

UW & SCIENCE & HEALTH NEWS

WINTER 2021-22 VOL. 18, NO. 1



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Sharing a science passion



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COLLEGE OF SCIENCE AND HEALTH
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CLASS NOTES POLICY

Update your address and provide a class note for the Lantern at uwlalumni.org.

ON THE COVER: Graduate student Vanessa Czeszynski loves the opportunity to do research in nearby streams. She is one of many young women studying Science, Technology, Engineering and Mathematics (STEM) on campus.

WOMEN IN SCIENCE

Sharing a science passion

A group of four women, all wearing waders, are engaged in field research in a stream. One woman is kneeling in the water, using a blue handheld device. The other three are standing on the bank, looking at notes and equipment. The background shows a grassy field and a forested hillside under a clear sky.

Graduate student Vanessa Czeszynski, kneeling, loves the opportunity to do research in nearby Coon Creek, southeast of La Crosse. Czeszynski, one of many young women studying Science, Technology, Engineering and Mathematics (STEM), says she not only represents women in STEM, but also UWL.

Continued on next page

Vanessa Czeszynski has always been curious. She wants to not only learn how things work, but also why they work.

As an undergraduate at UWL, Czeszynski loved taking environmental courses, but it wasn't until a class in limnology — the study of biological, chemical and physical features of freshwater bodies — that her career came into focus. She says it was a class trip to the University of Notre Dame's Environmental Research Center on the state line of Wisconsin's Vilas County and Michigan's Gogebic County that helped her realize her future.

"Limnological fieldwork fulfilled that curiosity to answer the big questions in the world, while still enjoying the outdoors," she explains. "There are always questions to be asked and researched in ecology, so I knew that this was a sustainable career that would leave no time for boredom."

That unique trip — the only UW System course that uses the state-of-the-art facility because of its class size — allows UWL students to sample ecologically famous lakes, taking water from various depths. They gain experience using various equipment to sample water and perform initial water quality assessments.

The students then bring samples back to campus for further analyses. In addition to the weekend field trip, the limnology students also visit local streams to learn more about ecosystems in UWL's backyard.

"This course gives students confidence in methods related to fieldwork and lab analyses used in aquatic fields, while

being able to also have fun in the beautiful outdoors," notes Czeszynski.

The 2020 bachelor's graduate in aquatic science with a minor in chemistry should know. Now as a master's student in aquatic science, Czeszynski is a teaching assistant (TA) while conducting her own research on how carbon content impacts the microbial community in Wisconsin's Northwoods lakes and streams.



Students in the fall limnology class headed to the Coon Creek to gather samples of the freshwater stream. The students include, from left, Signe Aspengren, Tessa Slaby and Abby Kroll.

"Changes in the microbial community could have effects on food web, eventually impacting outdoor recreation, like angling, and the economies that rely on it," she explains.

Czeszynski says her project requires long days of fieldwork collecting and extended nights in the laboratory performing analyses.

"It is definitely worth all the hard work," she says. "My research is my passion, and I am incredibly happy to have this opportunity."

Czeszynski says it's key to have mentors like Biology Professor Eric Strauss and CSH Associate Dean Roger Haro who value and support her experiences as a woman in STEM (Science, Technology, Engineering and Mathematics.)

The McNair Scholars post-baccalaureate achievement program for low-income, first-generation college students and traditionally underrepresented groups helped Czeszynski set the stage for success.

"The McNair program gave me a sense of community on campus," she explains. "I was surrounded by students from similar backgrounds that were like-minded and passionate about their futures. It was immensely helpful having a peer support system to go through the intimidating process of preparing for graduate school and to celebrate these great achievements with."

Czeszynski knows it's important to share her passion for science as a mentor and positive leader.

"As a graduate student TA, I help break down barriers between students and instructors," she says. "Being approachable and enthusiastic about class gets students engaged and excited to learn. I hope to pursue similar teaching or mentoring opportunities in my final year of graduate school."

Along with her teaching role, Czeszynski is a water quality intern with a government



Tara Metzger, one of the students in the limnology class, shows a water sample collected.

environmental agency, as well as a Society for Freshwater Science mentor and fellow. Both propel her to lead by example through a positive work environment and strong work ethic.

“I am not only representing women in STEM, but also UWL,” Czeszynski notes. “I will never stop seeking opportunities to show representation of women in STEM and to be a leader in every way that I can to empower younger women in STEM that may look to me as a role model.”

Czeszynski hopes to follow her passion for research and teaching by pursuing a doctorate focusing on water quality and chemistry in lakes and streams.

“I believe that being a professor would lead to incredibly rewarding mentoring opportunities, especially for young women in STEM,” she says.



Faculty leaders in CSH's first Women in STEM Living Learning Community led a walk through the La Crosse River Marsh. They're pictured here with some of their children who also took part in the outing.

Continued on next page

Women in STEM Living Learning Community launched

The path for women interested in STEM at UWL just got smoother.

The first Women in STEM Living Learning Community cohort arrived in fall 2021. Fourteen women live together in Hutchinson Hall with declared majors in biology, biochemistry, chemistry, computer science, mathematics and physics. Their resident assistant is biology major Emmery Wilson.

Twelve of the students, along with 13 who aren't in the learning community, are taking a new First Year Seminar (FYS100) course taught by Anne Galbraith (Biology), "STEM Strong: Why Women Matter."

In addition to topics such as the strategic abolition of women practicing medicine in

the early 1900s, students learn about dozens of female scientists and mathematicians — from Jocelyn Bell, who discovered pulsars, to Katalin Kariko who did the foundational work for the COVID-19 mRNA vaccines.

Students also participate in social activities. A "STEM scavenger hunt" was the focus of the September Kick-Off event, followed by a marsh hike, and conversations with successful current or recently graduated female STEM majors. Future activities include a movie night, conversations with female STEM faculty, and a celebratory wrap-up at year's end.

The Women in STEM LLC was the brainchild of CSH Dean Mark Sandheinrich and Victoria Carlson of the Residence Life Office.

"Historically and to society's great detriment, women were discouraged from pursuing careers in mathematics, sciences and engineering," notes Sandheinrich.

"The Women in STEM LLC is meant to foster a supportive environment for students to develop personally and professionally in preparation for life-long careers in STEM."

A steering committee consisting of Carlson, Galbraith, Whitney George, Mathematics & Statistics; Jenny Klein, Biology; and Kim Radtke, Exercise & Sport Science; spent the 2020-21 academic year planning for the first cohort. The current steering committee meets monthly and includes Hall Director Doralynn Mellinger, Galbraith, George, Klein and Radtke.

