College of Letters and Science

The College-at-the-Core

UW-Stevens Point College of Letters and Science • Annual Report 2014-15 • www.uwsp.edu/cols

Annual Report 2014-15

Social Sciences

The Humanities

Natural Sciences, Mathematics and Computing

University of Wisconsin
Stevens Point

College of Letters and Science

Mission Statement

The College of Letters and Science mission is to serve the region, the state and the world through ...

- *Academic excellence* that fosters students' career preparation, professional expertise, civic responsibility, personal development and global adaptability
- *Research and learning* that generate new knowledge and new insights, which through their application, promote economic development, community well-being, personal fulfillment and lifelong learning
- *Dedication to the public good* through leadership and service grounded in the foundational ideals of liberal education, robust academic majors, a vibrant general education program, and an overarching embrace of academic and personal integrity
- Adherence to the Principles of Excellence established for *Liberal Education and America's Promise* (LEAP) by the Association of American Colleges and Universities

COLS by the Numbers

- 13 departments
- 10 centers and affiliations
- 27 majors
- 43 minors
- 180 tenure-line faculty
- 70 academic staff
- 60 classified staff
- 14 formal awards/recognitions of teaching excellence
- 147 scholarly professional publications in electronic and print media
- 31 professional conference panels chaired
- 90 grants funded
- 185 professional conferences attended

On the Web

To view past Annual Reports from the College of Letters and Science, visit www.uwsp.edu/cols and look for "Annual Report."

Contents

On the cover: (Top) Yueyang Meng presents his research project, *Modeling Population Dynamics Using a Cellular Automaton*, at the Undergraduate Research Symposium. (Top inset) Students gather at a research poster with Department of Psychology chair Craig Wendorf. (Bottom inset) English students Sylvia Kies and Kendra Lenius discuss *Cornerstone Press: Broadening a Local Press with a National Reach at the AWP 2015 Book Fair.*

Letter from the Dean

Where do we find ourselves?
How do we respond?

As we follow the constant drone of budget reduction realities in the UW System, new demands upon our time, more students with fewer resources, tuition freezes, and with a general feeling that public education is under increasing attack ... **how do we respond**? There are those who yearn for the "academy of old" where we planned our courses and schedules around instructor time, offered only traditional lecture-based courses in the liberal arts and sciences, and graded and assessed the outcomes of our graduates in something of a vacuum with little communications among disciplines.

Yet there are others who feel the entire enterprise is flawed and non-responsive to present "needs of our economy" and want to see all courses offered online or at night, full competency credits for career experience, and a withdrawal from the time-honored traditions of academic freedom, acquisition of tenure, all students living on or near campus, etc. In reality, **we find ourselves at a tipping point in the history of the public academy**. Our response to "what we should be" must be strategic, decisive and organic, or we will find ourselves being "out-sourced" to corporate or private interest education. It is important that we remind ourselves of our mission, and just how an education centered on career-building (not just job-ready skillsets) is increasingly important as we try to balance access to higher education (equity) with excellence and return-on-investment in what we offer (value).

I, for one, am a product of the access our country affords through public education, and did not have the choice of attending an elite private institution. Costs at many private colleges are off-the-charts, and access was historically reserved for those who already had economic advantages going in. Private colleges and universities are a wonderful asset to our country, but access has not always been equitable, particularly to first-generation families.

We face a variety of challenges to our existing academic foundations; online colleges, technical education posed as career education, professional schools requiring less and less knowledge of basic literature, history, moral and ethical philosophy, attacks on our public teachers as underworked and overpaid. We can spend hours fighting perceptions, but if we only fight perceptions, we cannot adapt. We must also educate the public. **I am proud of being the dean of a college which forms the fundamental core of what is known as a liberal arts and sciences education**. Our faculty still require full *academic freedom*, an opportunity to attain *tenure*, and gain access to professional development in their fields in the form of *sabbaticals*. And we need some form of *shared governance* that guarantees faculty and staff expertise still have a role in determining curricula, policies and budget allocations. The italicized items have become lightning-rods for a public that seems increasing disenchanted and increasingly susceptible to misrepresentations.

We know such terms as the cement upon which a strong foundation of faculty depend, allowing them to stay current in their fields and attain a level of independence of thought that should be considered the *raison d'etre* of higher education. But with the 18-22 year-old student cohort declining, increasing family responsibilities of nontraditional students, distance challenges and limited financial resources, **students (and parents) now question our modes, content and schedule of educational delivery**. Is there a place for online education? Of course! Can we work out class schedules that appeal to more of our nontraditional and working-student base? Of course! Are we able to empower our contingent (adjunct) faculty to have a sense of belonging and some say in university affairs? Of course! Can we alter public perceptions to clarify that higher education is really preparation for lifelong learning, while addressing the real needs of working adults, returning veterans, the disabled, the financially challenged? Of course!

