A MESSAGE FROM DR. WAYNE WEBER, BILSA DEAN

Front row (L-R): Robin White, Dr. Jodi McDermott, and Kathy Alcott; back row: Dr. Wayne Weber, and Les Hollingsworth

Again, I extend warm greetings from the College of BILSA. There has been much discussion about state budgets, so in this newsletter I would like to start by providing some brief insights from my perspective as Dean of the College of BILSA in the context of some of the exciting things happening in the college and university, including workforce development.

UW-Platteville and the College of BILSA has had substantial success including being major contributors to workforce development. The university has grown approximately 37 percent since 2004 making it the fastest growing university in the UW System, and the college has grown well over 40 percent during that same time frame. With this growth, the institution as a whole serves over 8,901 students from the tri-state region and beyond. This compelling growth is well demonstrated by the exciting move to four university commencements for the first time ever, two of those for the college; one for the School of Business on Friday, and one for the rest of BILSA Saturday morning (please refer to important dates in the sidebar).

These students have a major impact on workforce development in Wisconsin, the tri-state region, and beyond. This is well reflected by UW-Platteville being ranked number one for annual return on investment among public and private institutions in Wisconsin (College Salary Report by Payscale.com). In addition, the College of BILSA has a 92.3 percent new graduate employment rate exemplifying the cogent value employers place on our graduates.

Despite significant growth, obvious positive impact on workforce development, and noted success, UW-Platteville is facing challenging budget issues that may compromise our ability to address workforce needs. To put this in context, state support of UW-Platteville has dropped 60 percent since 2001–02 resulting in only 16 percent of the university’s total operating budget being state funded. Relatedly, UW-Platteville experienced a $3.4 million cut in 2013–15 and is facing a projected $5–$6 million budget shortfall due to the declining state support, a tuition freeze in 2013–15, and projected tuition freeze in 2015–17. Most recently is the governor’s proposal of an additional $300 million cut to the UW System to ameliorate the substantial budgetary structural deficit resulting from state tax cuts put in place around a year ago. This would equal an additional, approximately $10 million cut to UW-Platteville over the 2015–17 biennium. There is no question that this cut will have a substantial impact reducing our ability to meet workforce needs to our fullest potential.

I would also argue that these cuts are being done at a time when higher education is more valuable than ever. This is well exemplified by unemployment rates being two-and-a-half times lower for those who have a baccalaureate degree as compared to those who have no degree (3.5 percent versus 9 percent) and one-and-a-half times lower from those who have a high school diploma compared to those that have a high school diploma. This translates to a $22,516 annual earning difference. The median weekly salary for those who have not obtained a high school diploma is much lower.

However, a university education is about much more than the dogmatic pursuit of dollar signs. It is, instead, through the arts and sciences, about developing and empowering each individual as a whole so that we can all prosper as a global society while being responsible and caring for that "globe" that sustains us, and all life. For those of you reading this, you know the value of a UW-Platteville education, which is why you continue to be highly involved in our university.

In conclusion, these cuts are significant. At the same time, as a university, we are approaching these as strategically as possible, while also looking at other creative and entrepreneurial ways to generate revenue so that we can continue to provide an outstanding education at UW-Platteville. I leave you with a quote from one of my personal heroes.

"Education is the most powerful weapon which you can use to change the world." – Nelson Mandela

Let’s continue to work together to change the world.

Best wishes,

Wayne Weber
B.S., M.S., Ph.D.
Dean of the College of BILSA
RECLAMATION STUDENTS CONDUCT FRAC SAND MINING RESEARCH
Written by Ethan Giebel, University Information and Communications

Working with UW-Platteville students, Dr. Yari Johnson, left, has conducted initial research in the field of industrial sand (frac sand) mine reclamation. Johnson is the Program Coordinator of reclamation, environment, and conservation in the School of Agriculture. Students Amy Delyea-Petska and Samantha Alvarez were among the first to work on the project. Delyea-Petska first approached Johnson with the idea during an introductory reclamation course. Being from the Chippewa Valley area, she had previous interest in the frac sand boom in Wisconsin.

In recent years, industrial sand mining has expanded rapidly in western Wisconsin, driven largely by the use of sand in hydraulic fracturing for oil. In 2010, there were a dozen mines in Wisconsin. Today, that number has grown to over 144 proposed, permitted, and operational frac sand mines in the state. Research done by Johnson and his students focuses on how mining companies plan to reclaim a site after mining operations have completed.

“There is no available research on the reclamation of industrial sand mines,” said Johnson. “Under state law, there needs to be a plan for reclamation in place for when mining is complete. One of our first steps in understanding reclamation plans for these sites was to analyze plans available for current mines. Topsoil handling, revegetation techniques, reclamation success criteria and plans for post-mining use were some of the areas we focused our research on.”