The plan is to have a new Women in STEM LLC cohort each September.



Article by Associate Professor Anne Galbraith, Biology



Students in the first Women in STEM Living Learning Community cohort periodically meet to discuss issues. The cohort includes 14 women who live in Hutchinson Hall with declared majors in biology, biochemistry, chemistry, computer science, mathematics and physics.



A five-student team of UWL biology majors led by graduate student Kristina Morben were joined by South Dakota biologists to search state river waters for two elusive fish.

BIOLOGICAL BONDS

Students hunt at-risk fish in the Black Hills, building connections

Graduate student Kristina Morben spent last summer searching for two 'lost' fish in the Black Hills of South Dakota.

The graduate student in biology-aquatic science is trying to better understand the distributions and habitat needs of two elusive stream fish: Longnose Sucker (*Catostomus catostomus*) and Lake Chub (*Couesius plumbeus*).

Morben led a team of three undergraduate students from the Biology Department: biology majors Joe Mickelson and Katie Klak (Biology), and biology aquatic science major Zach Hanson. They spent three months sampling more than 60 stream segments the fish historically inhabited.

The UWL team worked alongside biologists from the South Dakota Game, Fish and Parks agency to 'electrofishing' these

streams and describe the habitats the fish rely on.

That's right — they used low-voltage, direct-current electricity to temporarily immobilize the fish and capture them. Eventually, they caught 139 Longnose Sucker and 252 Lake Chub.

The capture of that many Lake Chub was a milestone in its own. That's more Lake Chub than the total number caught in the state since they were first encountered in 1893.

The UWL biologists also found five populations of these species previously unknown in South Dakota.

The newly discovered populations of Lake Chub and Longnose Sucker were not the only excitement of the summer. The students also encountered a lot of wildlife,

including six snake species, several big-game animals, and many unfamiliar western birds.

During their free time, they enjoyed outdoor recreational activities unique to the Black Hills and even visited national parks.

Collaborations with South Dakota Game, Fish, and Parks biologists provided the students a unique opportunity to learn new field techniques, create professional relationships, and discover a different part of the country.



Article by Assistant Professor David Schumann, Biology

DEAN'S DISTINGUISHED FELLOWSHIP PROGRAM OUTCOMES

356 unique students have been awarded 365 Dean's Distinguished Fellowship (DDF) grants since 1999.

Student Demographics

Gender

Male 51.3%
Female 48.7%

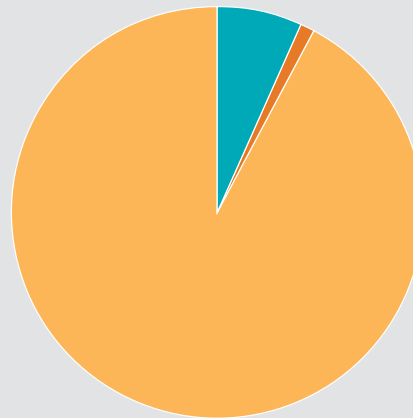
Pell Eligible 13.2%

Race/Ethnicity

International 2.7%
Student of Color 3.4%
White 93.5%

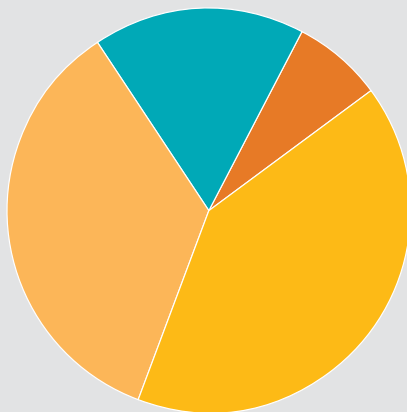
Outcomes

Of the 356 student, receiving a fellowship



- Earned an undergraduate degree from UWL
- Undergraduates still enrolled at UWL
- Unidentified or earned degree elsewhere

206 Additional Degrees Attained



- Additional Baccalaureates
- UWL Graduate degrees
- Master degrees from other institutions
- MD or Ph.D. degrees from other institutions

84 Doctorate Degrees

Degree	Count
Ph.D.	46
MD	17
DO	7
Dentistry	4
DVM	4
Pharm. D	3
DPM	2
DPT	1

Most Common Institutions Awarding Degrees

Institution	Degree Earned
University of Wisconsin-Madison	36
University of Iowa	7
University of Arizona	7
Des Moines University	6
University of Minnesota-Twin Cities	6
Rosalind Franklin University of Medicine & Science	4
Duke University	4
University of Rochester	4

POND PROBING

Students get hands-on research

Research opportunities for students in Geography and Earth Science include the analysis of lake sediment cores in the department's Paleoenvironmental Lab in the Prairie Springs Science Center.

This high-impact educational practice is available to students through independent undergraduate research credit, grant-driven research experiences, or course-embedded research opportunities. Working with Professor Joan Bunbury, students develop records of past environmental change through the geochemical analysis of sediment cores collected from a lake in southeastern Wisconsin.

In spring 2017, Bunbury developed the Past Environmental Change course

(GEO/ESC 425/525) specifically to provide students with hands-on research experiences. A subsequent offering in spring 2020 drew students from other disciplines including archaeology and biology.

As part of the course, students work in teams to develop a research question, generate data, write-up results, and present findings at UWL's annual Celebration of Research and Creativity.

The records that students develop contribute to two different studies. One is focused on the impact of climate change on the settlement, occupation, and abandonment of the ancient village of Aztalan in southeastern Wisconsin.

The other investigates periods of floods and droughts in the upper Midwest during the past 12,000 years.

Student-generated data will ultimately form part of peer-reviewed manuscripts — something that excites students about the course.

The research opportunities align with the pillar of UWL's Strategic Plan focused on Advancing Transformational Education.



Article by Associate Professor Joan Bunbury, Geography and Earth Science

Students in Geography and Earth Science get hands-on research experience while analyzing lake sediment. The students, pictured here in pre-pandemic March 2020, work in the department's Paleoenvironmental Lab in the Prairie Springs Science Center.



Helping **HERself**

ALUMS OFFER ADVICE,
HELP FOR WOMEN



Amy Kiefer, '10, left, and Abby Green, '08, have started numerous initiatives to help women through the challenging changes of pregnancy, motherhood and more. One is the HERself podcast.

in communications; Kiefer, an exercise and sport science major with an emphasis in fitness. They launched their podcast in January 2020, two months before the world shut down. While the pandemic changed some podcast routines, they got back on track.