If we do not address a rapidly diversifying student demography, use and master new pedagogic technologies, and require more accountability of ourselves, it will mean nothing to say we are still the "best deal in town." And we are! With tuition of $7,675 per year, world-class faculty and staff, and state-of-the-art facilities, how can it be so quickly accepted that we are too expensive?

As a first-generation college student and first-generation high school student (my parents finished but sixth grade), I attest to the incredible value of what we offer, and challenge those who belittle it to show me how building career and life-long leadership skills, and welcoming a diversity of viewpoints, is not important. At this institution, we train our students to become leaders with career skills — beyond having a trade and a certificate. **Public higher education in the U.S. is still the envy of the world**. Our own citizens need to be convinced it is so, or we will all pay the price as a democracy. I challenge us all — administration, faculty, students, staff, our stakeholders, public employees, entrepreneurs, bankers, business owners and CEOs — to take on the challenge of communicating these truths to the public. This annual report is an opportunity for our academic community to communicate to you our value to Wisconsin, as we move into what might be considered "uncharted waters." I am confident we can step up to these challenges and remain the jewel in this UW crown.

Sincerely,

Christopher P. Cirmo
Dean, College of Letters and Science
University of Wisconsin-Stevens Point

The College of Letters and Science
A Roadmap

The College-at-the-Core

At the University of Wisconsin-Stevens Point, the College of Letters and Science is focused on the public good, promoting leadership and service grounded in a foundation of flexible and robust education. As home for UW-Steven Point's humanities, social sciences, natural sciences and computing/mathematics disciplines, our mission is to serve the region, the state, the country and the world through education, scholarship, service and leadership training.

Directions

- We will be leaders in quality mathematics and science education for future generations
- We will be partners in health care
- We will create better citizens and caretakers of their government
- We will be stimulators of local and regional economies
- We will be ethical leaders and promote civil discourse

Waypoints

The New Science Building: Plans for the new science building have entered the final stage as university officials, architects, the state of Wisconsin Division of Facilities Development (DFD), and the University of Wisconsin System have completed the 100 percent design phase as of September 2015. With final state bid and governor's final approval, the university will break ground on the four-story, 175,000-square foot facility in the spring of 2016. The facility will house all of the Department of Chemistry and the human biology, molecular biology, genetics and botany sections of the Department of Biology. Plans include a tropical conservatory and science-on-display components which will continue to point at UW-Stevens Point as the "science" campus of the University of Wisconsin system. With the best science education facility in the region, the college will remain the "go-to" institution for graduate school preparation, professional health care careers, science education, chemistry and biochemistry, for the foreseeable future.

Geographic Information Systems (GIS) and Spatial Analysis: The College continues on track as a critical center for spatial information and GIS expertise and training, with a new collaborative master's certificate in GIS offered through UW-Extension, and development of novel mobile apps and collaboration with other departments and colleges. The GIS Center has worked with its home department of Geography and Geology in focusing new curricula on surficial analysis, hydrogeology, environmental analysis and remote sensing specializations. Collaboration with the Department of Computing and New Media Technologies (CNMT) resulted in a mobile app for tracking the bathymetry of the Wisconsin River bottoms near Stevens Point (page 6). Along with development of a mobile app for touring the UW-Stevens Point campus as part of the First-Year Experience, new ideas are hatched using the ubiquitous spatial information at the center of many disciplines.

Local Collaborations for the Advancement of Information Technology: With computer science, informatics and data analytics becoming critically important in health care, insurance, business and marketing, the College is proud of the partnerships being developed with local businesses as part of the Central Wisconsin Information Technology Association (CWITA). As computing and Web analytic information technology become major venture investments for small and large businesses, CNMT has entered into partnerships and collaborations to bring new funding for instructional positions, software development, and cooperative internship opportunities for graduates of its programs.

These partnerships are in keeping with the goals of involving our regional stakeholders in assisting the college and university in staying in tune with the needs of local businesses, industry, and government and health care concerns. These partnerships are enhanced by new curricula, including an online bachelor's degree in Health Information and Management Technology (HIMT) and Master of Science in Data Science (MSDS), with both curricula showing promise in serving nontraditional students.

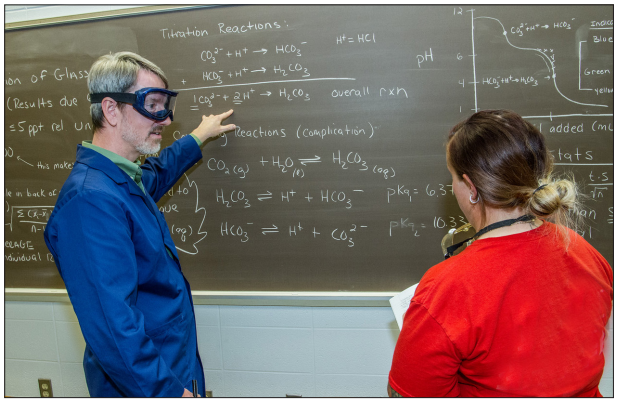
Aquaponics and Aquaculture: This year highlighted public/private partnerships across the college, with perhaps none as strategic as the development of the new Aquaponics Innovation Center (AIC) with the assistance of a Wisconsin Economic Incentive Grant, and the true collaboration of Nelson and Pade Aquaponics of Montello, Wis. The facility is now considered the premier aquaponics education and research facility in the

United States, and promises to become a magnet for true innovation in what is considered by many one of the critical national strategic components in the development of sustainable agriculture.

