emphasized that the only input in the past was the past year's budget (in addition to enrollment projections). Projected actuals and projected carry forward are being added. This should provide a better picture of what the budget should look like. President Falbo added that the goal is to develop a budget that is more reflective of actual performance and projections that are more reflective of historic actuals.

Regent Mueller noted that two critical factors for the FY 2015 budget are known: the amount of general purpose revenue (GPR), since this was in the legislature's 2013-15 biennial budget, and the amount of tuition, because it was frozen. Enrollments are not known, but can be estimated. She concluded that many of the factors needed to develop a good estimate for FY 2014-15 are known.

Regent Higgins sought clarification of the university's new efforts to incorporate projections of actual spending into the budgeting process. He asked what the university gains by deciding to do this, independent of what the state requires. Regent Mueller indicated that all state agencies use actual spending, rather than prior-year budgets, as the basis for their budget requests. Regent Higgins then asked how it happened that the UW became the only state agency to not look at actual spending. President Falbo suggested that the new method would become routine for the university.

Mr. Miller indicated that if other state agencies are within budget, they have a carry forward and transfer it from June 30 to July 1, just as the university does; they go back to the legislature if they are beyond budget, for a supplement. Their fiscal year budget starts with their prior year budget amount, not their actual. Regent Mueller clarified that this was true in the case of continuing appropriations. In the case of an annual appropriation, which many are, then the funds lapse to the general fund at the end of the fiscal year.



President Cross remarked that much had been learned in the past year about the importance of understanding the actuals and the carry-forward balances. Mr. Miller commented that the university has a continuing appropriation so that it can carry forward funds, and it is important to not incentivize unnecessary end-of-fiscal-year spending.

President Falbo thanked the presenters.

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## **CLOSED SESSION**

President Falbo called upon Vice President Millner to read Resolution 10333, to move into closed session. The motion was seconded by Regent Behling and adopted on a roll-call vote, with Regents Behling, Drew, Evers, Falbo, Farrow, Higgins, Hribar, Landes, Manydeeds, Millner, Mueller, Petersen, Vásquez, Walsh and Whitburn voting in the affirmative. There were no dissenting votes and no abstentions.

### **Closed Session Resolution**

Resolution 10333      That the Board of Regents move into closed session: (1) to consider a UW-Parkside honorary degree nomination, as permitted by s. 19.85(1)(f), Wis. Stats.; (2) to consider a UW-Madison salary adjustment, as permitted by s. 19.85(1)(c), Wis. Stats.; (3) to consider an amended compensation agreement for the UW-Madison head football coach, as permitted by s. 19.85(1)(c) and (e), Wis. Stats.; (4) to consider amended employment agreements for two UW-Madison assistant football coaches, as permitted by s. 19.85(1)(c) and (e), Wis. Stats.; and (5) to confer with legal counsel regarding pending or potential litigation, as permitted by s. 19.85(1)(g), Wis. Stats.

The following resolutions were adopted during the closed session:

### **Approval of Salary: Dean of the School of Business, UW-Madison**

Resolution 10334      That, upon recommendation of the President of the University of Wisconsin System and the University of Wisconsin-Madison Chancellor, the annual salary of \$414,100 for François Ortalo-Magné, Dean of the School of Business, University of Wisconsin-Madison, be increased by 2% to an annual salary of \$422,382, effective March 1, 2014.

### **Referral of UW-Madison Coaches' Amended Compensation and Employment Agreements**

Resolution 10335      That the Board refer action on all three contracts to the Executive Committee, for a telephone meeting, to include the Athletic Director.

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The meeting was adjourned at 4:35 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