Kiefer helped build their podcast community through her blog and Instagram. Many followers share HERself on social media. The result: HERself grew quickly and has steady growth, crossing the threshold of 1 million downloads in summer 2021.

The pair, who live with their families in Waunakee, have growing Instagram accounts to expand details from their podcasts. They've also created HERself Patreon, a private group for a book club, exclusive episodes and coaching.

In September, they launched the podcast, Pursuing HER Purpose, which aims to help women shine at work and motherhood.

Kiefer and Green plan to continue working to offer sound advice for busy women.

When UWL alums Abby Green, '08, and Amy Kiefer, '10, had children, they would have loved to have easy access to more information about the changes they were experiencing. Now, they're helping other women facing that experience.

The two have started initiatives to help women through the changes of pregnancy, motherhood and more. One is the HERself podcast.

"There was a void in the podcast industry of real conversations on becoming a better mother, partner, individual and shining in the titles we each own," explains Green.

"We knew between each of our experiences and bringing on experts and guests, we could help many women feel their best."

Green says many lose their identity when becoming mothers. HERself gives them get a step ahead.

"We all know there will be shifts, but losing sight of who each of us uniquely is, that is something we want to prevent," Green notes. "This podcast provides solidarity when you need support and guidance when you're looking to grow."

Green and Kiefer met at UWL. Green was a community health major minoring

Connect with them

Find Abby Green and Amy Kiefer on Instagram:

@ameskiefier

@abbyrosegreen

@herselfpodcast

A NEW CHAPTER

LESHER IS MCNAIR PROGRAM'S DIRECTOR

As a mentor for UWL's McNair Scholars Program, Shelly Leshar has helped underserved and underrepresented students realize their potential in graduate school and beyond.

Now, Leshar has taken her efforts to the next level. She succeeded Roger Haro as the program's director in September.

"I'm honored to be filling these gigantic shoes Roger has left, and I hope to do the program proud by continuing the success Roger started," says Physics Department Chair Leshar, who runs nuclear science research on campus. "Seeing the potential and possibilities in students is so rewarding. As director, I'll get to see that in students from not just nuclear science, but from all over campus."

The McNair program — named for African American scientist Ronald McNair, who was killed in the 1986 Space Shuttle Challenger disaster — provides eligible students with academic, personal and financial support as they prepare for graduate school. McNair Scholars must be low-income, first-generation college students and/or members of a traditionally underrepresented group in graduate education.

The program introduces students to research and scholarly activity. Open to all majors, it is funded by the U.S. Department of Education, CSH and UWL.

Leshar says it is particularly impactful for first-generation students and those from diverse backgrounds, who often face challenges adjusting to college. The program

also helps scholars with graduate school applications, college visits, preparing and paying for the GRE, and more.

One scholar is Xavier James, '19, who earned his bachelor's degree in physics. James is now in his third year in the nuclear physics doctorate program at the University of North Carolina at Chapel Hill.

He says Leshar was impactful not just because of her extensive professional experience, but also because of her ability to connect with students.

"Being such an amazing human, Shelly always made sure that everyone's voice was heard and always was in your corner whenever you needed help," James says. "Working with Shelly never felt like work — it was always a fun experience."



Shelly Leshar, left, works with McNair Scholar Hannah Bechtel, a physics major. Leshar, chair of UWL's Physics Department, replaced Roger Haro as director of UWL's McNair Scholars Program. The program helps students from first-generation and diverse backgrounds prepare for grad school.

'GREATER



Cassidy Ehmcke gives blood at the Red Cross in La Crosse as part of the "Greater Good Project."

GOOD'

Biology classes include community service

They're doing everything from giving blood to helping elementary students with virtual learning.

Students in Associate Professor of Biology Christine Schwartz's sections of Human Anatomy and Physiology II (BIO 313) participate in the "Greater Good Project." It's a service-learning project designed to get students helping in the community and reflecting on what they learned about the human body at the same time.

Students can pick any service activity, which has included blood donations, park cleanups, educational articles, and everything in between. Students document

their service by taking a picture and reflect on how their service effort relates to something that they learned in anatomy and physiology, either in BIO 313 or the prerequisite, BIO 312.

Schwartz started the project in spring 2020 — the perfect semester for it. COVID-19 began disrupting every aspect of life, but BIO 313 students found creative and wonderful ways to complete the project that spring — and have every semester since.

"As a class, we have donated over 40 pints of blood in just three semesters, particularly during the pandemic when there was a great need," says Schwartz.

Every semester, students have been working at food banks, assisting at the

Upper right: Abby Ambrosius, left, and Addy Bengston, participate in the Myrick Park cleanup.

Lower left: From left, Lindsey Brown, Katie Hall and Morgan Harrison serve meals at the Salvation Army in La Crosse.

Lower right: Jacob Niebuhr works with Livestrong at the YMCA in La Crosse.

Salvation Army shelter, and visiting the elderly throughout La Crosse. Students are also sewing masks, making blankets, administering vaccines, and helping grade school students with virtual learning.

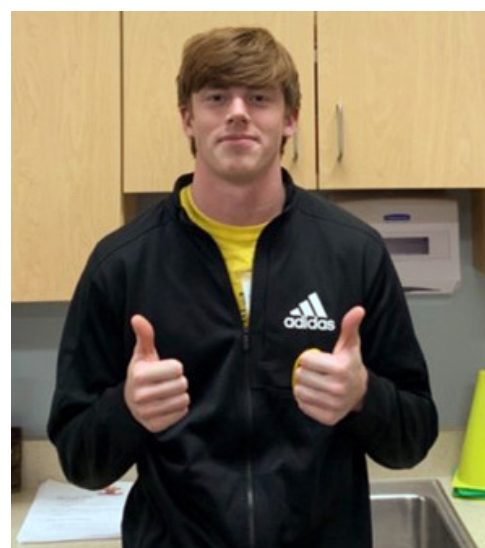
Schwartz says serving the community is an important part of education and being part of a community of people.

“My focus has been to try to provide that experience to the students that take BIO 313,” she says. “I hope that many will continue to seek out service opportunities as they graduate and move on.”

Schwartz is incredibly proud of the efforts of her classes and looks forward to what future semesters will bring.