With a state-of-the-art facility for use by UW-Stevens Point scientists and students, and in partnership with one of the nation's major aquaponics system developers, the AIC is poised to complement the Northern Aquaculture Demonstration Facility (NADF) in Bayfield, Wis., in the testing and marketing of aquaponics systems utilizing northern fish species in what was once considered only a warm-climate technology. The promise of this new facility, along with the national stature of the NADF, makes COLS and UW-Stevens Point the premier undergraduate university for training in the practical applications of the "aqua" side of agriculture.

The Institute for Applied Ethics and Civil Discourse: When the university's strategic plan was finalized several years ago, one of the signature outcomes expected of students as part of their educations was an expectation that civility and civil discourse be part of their skillset and understanding. The College is poised to further this expectation through its curricula in the humanities and social sciences by offering courses demanded by disciplines which will increasingly require ethical standards of their practitioners.

Topics in environmental, medical, business and legal ethics are continually in the news and germane to the curricula offered by our college. Our departments of Philosophy, Psychology, Political Science and Biology have developed new courses covering these topics, and, as part of a new college effort in applied ethics and civil discourse, we hope to incubate a new institute serving these needs across the university. Together with the Healthy Communities Initiative of the University Strategic Plan, this effort will demand interdisciplinary collaboration across departments and colleges as the university prepares its students for a world where they will be expected to make difficult decisions which cross ethical, religious and political boundaries. It is hoped this institute will assist in the development of courses, seminars, speaker series and public discourse in areas which challenge us all to think in a deeper and more open way than we have in the past.



(Opposite) Chris Hartleb demonstrates aquaponics systems at the grand opening of the Aquaponics Innovation Center in Montello. (Top) Katie Cronmiller honors political science professor Brad Mapes-Martins at Convocation. (Right) Chemistry professor David Snyder works with a student in his quantitative analysis course.

Destinations

As the college works carefully to nurture and promote a positive environment for learning, and begins to adapt to societal needs for more distance, online and nontraditional education, we cannot simply do more of what we currently do.

As the new partnerships, collaborations and interdisciplinary opportunities mentioned above give us the opportunity to think outside the box, we must adapt to changes in our student demography, new pedagogic technologies, and the clear needs of a new employment reality.

Our stakeholders are in unison in their message to us through our outreach arms (e.g., disciplinary advisory councils and the Academy of Letters and Science): adapt or become irrelevant. The college is promoting initiatives which will require us to serve a much wider audience than the traditional 18-22-year-old cohort, with more diverse instructional tools, from a distance, in the evening, on weekends, and indeed, on-the-road.

Our **Initiative in Physical Sciences and Engineering** is an attempt at bringing higher enrollments into science disciplines which have room for growth, such as Physics, Astronomy, Geography, Geology, Chemistry and Environmental Science. In addition, our faculty are being trained and certified in offering online course and curricula presentation, collaborative curricula with other campuses in the system and our technical college partners.

We must also address the increasing needs of our diversifying underrepresented student base. A growing need exists for us to service students of Hispanic, Hmong, Native American, economically disadvantaged and first-generation backgrounds, while our diversity challenge includes more students who bring varied religious beliefs to our campus. We must also be intentional in diversifying our student and faculty profile, while showing compassion and understanding for our students who suffer from a growing list of anxiety and mental health disorders.

Waterways mapped in UWSP mobile app

The Wisconsin River has been called the nation's hardest working river, but thanks to a new mobile application ("app") produced by the University of Wisconsin-Stevens Point, enjoying the river in Central Wisconsin has become easier.

The **Wisconsin Waterways app** shows depth contours and map information for 13 Central Wisconsin water bodies, including the Stevens Point Flowage of the Wisconsin River. In addition to water depth contour information under normal water-level conditions, the app includes the locations of old log pilings, points of interest such as nearby parks and boat launch locations, and municipal boundaries.

Content for the app (available for download to Android devices at https://play.google.com/store/apps/details?id=edu.uwsp.wisconsinwaterways) was originally generated as part of a bathymetric survey and mapping project conducted by the UW-Stevens Point Geographic Information Systems (GIS) Center. A team of faculty and students led by education specialist **Christine Koeller** collected more than 120,000 data points over 2,800 acres of the Stevens Point Flowage.