Johnson and his students reviewed 38 individual plans for the implementation of best practices. Minimizing topsoil compaction, reducing erosion, and returning the land to a productive state are some of the areas they reviewed. They found that a majority of plans had erosion control measures and plans for revegetation.

“Moving forward, we see a need to incorporate an agricultural productivity index into the plans,” said Johnson. “If land is taken out of agriculture for mining purposes and returned to its original purpose with significantly lower productivity, we will face challenges.” Other recommendations after completing the initial study were to incorporate more trees into revegetating forested sites and minimizing topsoil stockpiling.

PLASTICS PROGRAM FURNISHED WITH NEW EQUIPMENT
Written by Carly Willman, University Information and Communications

The UW-Platteville Center for Plastics Processing Technology has received a new 3D printing machine that allows for inverse printing as well as an ASOMA X-ray machine that will add an estimated $50,000 in value to the plastics lab.

ASOMA X-ray is a specialized technology that has become popular not only as a research tool but also as a manufacturing tool to ensure the quality of plastics products. The Plastics Ingenuity Corporation provided the university with a permanent loan for the device to educate the students to the complex need of industry today. The Plastics Ingenuity Corporation has been the largest donor of instruments, machinery and materials to sustain the success of the program at UW-Platteville.

The 3D printer, donated by the Society of Plastic Engineers-Milwaukee Section, is capable of fabricating a three-dimensional model of design. With the duplication process in 3D printing, it is becoming a popular machine, but has serious limitations, because as of right now only plastic can be used.

The new 3D printer also has a capability known as inverse 3D printing. “The idea behind the inverse 3D printing machine is what if we use the proper material to remove what we’d like to remove from a single part, rather than coming and building something,” said Dr. Majid Tabrizi, industrial studies Professor. The new inverse 3D printing mechanism brings forth something innovative.

“In the case of 3D printing, the only thing you wouldn’t be able to use is wood because it doesn’t melt, but when it comes to inverse 3D printing, you can use wood because you can just cut out whatever you don’t like,” said Tabrizi.

UW-Platteville students are offering services to industries as well as welcoming them to utilize the machine, and some companies have sent dysfunctional parts to the plastics students to see if they can create something that works. “I truly feel that the responsibilities of educational institutions have changed,” said Tabrizi. “It has changed from dissemination of knowledge to acquiring the sense of invention and innovation.”

One innovation the UW-Platteville plastics students are working on is determining whether they can change plastic material from thermoplastic—a plastic material that can be heated and molded into something else—to thermoset, a material that strengthens when heated and cannot be molded. “What we are trying to do is to educate students is we’re trying to see if we can produce something that is going to be the technology of tomorrow rather than the technology of yesterday,” said Tabrizi.

Some of the capabilities acquired in the UW-Platteville plastics lab are some of the few in the nation and the only ones in the UW System. In 2004, the Society of Plastic Engineers selected the UW-Platteville plastics program as one of the two best programs in the nation, with Penn State University being the other.

“We are very proud of what we’re doing and where we’re going,” said Tabrizi. “We always try to look at what industries will require of successful engineers for today and tomorrow.”
Animal science major steps outside of dairy comfort zone

Written by Carly Willman, University Information and Communications

Nicole Wallenhorst, a senior animal science major with a dairy emphasis at UW-Platteville from Cuba City, Wisconsin, spent her winter break as an intern at the Forest Animal Rescue wild animal sanctuary in Silver Springs, Florida.

Wallenhorst found the internship online and knew it would be the perfect fit. "I've always had an interest in wildlife, so I decided to check out the University of Vermont's list of internships and I spotted this one, applied and was accepted," said Wallenhorst. About halfway through her time at the sanctuary, Wallenhorst was joined by two other interns, one from UW-Stevens Point and the other from Yorkshire, England.

Throughout her time at the sanctuary, Wallenhorst shadowed employees, learned diet preparations for the primates and carnivores, cleaned the animal pens, and took part in the construction phase of building new pens for the animals. "It wasn't what I expected, but it was neat to see how much work actually goes into a wild animal sanctuary," said Wallenhorst. "I am now more appreciative of people who work at sanctuaries."

Founded in 1998, Forest Animal Rescue, a nonprofit facility, takes in wild animals from zoos that are being shut down or from people who tried to keep them as pets and mistreated them. Being a non-release facility, once the animals have arrived at the sanctuary, they stay there for the rest of their lives. Forest Animal Rescue is also a non-contact facility, meaning no employee is ever in a cage or comes in close contact with a wild animal.

Growing up on a dairy farm, Wallenhorst has always had a love for animals, so taking the internship was a no-brainer. "Being around animals is very important to me, and I feel like now is the time to step outside my comfort zone and experience things like this," she said. "I usually just go to class and study dairy so it was cool to see and learn about something different."