Article by Associate Professor Christine Schwartz, Biology





A STAR participant takes part in sled hockey at the Green Island Ice Arena in La Crosse. Therapeutic recreation students worked with participants to administer assessments.

ATHLETIC ASSESSMENT

DEPARTMENT GROWS PARTNERSHIP WITH STAR CENTER

Therapeutic recreation students got hands-on experience in assessment while helping La Crosse area individuals with disabilities and impairments.

During the fall semester, therapeutic recreation students partnered with the STAR Center to apply learning from RTH 476: Assessment and Treatment Planning with the Coulee Region Sled Hockey Team.

The students collected data for the sled hockey team to demonstrate the benefits of participating in adaptive sport. Simultaneously, the UWL students got an opportunity to engage clients in the assessment process.

Experiential and community engaged learning are hallmarks of the curriculum within the Department of Recreation Management and

Therapeutic Recreation, says Assistant Professor Thomas Means, '15. Student learning began in the classroom when Means challenged students to locate assessments to measure the effects of participation.

After researching the program and possible measurement tools, the students identified five assessments: demographics; general self-efficacy

(GSE); pain scale; hand grip strength assessment; and a strengths-based questionnaire.

The strengths-based questionnaire included items such as: “How do you feel about sled hockey?” and “Can you think of a time when you were really proud of something you accomplished?” Students then developed protocols to administer each assessment.

During two separate assessment clinics, students attended sled hockey practice at the Green Island Ice Arena in La Crosse. They worked in teams to administer the pre-assessments with the athletes. At the end of the semester, the students will return to provide post-assessments.

The learning experience allowed students to administer a variety of assessments that required different clinical skills, says Means. Among the skills they gained: interviewing (strengths-

based questionnaire and GSE) and technical tool administration (using a hydraulic hand dynamometer for grip strength), in addition to protocol development and data evaluation.

In the future, Means says the assessment clinics will continue the partnership. He says the arrangement will further the mission of the STAR Center to promote and encourage routine physical activity for individuals with disabilities and impairments as a means of preventative health and wellness.



Article by Assistant Professor Thomas Means, Recreation Management and Therapeutic Recreation



Therapeutic recreation students attended sled hockey practice at the Green Island Ice Arena in La Crosse to administer pre-assessments with the athletes.



Therapeutic recreation students partnered with La Crosse's STAR Center to apply classroom learning by holding assessments with the Coulee Region Sled Hockey Team. During two separate assessment clinics, students attended sled hockey practice at the Green Island Ice Arena in La Crosse.

The La Crosse Exercise and Health Program (LEHP) is celebrating its 50th anniversary.

The program was founded in 1971 as a joint effort between UWL and the La Crosse County Medical Society. Representatives from both felt that with their combined expertise, a medically oriented exercise program could be developed to benefit area cardiac patients.

The first exercise session took place June 6, 1971, with six patients and three attending physicians. Since, it has expanded to include participants with other medical issues, as well as those with no known health concerns. The program has grown, primarily by word of mouth, to include approximately 125 active participants.

Early birds can exercise at the Mitchell Pool from 5-7 a.m. weekdays, or in Mitchell 101 from 5-7 a.m. Mondays, Wednesdays and Fridays. Most participants enjoy the group led exercise classes or walking on the indoor track at the Recreational Eagle Center from 8:30 to 11 a.m. Mondays, Wednesdays and Fridays.

The LEHP is unique — it is run by an executive director, Kim Radtke, and 14-15 graduate students who are earning a master's degree in clinical exercise physiology.

Most of these students plan on working in cardiopulmonary rehabilitation upon graduation. A small percentage of these students will pursue advanced degrees including medical school or a doctoral degree.

Program details

Participants must be at least 18 years old to participate. People can enroll at any time. The cost is \$45 per month, with discounted rates of \$230 for a six-month membership and \$385 for an annual membership. A spousal discount of 50% is available. Current and retired UWL employees also receive a 20 percent discount.

For more information, contact the La Crosse Exercise and Health Program at 608.785.8683 or visit:



Visit our website.

**50 AND STILL
GOING
STRONG**



Participants in the La Crosse Exercise and Health Program stretch and warm up with graduate students in Mitchell Hall. The program is celebrating its 50th anniversary.

CSH Student Andrew Ericson on the roof of the Recreational Eagle Center showing off campus sustainability efforts. Solar panels were added to the REC in 2016 when the two-story addition on the southwest corner was constructed. The 1,875 square foot system can reduce greenhouse gas emissions up to 40,000 pounds of carbon dioxide per year, equivalent to annually saving 2,035 gallons of gasoline or recycling 13,000 pounds of trash.



‘Let’s do more’

Andrew Ericson’s passion for environmental sustainability is turning heads

became aware of Andrew Ericson after a period of silence during the initial meeting of the UW-La Crosse Joint Committee on Environmental Sustainability (JCES) in September 2020.

The silence was broken when Ericson voiced his willingness to chair the committee. I thought to myself, “A student chairing this committee, who is this guy?”

Having served on JCES during the prior year, Andrew Ericson jumped at the opportunity to get more involved.

“I say yes to a lot of things and, therefore, I have a lot of things on my plate,” explains Ericson.

He was eventually joined by Emily Roraff of the UWL Budget Office as co-chair, which has been the arrangement in JCES for the past two years. JCES includes students, faculty and staff, working under the direction of Chancellor Joe Gow, in support of UWL’s environmental sustainability efforts.

Ericson’s growth as a student and environmental activist is the type of story any university would be proud to highlight. In addition to co-chairing JCES, Ericson’s list of contributions includes, Green Fund Coordinator, Student Senate, College of Science and Health (CSH) Strategic Planning Advisory Committee, Prairie Springs II Legislative Presentation Team, and CSH Dean’s Search and Screen Committee. He also captains the UWL Ultimate Frisbee Club Team.

Don’t be concerned about the impact of these activities on his academic work. Ericson is on track to graduate in May 2022, with a chemistry: environmental concentration major and mathematics minor—with honors.

The opportunities to learn about and promote environmental sustainability at UWL is what’s most meaningful for Ericson. His leadership with the Green Fund and JCES makes him well-informed about campus environmental sustainability, explaining, in part, his expanding service opportunities.

Ericson affirms what has been accomplished by campus environmental sustainability efforts and is excited about doing more.

“Kudos to Dr. Bob Hetzel, Dan Sweetman, and the whole team in Facilities for all they’ve done,” he says. “But, there’s more to be done and that really energizes me. Let’s do more.”