"We took it only as far as a paper version," says Koeller, whose group printed 6,000 copies of the Flowage map for distribution, while the Lake Wausau Association printed 5,000 copies of that map. "But we really wanted to take it mobile and give people the opportunity to use the depth information that we collected in a mobile environment: 'Here I am out on my boat, this is where I'm located, this is where I want to go. What's the safest route? What are the potential locations I might want to visit kayaking, boating, fishing, duck hunting?'"

Students in CNMT 480, a capstone course in the UW-Stevens Point Department of Computing and New Media Technologies, were tasked with bringing these maps to life in a mobile environment. Supervised by professors **Tim Krause** and **David Gibbs**, CNMT 480 students work with clients both local and nationwide on technology-based projects. To date, students have worked on roughly 250 projects and contributed about $1.4 million to the local economy, according to Krause. During the semester-long course, students average 200 to 300 hours working on their projects.

Students **Dirk Kahl, Sam Franz** and **Justin Knight** were assigned to the Wisconsin Waterways project. They did not start from scratch; a group of classmates had previously built a functional prototype of the app. While that work provided guidance on working with the ArcGIS platform on which the original map was built, the prototype lacked certain desired features.

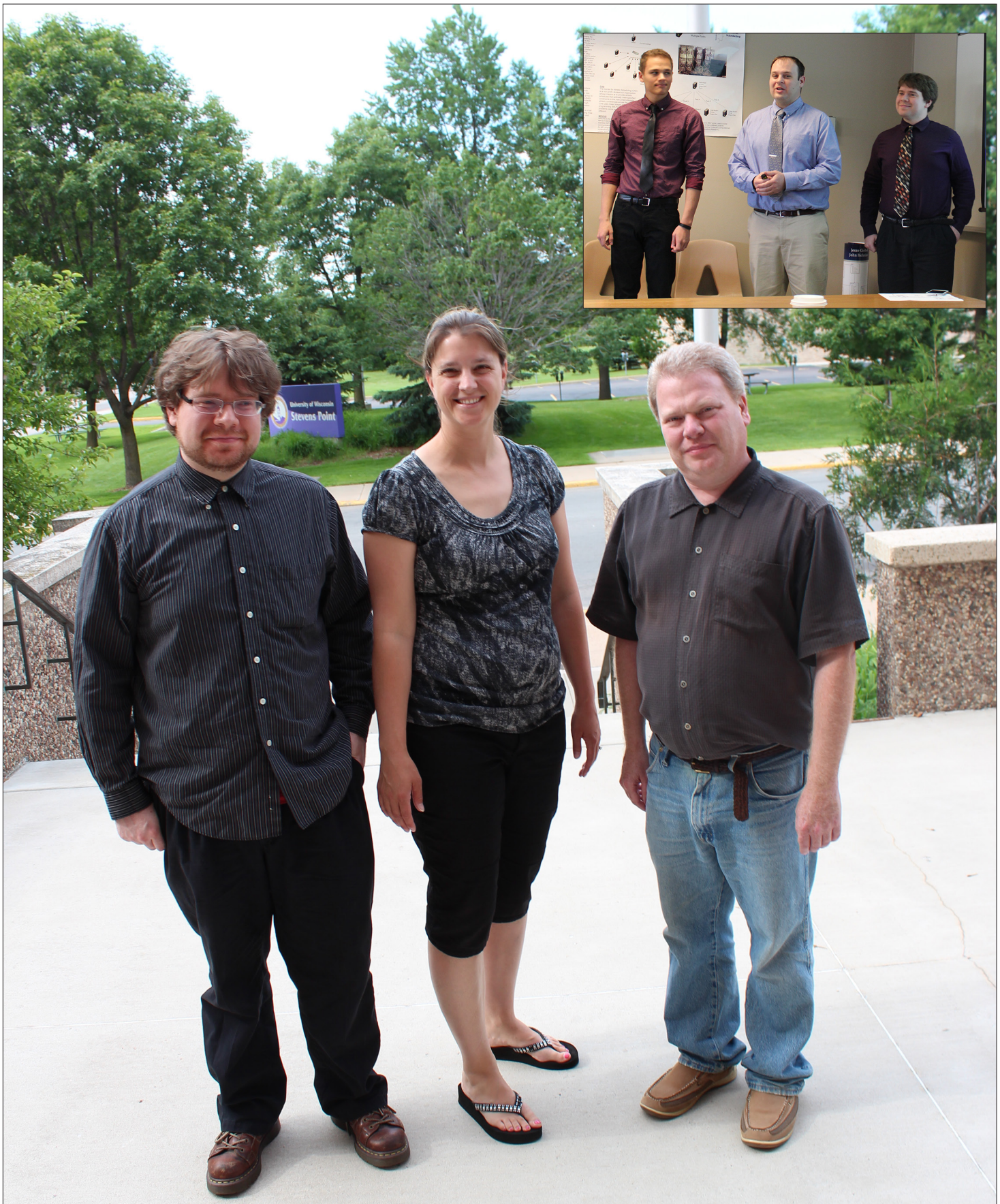
"It was a bit of a challenge," says Kahl, who graduated in May and is working for Herrschners as a developer. "There were a few things we had to remove from the application to restructure it, and since these are our colleagues and friends, it was sometimes hard to say 'This is not the way to do it, this is how it has to be.' There were a lot of sleepless nights but it turned out a lot more suited to the functionality we were looking for."