Wallenhorst says she learned things from the internship that relate back to her UW-Platteville education. "A lot of the nutrition aspect from the sanctuary relates back to dairy nutrition," she said. "Now I can make the connection in class and see the similarities and differences in each animal's diet."

After experiencing life at a wild animal sanctuary, Wallenhorst says she is more well rounded. "I think it's important to go outside your comfort zone and especially for agriculture students, to learn about other animals," she said. "You never know where you're going to end up in life, so this was an opportunity for me to grow and be better experienced for the future."

School of Business rolls out marketing minor

Written by Ethan Giebel, University Information and Communications

UW-Platteville students of all majors can now take advantage of a new marketing minor offered through the School of Business.

Now live for students to enroll, the minor features a set of courses that have been repackaged to accommodate students of varied degree areas. Based upon their major, students enrolling in the all-new marketing minor will complete a 24-credit course of study. A variety of courses will be offered in the areas of marketing strategy, art, and design.

"On campus, we were seeing a need from students who were not enrolled in the School of Business to receive structured instruction in the area of marketing," said Les Hollingsworth, Assistant Professor of business and Assistant Dean of Faculty and Staff Services in the College of Business, Industry, Life Science and Agriculture. "The minor complements any major on campus and focuses on the primary tools and functions for promoting a product, service, or idea. Marketing has become extremely important in today's world. Having a robust understanding of marketing is important regardless of the area you work in."

A marketing emphasis already existed within the School of Business. The new marketing minors will serve business students in addition to non-business students. "We foresee this minor having a large appeal with engineering majors who may need to understand the marketing side of product management," said Hollingsworth. "I would consider that a big win for students who are seeking out opportunities to diversify their degree. Students should walk away with a better understanding of customers, which is beneficial in any career."

Moving forward, faculty will be tasked with forecasting demand for the program and strategically offering classes at the best interest of students.
**Changes for Media Studies**

We will be implementing some administrative changes with the department of media studies by merging the department with the School of Business. This change will likely become effective this summer. We WILL still be offering a major in media studies. Students in media studies will be able to finish their majors. Media studies will continue to accept new students into the major, and any student who declares the major will have the opportunity to finish the program.

Why the change? Media studies began the fall semester with seven full-time instructional personnel and one instructor at a 60 percent load, plus a full-time program assistant. Our dear friend and colleague Dan Banda passed away, which put the department at six full-time instructors. Faculty members B.J. Reed and Arthur Ranney are retiring after this spring. The academic department associate, Becky Troy, may retire this year as well. With the numerous budget cuts from the state, it was decided that the vacant positions would not be filled. To assist with the administrative duties of the department, it was decided that a merger with the School of Business would be the most viable, least disruptive model to select to ensure media studies could continue despite the cuts.

In the words of Ranney, “There will be changes, no doubt, but with every change comes an opportunity. I see a field of opportunities.”

**Biology News**

The department of biology is excited to announce the naming of our cadaver lab in honor of Dr. A. Keith Brewer. Brewer had a lifelong desire to understand the processes occurring in the living cell. The development of his theory of the High pH Cancer Therapy with Cesium grew out of his understanding of the physics of the cell membrane. Brewer funded animal research of this theory under the direction of Dr. Marilyn Tufte, Ph.D. at the University of Wisconsin-Platteville.

Brewer was born in Richland Center, Wisconsin, on Oct. 20, 1893. He graduated from Platteville Normal School in 1913, and the University of Wisconsin-Madison in 1915, then completed his master's at UW-Madison in chemistry and physics. In a career spanning more than 44 years, including 22 years as the chief scientist in Naval Operations, Brewer amassed more than 20 patents and was awarded the Navy Department’s Distinguished Civilian Award, Alumnus Award from UW-Platteville, and State Legislature Award from the state of Wisconsin.

It is through his generosity, the UW-Platteville Biology Department, both students and staff, are supported in their research and studies.

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**BILSA Golf Outing**

We need your help! Did you know that 2014–15 tuition and fees (without room and board) was $7,491 for an in-state student? Please help support scholarships to aid our students in the College of Business, Industry, Life Science and Agriculture by sponsoring a hole and/or golfing in our 10th annual College of BILSA Alumni Golf Outing.

Details: Friday, May 29, 2015 at the Platteville Golf and Country Club; nine or 18 hole; four person best shot event; tee-off at 9 a.m. for 18 holes and 11 a.m. for nine holes; lunch to follow; more details can be found at www.uwplatt.edu/alumni-events/bilsa-golf-outing

**UW-Platteville BILSA Alumni Golf Outing Sponsor Registration Form** – Friday, May 29, 2015

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