Hetzel is vice chancellor of Administration and Finance; Sweetman is Safety and Sustainability manager.

Richard Frost, an environmental studies instructor, has been an inspiration to Ericson. Frost says Ericson utilizes his roles well.

“Andrew sees how his activism fits into the bigger picture, and this is a remarkable aspect of his intelligence,” notes Frost.

“He’s involved in everything,” adds Professor Kristopher Rolfhus, Chemistry & Biochemistry, who serves as Ericson’s faculty advisor. He sees a rare combination of academic and personal qualities in Ericson.

“Andrew Ericson has a set of convictions he’s willing to stand on and defend — without being heavy handed,” explains Rolfhus. “He is plugged-in, pays attention, and asks follow-up questions. He’s interested in knowing the context and the linkages within interdisciplinary topics.”

Ericson envisions UWL being on the forefront of identifying and solving environmental problems, both on campus and in the La Crosse community.

“I think we (UWL) should be known as the environmental sustainability school,” says Ericson.

UWL sustainability efforts

Among UWL’s sustainability efforts is the Green Fund, which gives students an opportunity to write grants to launch sustainable efforts.

 [See more.](#)



Article by Guy Herling,
CSH Academic
Services Director



GROWING THE GAME

Geary shares his love of golf as
executive director of Georgia PGA

Scott Geary took a swing at several majors before finding the perfect fit.

“I started with the English and journalism route, then the science and physical therapy route, then the physical education route, then straight business,” remembers Geary, ’11. “Finally, after conversations with family and friends, I got into exercise and sport science (sport management emphasis) with an economics minor. That’s where I got the answer to the question: ‘What do I love, and where can I make money within that field?’”

A decade later, Geary couldn’t be happier with his decision.

In his new position as executive director of the Georgia Professional Golf Association, Geary supports Georgia’s roughly 900 golf professionals — men and women who manage golf courses, give lessons and help grow the game in their local communities.

He also oversees the Georgia PGA Foundation, which raises funds for scholarships and programming meant to get children, people from diverse backgrounds and veterans interested in the game.

“In my experience, there’s no sport that does more to give back than golf,” Geary



Scott Geary

explains. “The money raised for junior golf, veterans, people in need — it’s such a unique platform.”

Geary began playing golf in high school and went on to work at the La Crosse Country Club through college.

After graduating, he interned with the American Junior Golf Association, a nonprofit based in Braselton, Georgia. He landed a full-time job as a tournament coordinator before transitioning to a role in sponsorships and business development. In February, he made the move to the PGA.

Golf has taken Geary all over the country and allowed him to meet some of the sport’s most iconic figures: Jack Nicklaus, Arnold Palmer, Gary Player, Lee Elder, Annika Sörenstam and others.

Through his work with the American Junior Golf Association, he also met many of today’s top players when they were young.

“The coolest part for me was seeing the Jordan Spieths, the Justin Thomases, the Scottie Schefflers and the Xander Schauffeles when they were growing up and playing junior golf,” Geary notes. “It’s neat to have known them when they were kids, and now they’re out there earning all those dollars on the PGA Tour.”

Geary says he hopes to share his love of golf with as many people as possible.

During COVID-19 in particular, he says, golf has had a golden opportunity to grow.

“Golf was the first sport that came back after COVID because of the ability to be outdoors and socially distance,” he says. “We were really able to reboot the sports industry, and that’s an opportunity that I wouldn’t have expected a couple years ago.”

Being good at golf, Geary adds, is not a requirement for a career in the game.

“I know a lot of folks who have done very well in their careers in golf who aren’t talented golfers,” he says. “Within golf, you can get into marketing, communications, public relations, business. There are just so many different avenues, and I think that’s what makes it unique.”



Pablo San Emeterio, '18, is in his final year of a three-year environmental law program at Lewis & Clark Law School in Portland, Oregon. He credits his earth science minor for giving him a deeper understanding of the cases he's studying.

BACK TO EARTH (SCIENCE)

Alum's minor proves useful in law school

A UWL alum calls his earth science minor a game-changer as he pursues his environmental law degree.

Pablo San Emeterio, '18, is in his final year of a three-year program at Lewis & Clark Law School in Portland, Oregon.

While the rainforests of Oregon are a far cry from the bluffs of La Crosse, San Emeterio says the lessons he learned at UWL have transferred seamlessly, giving him a deeper understanding of the cases he's studying. A project he did for his undergrad biogeography course with Professor Joan Bunbury has proved particularly beneficial.

"For the final in that class, I researched and made a presentation on the ecology of temperate rainforests along the West Coast," San Emeterio explains. "Now, at Lewis & Clark, I'm enrolled in a forest law and policy class (where) we mainly focus on issues surrounding National Forests in the Pacific Northwest, including the very same types of forests that I researched for Professor Bunbury's class. Understanding some of the science behind the topics and case law helps me to be more engaged with the material and to better understand the cases and issues."

The Madison native has always felt an environmental connection. This, paired with his interest in political science — in which he earned his UWL bachelor's degree — made environmental law a natural fit.

"I have always been interested in environmental law because of my passion for the outdoors and for wild places," San Emeterio explains. "Through environmental law, I will be able to give a voice to these places in ensuring their protection and proper management for the future. I am motivated by the idea that I will be able to make a difference and hopefully have a

positive impact on our environment — especially in the face of threats stemming from extractive industry, indifferent politicians and climate change."

According to San Emeterio, one key issue is the U.S. Forest Service's susceptibility to political and industry pressure. This leads to policies and management decisions that use research in a flawed manner or ignore the science completely. This, he says, negatively impacts the environment and those who enjoy the outdoors.

By pursuing a career in environmental law, with a focus on public lands and wildlife, San Emeterio hopes to ensure that environmental policy decisions are based on science rather than politics.

"Having knowledge of what the science currently tells us about forest ecology in this region helps to spot issues with Forest Service management decisions that are not in line with the best available scientific information," he notes. "By having an understanding of what the science really tells us, individuals and organizations can bring actions against the government for failing to comply with the law."

For those passionate about the environment and looking to study it in college, San Emeterio is a strong proponent of the CSH earth science minor.

"I feel like my major/minor combination was pretty unconventional. I often questioned this choice, but it turned out to be beneficial for my career goals," he says. "If you are interested in earth science, and if you can find a combination that works for your goals, then I would encourage you to go for it."