In addition to the technical side of executing the project – "our professors do a very good job of teaching us how to think like a programmer, think logically and make apps maintainable going forward," says Kahl – students also learned valuable lessons on project management.

"They used a method called Agile management for project planning and management, which is new to me but made me think we should probably be managing our student projects in a similar fashion," says Koeller. "The students always came in well prepared and organized, communicated effectively, stayed in contact with me once a week, and it's very clear to me that they were trained how to do that. I think they did a fantastic job."

While the app team is excited to have launched the Android version in time for use this summer and fall, development will continue. In addition to added functionality such as the ability to store information about specific locations, an iOS version remains under development. On the content side, the app has been built to add new water body maps created by the GIS team.

Krause sees projects like Wisconsin Waterways as part of a larger community service provided by UW-Stevens Point students and faculty. "If you live in a major metropolitan area, this kind of information is available, but a lot of times in rural areas like Central Wisconsin, it gets overlooked," he says. "We're able to provide the tools, resources and data to folks who really need it. If it weren't for collaborations like this we wouldn't have that. It's vitally important for our students to be a part of that so that hopefully a year or two down the road, as they're settling into their careers, they can think about how they can take what they've learned at Point and apply it to give something back to their community."



(Top) Students Sam Franz, Justin Knight and Dirk Kahl present their work on the Wisconsin Waterways app at the end of their CNMT 480 class during the spring semester. (Above) Kahl's team worked with Christine Koeller (center) and the GIS Center under the direction of professors Tim Krause (right) and David Gibbs (not pictured).

Students go on a 'trip' with Dreyfus

Few figures loom larger in the history of the University of Wisconsin-Stevens Point than **Lee Sherman Dreyfus**. The man with the red vest served as president and then chancellor of the university from 1967 to 1977 and was a powerful force during a turbulent time in Stevens Point and on college campuses nationwide.

It was the pull of Dreyfus and his role during this period – along with one noteworthy quote –that inspired history students **Ryan Bottomley** and **Kyle Ebelt** to make Dreyfus the subject of a documentary film for their History 395 course, taught by assistant professor **Sarah Scripps**.

Bottomley and Ebelt are members of the History Club, which was brainstorming ideas for a group activity. Turning their attention to their home school, Bottomley was interested in buildings and the gradual expansion of campus over time, while Ebelt was interested in student activism.

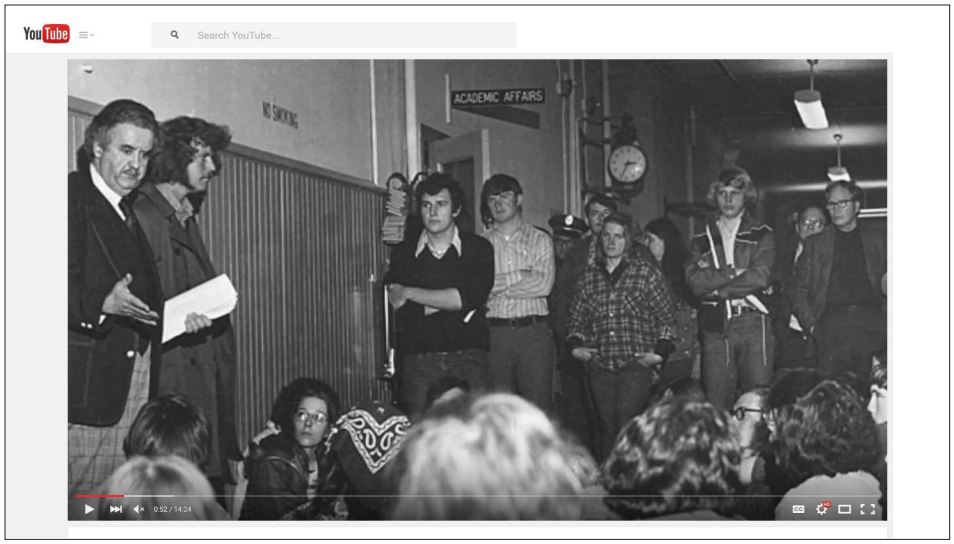
"We were talking about how we could combine our ideas and were standing in front of the stairwell for an hour after class one night," says Bottomley. "We got out the Justus Paul book (*The World Is Ours – A History of the University of Wisconsin-Stevens Point, 1894-1994*), and it was all Dreyfus."