CLIMBING THE LADDER

Alum's first job evolves into fulfilling career

Brian Soller's first job out of college was with a fiber optics technology startup. He saw it as little more than a stepping stone.

Twenty years later, Soller is still with Luna Innovations, but he has turned that stepping stone into a successful, fulfilling career.

In spring 2021, he was named Luna's chief operating officer. He helps manage the company's 500 employees and ensures they have the right tools to advance the company's mission.

"My job is to make sure my team and all of the individuals that make up the company are aligning with and working toward our goals," explains Soller, '96. "Historically, I've been more involved with the details of our products. I'll still get to do some of that, but now, I'm at more of an oversight level and making sure everyone is in the right place to do their job."

Over two decades, Soller has seen an office of 10 or 12 people evolve into a publicly traded company with locations in the United Kingdom and Dubai, and nine locations across North America.

Based in Roanoke, Virginia, Luna is now a leading provider of fiber optic technology.

Fiber optics, Soller explains, is the plumbing of the internet. It is the basis for all internet-based communication systems, using laser signals to transmit voice, video and other message formats across long distances.

Luna makes technology used to test fiber optic networks, ensuring they can support the necessary bandwidth.

Luna's products also have important applications in infrastructure — they can identify weak spots in buildings or bridges before they become a threat to public safety.

Soller notes that the explosion of the internet and technology has allowed the company to thrive.

"When we started, I'd say we were 15 to 20 years ahead of our time," he says. "Back then, no one was streaming videos, no one had a smartphone — the internet was basically in its infancy. Since then, the internet has grown into needing the equipment we make. We just needed to wait for it to catch up."

Soller, a La Crosse Central High School graduate, says he still draws upon UWL lessons and experiences.


He chose UWL because of the proximity to home and the strength of the track and field program. He competed in the 110-meter hurdles during his first year on campus, but soon gave it up due to injuries.

With more time to focus on academics, Soller excelled in physics and engineering. As one of the first UWL physics students with a research emphasis, he worked with Physics Professor Gubbi Sudhakaran to publish papers and present at conferences.

That research experience, paired with a Barry M. Goldwater Scholarship, propelled him to a graduate program at the University of Rochester in New York — one of the country's best optical physics programs.

"UWL is a fantastic school with a great environment and great people," Soller says. "The quality and level of education I received, specifically in math and physics, was really top-notch. It prepared me to go to the next level at a top graduate program, and set me up for the rest of my career.

"If I had the chance to do it over, I would still choose UWL," he says.

A portrait of Brian Soller, a middle-aged man with light brown hair and blue eyes, smiling slightly. He is wearing a light blue and white checkered button-down shirt. His arms are crossed, and he is wearing a dark watch on his left wrist. The background is a bright, out-of-focus window with green foliage visible outside.

Brian Soller, '96, is the chief operating officer for Luna Innovations, a fiber optics company based in Roanoke, Virginia.

'ALWAYS MORE TO LEARN'

Summer internships with JF Brennan create hands-on experiences

Peyton Paulson's summer included visits to seven states and two Great Lakes. But he wasn't your usual tourist, and this wasn't your usual road trip.

Paulson, who graduated in December 2021, was conducting bathymetric surveys for JF Brennan, a La Crosse-based company specializing in construction, environmental services and harbor management.



Peyton Paulson, a senior geography major, traveled across the Midwest conducting bathymetric surveys as part of an internship with JF Brennan this summer. The internship helped him land a full-time job with the La Crosse-based company following his graduation in December.

In the summer internship with Brennan, Paulson helped the survey team gather data about various bodies of water — information for studying everything from aquatic life to predicting currents and rip tides, along with monitoring climate change effects.

Paulson's internship served another purpose: He discovered his passion and landed a full-time job.

"I wanted to gain some real-world experience that was related to my field of study ... and found JF Brennan while looking around on the internet," Paulson says. "The goal

of this internship was to find a career that interested me and would allow me to put the skills I learned in school to use. I accomplished that and more."

Paulson's travels took him to Minnesota, Iowa, Illinois, Michigan, South Dakota, Nebraska and Missouri, as well as Lake Huron and Lake Superior.

He learned how to use single-beam and multi-beam sonar, GPS equipment and hydrographic/dredging software integral to Brennan's work. He also helped with dredging in West Salem, Albert Lea and Duluth.

"The best thing about this kind of work is that every job is a little different, and there is always more to learn," Paulson notes. "I also enjoy that much of your workday is spent outside on a boat."

Mike Wyatt, survey group manager for Brennan, says Paulson has been an exemplary worker, as have other UWL alums with the company.

"Peyton brought a positive attitude to work each day and was eager to learn and contribute," Wyatt says. "I'd say his strengths are his ability to learn and catch on quickly, his work ethic and his ability to not stare at his cell phone anytime there is a spare moment."

"We have six (UWL geography grads) in the survey engineering group," Wyatt continues. "I think their background in geospatial data gives them an edge over others who haven't had as much exposure to coordinate systems and mapping."

Paulson even told classmate Gavin Bush about the internship. Brennan hired Bush for summer as well.

In the office, Bush assisted with making charts and figures for upcoming job proposals. In the field, he compiled daily reports and performed surveys.

"I really enjoyed the opportunity to get out into the field and get some hands-on experience," Bush says. "(That's) something that was harder to do in a classroom setting."

BUILDING COMMUNITY DURING A PANDEMIC

American Chemical Society cites UWL Chemistry and Biochemistry Club

Liquid nitrogen ice cream — that’s just one of the ways the UWL Chemistry and Biochemistry Club enticed students to join them.

COVID-19 has brought many hardships since March 2020, with one being feelings of isolation and loss of community moving to a virtual world.

Officers from the UWL Chemistry and Biochemistry tackled those challenges head on to build a supportive community while helping classmates.

The officers organized virtual events targeting students’ interests. One of the most successful events was an alumni panel where former students talked about their career paths.

Another new event done in collaboration with the Peer Health Advocates addressed student mental health. Officers arranged an informational get together about resources available on campus. The efforts have proven invaluable to students as they navigate the pandemic world.

This fall, the officers continued working toward building a community by taking part or organizing 10 events in two months. Of particular note was the highly successful department organized fall picnic which brought close to 150 students and faculty members together at Myrick Park where the club provided liquid nitrogen ice cream to welcome students.

Other events in fall included faculty forums, invited speakers from industry, volunteering at a local food bank, tours of local companies and trivia night.

Attendance at the events tended to be larger than pre-pandemic times, clearly highlighting the need for such endeavors.

For their efforts, the club was awarded a “Commendable” ranking (the second highest possible) by the American Chemical Society, the only school in the state to be so honored.

UWL Chemistry and Biochemistry Club officers

Bryton Foate, president

Carter Caya, vice president

Rylie Gramann, secretary

Lilly Riederer, outreach coordinator

Madison Schutze, social media coordinator



Benjamin Haenni and Basudeb Bhattacharyya, both Department of Chemistry and Biochemistry, are advisors of the UWL Chemistry and Biochemistry Club

Growing undergraduate research

Inaugural director stepping down to head back to the classroom



Scott Cooper, back, works with then student researcher Tanner Tenpas on squirrel blood clot research in 2017. After 11 years as director of Undergraduate Research and Creativity, Cooper will be heading exclusively back into the classroom and lab in 2022.

A trip to Nepal to map the Himalayas by drone. Discovering the region's impact of the Affordable Care Act. Viewing vintage theatre costumes in London.

UWL students have done all that — and more — in the past decade thanks to the university's increased emphasis on undergraduate research. And the person leading the charge has been Biology Professor Scott Cooper. After 11 years, he will be heading exclusively back into the classroom and lab.

Appointed the inaugural director of Undergraduate Research and Creativity in 2010, Cooper has helped UWL's undergraduate research grow with an endowment that funds around 25 research projects each year. Cooper also worked with the Financial Aid and Admissions offices to create the Eagle Apprentice program that matches up to 35 incoming students annually with a faculty expert in their preferred field, while providing the students a two-year scholarship.

The Eagle Apprentice program has been one of the best things for UWL's undergraduate research effort, says Cooper. Seeing first-year students start out as an Eagle Apprentice working with a faculty mentor and then continuing with that mentor for four years has been rewarding, he says.

"They were able to really learn about their chosen field of study, present at conferences, publish their work, and contribute to their mentor's scholarship," he notes.

The increase in undergraduate research has an impact beyond campus.

"Some less traditional innovations have also focused on expanding course embedded research, in which students work on a real project in the classroom," he explains. "We have also focused on increasing the number of projects that involve community partners — policy makers, businesses, non-profits — in alignment with the Wisconsin Idea."

This has contributed to UWL's expanded emphasis on community engagement being headed by Lisa Klein.

Cooper looks forward to once again focusing on teaching and research beginning in 2022 after helping the new undergraduate research coordinator transition into the position. He says working with undergraduate research has been rewarding.

"Establishing and being the director of the office of undergraduate research and creativity has been one of the highlights of my career at UWL," he says. "I think being a mentor is one of the most important roles faculty play, and it has been a privilege to support this over the past 11 years."

Cooper appreciates the hard work of faculty and students who have reviewed undergraduate research grants twice each year. He also credits colleague Chandra Hawkins, Office of Research and Sponsored Programs, for her dedication to helping students with their grants and travel budgeting.

ALUM ELLE MARK

MAKING A DIFFERENCE AS MISS MINNESOTA 2021

Many girls grow up dreaming of becoming a queen. For Elle Mark, that dream is reality — times three.

Mark, a May 2019 graduate with a public health and community health education major, was crowned Miss Minnesota 2021 in June. She entered the competition as the 2019-20 Miss St. Croix Valley, a title she won following her year as Miss La Crosse/Oktoberfest in 2018-19.

“I’ve dreamt of being Miss Minnesota since I was a young girl, but I had no idea where to start,” explains Mark. “It wasn’t until I got involved in the Miss La Crosse/Oktoberfest organization that I realized how. Once I realized that I could compete for Miss Minnesota, my heart was set on making my dream a reality.”

It was the Red Wing, Minnesota, native’s first attempt at becoming Miss Minnesota. She had participated in the Miss Wisconsin pageant during her Miss La Crosse/Oktoberfest reign.

Mark says her reign in La Crosse was key in helping her find success in becoming Miss Minnesota. She learned about the Miss America Organization, and recognized the crown and title was more of a job and less of a hobby.

Elle Mark, '19, was crowned Miss Minnesota 2021 in June. Mark is using her position to reduce the stigma around mental health issues. Photo credit: Paula Preston Photography



Mark credits campus experiences too. She was involved in Eta Sigma Gamma (the Public Health Honorary fraternity), Love Your Melon, Kinesis Dance Theatre and the UWL Dance Team. Along with those extracurriculars, her classes pushed her to think beyond her own preconceived ideas and beliefs to understand what was happening around her.

“That type of critical thinking is crucial in preparing for the interview portion of the competition,” she says. “I also was able to do a bit of public speaking and performing in my time at UWL which helped me to develop a stronger stage presence.”

Besides preparing for the 100th Miss America competition in December, Mark will spend the upcoming year spreading the word about the Miss Minnesota scholarship program. She will also promote her social impact initiative,

“The Campaign to Change Direction: Changing the Culture of Mental Health.”

Despite what happens during the Miss America competition, Mark sees herself returning to school for a master’s degree in public health and epidemiology. She has earned nearly \$20,000 in scholarships in Miss America-sponsored events.

Mark says those she has met along the way should take part in her success.

“I’m so grateful for everyone who has believed in me on this journey—including my professors and classmates,” she says. “I’m so proud to be an Eagle!”

NEW HIRES FALL 2021



Cord Brundage

Biology

Lecturer | B.S., Colorado State University, (Zoology, Anatomy & Neurobiology) | MS, University of Alaska Fairbanks (Biology) | Ph. D., University of Alaska Fairbanks (Zoology and Neurophysiology) | D.V.M. Colorado State University, (Veterinary Medicine, Rehabilitation certified).

Specialty: Vertebrate Physiology

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Jenny Leren

Health Professions

Clinical Assistant Professor | B.S., University of Wisconsin – La Crosse, (Psychology; Occupational Therapy) | M.S., Mount Mary University, (Occupational Therapy) | Post-Professional Doctorate, Mount Mary University, (Occupational Therapy).

Specialties: School-based occupational therapy, executive function skills, and occupational therapy's role in supporting students/teams in middle/high school/transition settings.



Jacob Caldwell

Exercise and Sport Science

Assistant Professor | Ph. D. CSCS, Kansas State University, (Kinesiology).

Specialties: Clinical Cardiovascular Physiology and microcirculation

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Brandon McCauley

Health Professions

Clinical Assistant Professor | A.S., Western Technical College, (Occupational Therapy Assistant) | B.S., Concordia University Wisconsin, (Rehab Science) | M.S., Concordia University Wisconsin, (Occupational Therapy).