Thus the title of the students' documentary – "Foundations of UWSP: A Trip with LSD" – inspired by a quote from Dreyfus at his installation as chancellor, referencing both his initials and the drug culture.

"My initials are LSD and we're going on a trip together somewhere."

A check of YouTube revealed no historically focused UW-Stevens Point video, so the team moved forward with the project. Ebelt "lived in the archives," says Bottomley, diving deep into the decade Dreyfus served. "Once I had all the information, we found a common theme and took out parts that didn't fit the theme," says Ebelt.

Beyond Dreyfus, the unifying themes were articulated by a trifold in the 1971 edition of the Iris, the UW-Stevens Point yearbook: perceptions of the Vietnam War, environmental activism, sexuality (as expressed in the yearbook's faux Playboy section) and drug culture. Assisted by university archivist **Ruth Wachter-Nelson**, the pair then went about finding subjects to speak with on camera, with Bottomley filming and Ebelt conducting the interviews.



(Opposite page) Kyle Ebelt (left) and Ryan Bottomley (right) worked with history professor Sarah Scripps to produce a documentary on Lee Sherman Dreyfus, who served as chancellor of UW-Stevens Point for 10 years before becoming governor of Wisconsin. The video is viewable on YouTube at https://youtu.be/iCYFSg7ybUA.

"The first one was rough, getting used to the process of talking to someone and asking questions, then asking impromptu questions based off the answers," says Ebelt. "But as I got to the third and fourth interview it became fairly natural, using parts of other interviews to compile better questions."

Subjects included former students **Tom Reich** and **Tim Siebert**, current political science professor **Ed Miller** and professor emeritus of history **William Skelton**. All made valuable contributions to the documentary.

"One thing we learned more about was the 'beer riots,'" says Bottomley. "All we had on that were two pictures and a brief mention in the Paul book. Tom talked for 20 minutes about it. It gave us incredibly valuable information that we wouldn't have gotten from written sources."

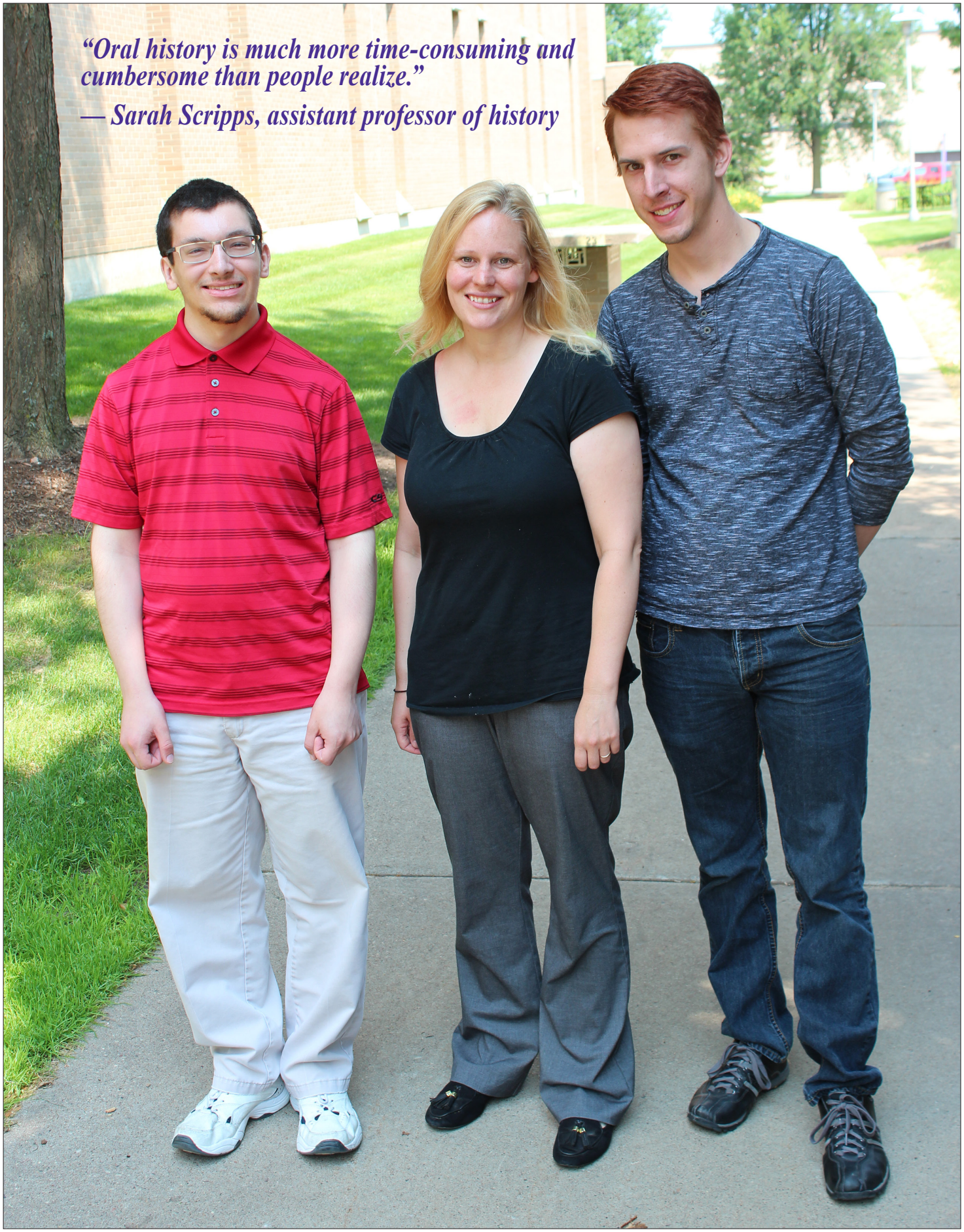
It was a learning experience not just for the students but for Scripps as well. For instance, she is interested in possibly teaching interviewing as an entire course. "Oral history is much more time consuming and cumbersome than people realize," she says.

Ebelt and Bottomley found this out the hard way as script development consumed more time than originally anticipated, leaving a compressed time frame for editing. "Writing a script and reading a script out loud, seeing how it fits with the visual components, it's an organic process," says Scripps. "You have to go back and do several iterations of it. The technical aspects are going to influence the writing.

"I'll be teaching this class again in the spring, and now we have a better sense of how to move forward doing documentaries as a department. Ryan and Kyle were guinea pigs, but overall had a very positive experience, hopefully one we can replicate in future semesters."

Future students will have the opportunity to build off the carefully chosen "Foundations of UWSP" title, further exploring university history. Ebelt would like to dig deeper into campus life during wartime, and Bottomley remains interested in looking more closely at Old Main, Nelson Hall and other historic buildings.

Students Adam Stresing and Jordan Straight assisted Bottomley with narration. "Foundations of UWSP: A Trip with LSD" is viewable online at https://youtu.be/iCYFSg7ybUA.



"Oral history is much more time-consuming and cumbersome than people realize."

— Sarah Scripps, assistant professor of history

Research confirms 'ace' running genes

Elliot Franczek is not afraid to admit it. "I have always dreaded sprints," says the University of Wisconsin-Stevens Point cross country runner.

Yet through research Franczek conducted with visiting biology lecturer **Aaron Davis**, the Biochemistry, Chemistry and Spanish major learned he might be genetically predisposed for success in shorter runs.

Davis received his Ph.D. at Utah State University, where he studied early embryo development, specifically how genes get turned on and off during embryonic development. His primary interest area is cloning, but cloning research requires extensive funding and expensive research facilities. So upon arriving at UW-Stevens Point he shifted his research focus to athletic genomics, the study of genes and how they predispose certain people to success in different sports.

Several student groups analyzed genes and their correlation to performance in a range of academic and athletic pursuits. Franczek and Davis focused on the genes ACE and ACTN3 and their relationship to long- and short-distance running.

ACE contributes to blood vessel constriction and restricts oxygen delivery to muscles. The I allele has decreased ACE activity, resulting in increased oxygen delivery – optimal for endurance athletes like distance runners. The ACTN3 gene organizes fast-twitch muscle fibers and increases forceful muscle contractions. As such, this gene's R allele is advantageous in sprint and power events.

Franczek and Davis set out to research the frequency of these alleles in UW-Stevens Point athletes. Franczek approached Pointer cross country/ track and field coach **Rick Witt**, who was supportive of the initiative. His teammates were also enthusiastic – roughly 60 athletes took part in the study.

"The track athletes were extremely excited to discover what genotype they had and thrilled that research was being done on them," he says. "I was asked almost daily how the research was going and when they would have the results."

The results confirmed the pair's hypothesis. Among runners competing in distance running events (3, 5, 6 and 8 kilometers) presence of the ACE I allele

showed a performance advantage. Among sprinters (60, 100 and 200 meters), those possessing the ACTN3 R allele showed a performance advantage.

"I was thrilled with the findings, they were better than I was expecting," says Franczek. "These findings suggest that the genotype of an individual can have very real consequences at the Division III collegiate level of competition."

Davis says the presence of these genes is just a portion of the overall genetic makeup characterized in runners of various distances. "That's the challenge – what genes are involved?" he says. "Let's say for sprinters 100 genes are favorable. One of them doesn't give you superfast abilities, but all contribute in some amount. Somebody who has 10 favorable genes will be faster than someone who has five, but still slower than somebody who has 25. Usain Bolt probably has 40-45 favorable genes."

Discovering the relationship between genetics and athletic performance raises ethical questions, but Davis says the research is less about predicting future performance and more about focusing and training more efficiently.