Specialties: Older Adults, Outpatient Rehabilitation, Certified Lymphedema Therapist, Rehab Management

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Kari Emineth

Exercise and Sport Science

Assistant Professor | B.S., University of Mary, (Athletic Training) | M.S., University of Wisconsin – La Crosse, (Exercise and Sport Science – Human Performance) | Ph. D. University of the Cumberlands (Leadership – Health Science).

Specialty: Athletic Training

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Dipankar Mitra

Computer Science

Assistant Professor | B.S., Chittagong University of Engineering & Tech., Bangladesh, (Electrical and Electronics Engineering) | M.S., North Dakota State University, (Electrical and Computer Engineering) | Ph. D., North Dakota State University, (Electrical and Computer Engineering).

Specialties: RF-Embedded systems, RF and Microwave Engineering, 3D-printed RF circuits and systems, Transformation electromagnetics/optics, and Metamaterials

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Maggie Laufenberg

Health Professions

Clinical Assistant Professor | B.S., University of Wisconsin – Platteville, (Biology) | M.S., Arcadia University, (Physician Assistant).

Specialties: Physician Assistant Studies, Medical Pharmacology, Clinical Neurosciences, Clinical Practice Skills

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Sarah Mosley

Exercise and Sport Science

Lecturer | B.S., Carroll University, (Physical Education/Health Education) | M.S., University of Wisconsin-La Crosse, (Cross Categorical Special Education).

Specialties: PASHE (Physical, Adapted, and School Health Education)

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Lien Nguyen

Health Education and Health Promotion
Lecturer | B.S., San Jose State University, (Health Care Administration) | M.P.H., San Jose State University, (Public Health) Certificate, University of California-Davis, (Health Informatics) | Ph. D., University of Wisconsin - Milwaukee, (Health Sciences).

Specialty: Contact Tracing Practice of Infectious Diseases

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Nicole Ross

Exercise and Sport Science
Lecturer and Athletic Trainer | B.A., Wisconsin Lutheran College, (Psychology) | M.S., University of Wisconsin - Milwaukee, (Human Kinetics) AAS, Western Wisconsin Technical College.

Specialty: Rehabilitation

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Brian Pompeii

Geography and Earth Science
Lecturer | B.S., The Pennsylvania State University, (Geography) | M.S., Arizona State University, (Geography) | Ph.D., Arizona State University, (Geography).

Specialties: Water resource management, environmental justice, sustainability, and hazards.

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THANK YOU FOR SUPPORTING UWL

Your support allows the College of Science & Health to provide research opportunities that make a difference in the lives of our students

PET PARTNERSHIP | Pre-Vet students probing alternative procedure

A new partnership between UWL biology students and the Coulee Region Humane Society could help make future vet visits more comfortable for pets and their owners.

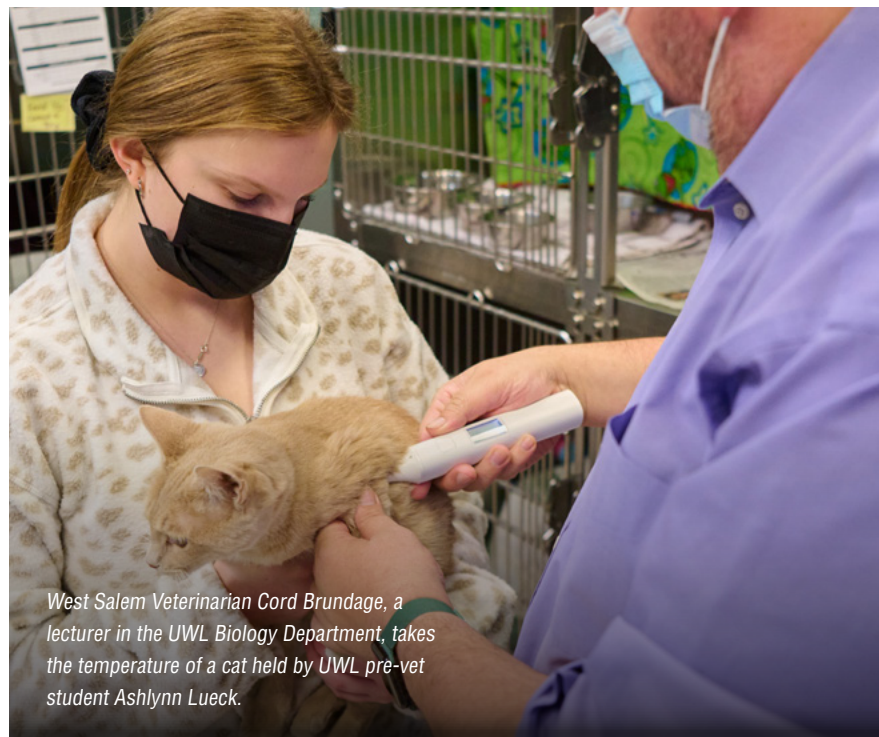
In the process, West Salem Vet Cord Brundage, a Biology lecturer, is helping students get needed hands-on experience.

A pet care company developed a new type of thermometer to use under a dog or cat's arm rather than rectally. Mella Pet Care asked Brundage to test the new thermometer, so he contacted the Society to see if students could work with their animals. Society officials said yes.

Brundage says early results are promising.

"We are confident that, in the future, a lot more pet rears will be saved from thermometers," he says. "Refining the technology will be an ongoing process, but it looks like the thermometers we are testing meet FDA requirements.

Brundage says it's a win-win not only for animals, but also the students.



West Salem Veterinarian Cord Brundage, a lecturer in the UWL Biology Department, takes the temperature of a cat held by UWL pre-vet student Ashlynn Lueck.

FINALEXAM

Austin Bol, right, with fellow UWL Physician Assistant Student Society members Elise Kreger, left, president, and Allison Riemersma, vice president, with the Little Free Library they presented to the St. Clare Health Mission.



A Little Free Library has special meaning for grad student

UWL Physician Assistant Student Society members fill the Little Free Library they presented to La Crosse's St. Clare Health Mission at the beginning of the fall 2021 semester. Society member Austin Bol is the son of Todd Bol who founded the worldwide network of neighborhood libraries that now has 100,000 registered libraries in more than 100 countries.



See more about Austin Bol and the Little Free Library organization.