"That is the future of athletic genomics – precision training," he says. "How can you train more efficiently to maximize your results? Based on this genotype, we feed you a certain way, train you a certain way, whereas someone else with a different genotype would train differently.

"We certainly saw examples of sprinters who did not have favorable genes but were still posting really good times. But what we can do with this is take a high school athlete and say 'You have the genotype of a mid-distance runner. You can spend the next three years trying out these different events until you realize your best times are in mid-distance, or we can tell you from Day 1 and you can start training for that.'"

In the coming year Franczek and Davis hope to expand their research to include more genes and more athletes from more sports. "My hope is to get well over 300 DNA samples from large cross country and track meets," says Franczek. "With a much larger sample size we will be able to make a more definite conclusion on the effects of an individual's genotype. There will also be a much larger data set, which hopefully shows the same trends that we have observed in the UW-Stevens Point track athletes."

As for Franczek, the senior from Hilbert was not surprised to learn his ACE gene predisposes him to distance running. He was surprised to learn he also possesses the ACTN3 genotype that suggests possible sprinting success. No matter.

"Even with the R genotype I will continue to hate sprinting!" he says.

To view Franczek and Davis's research visit www.uwsp.edu/cols/Documents/ResearchSymposium/2015%20Posters/Biology-Franczek-Davis.pdf.

Aaron Davis (left) and Elliot Franczek conducted athletics-focused genetic research during the 2014-15 academic year, the results of which Franczek presented at the College of Letters and Science Undergraduate Research Symposium in May (opposite page).

"I knew coming in I'd be able to do a lot of work and help out but I didn't realize how hands-on I would be in the process."

— Lliy Molik

Emily Lindberg and Lily Molik worked with lecturer Rachel Albert (opposite page) and classmates Haley Roenneburg, Jena VanderLogt and Rebecca Pletka to record responses to infant vocalizations.

Students track responses of mothers, 'others'

Infant brain development is a hot research topic, particularly as it pertains to communication. There is widespread interest in understanding how babies go from babbling to forming their first words, with the ultimate goal of determining how caregivers can help nurture infant language development.

Caregiver-infant interaction is dynamic, with the former's communication influenced not only by the latter's actions but by their level of experience with children. These differences are at the root of research conducted by University of Wisconsin-Stevens Point psychology lecturer **Rachel Albert** and a group of her students.

"Parents are really responsive to their babies' babbles, but they respond differently depending on the situation, the type of babble," says Albert. "Our work focuses on the moment-to-moment interactions and sounds the baby is making – does that change how the parent responds?

"We look at categorizing the types of sounds babies make, those nice 'ba bas' versus fussy, less mature sounds. Do parents respond differently to those sounds? Are they more likely to label an object a ball after a 'ba' sound and ask 'Are you OK?' after a fussy sound?"

Students assisting Albert with this research include **Lily Molik, Emily Lindberg, Haley Roenneburg, Jena VanderLogt** and **Rebecca Pletka**. The group has been involved with all aspects of the research, starting with redeveloping the coding system used to categorize caregivers' responses to infant vocalizations.

They then supervised participants in the Department of Psychology's laboratory, which was set with a computer screen, headphones, a blanket to simulate the presence of a baby, and cameras to record responses. Participants then watched videos of infants making a variety of sounds and were instructed to react naturally. Each subject experienced 80 to 90 examples.

Molik and Roenneburg focused on developing the coding system, and all students took an active role in recruiting and testing participants and analyzing the data. "I knew coming in I'd be able to do a lot of work and help out, but didn't realize how hands-on I would be in the process," says Molik. "It was a blessing to get so much experience with the research process."

The group found that inexperienced caregivers were more likely to respond to infant vocalization of vowels with questions than experienced caregivers. When attempting to imitate infant sounds, this group was more likely to miss the mark – "They sounded nothing like the sounds and the infant made," says Molik. Also, experienced caregivers regularly used a wider variety of responses than their inexperienced counterparts.

This spring the students had the opportunity to present their research at the Society for Research in Child Development biennial conference, the largest one of its kind for developmental psychologists, with around 8,000 people attending. Albert says the UW-Stevens Point group was unique in being one of only a handful of undergraduates to present.

"Presenting at a national conference as a undergraduate gave these students the opportunity to showcase their work in front of the leading scientists in the field," says Albert. "They made connections with potential graduate school advisers, putting faces to names they'd previously only seen cited in their textbooks."

While the group had relatively little trouble finding non-mothers to participate in the research, recruiting mothers from the community has proven to be more of a challenge. Albert anticipates bringing in the first mothers during the fall.

Molik and Lindberg envision a wide range of future directions for the study, including testing differences between fathers and non-fathers, analyzing the impact of caregivers' ages on perceptions, and better definition of what constitutes caregiving experience.

"These ladies have all been with me four or five semesters," says Albert. "To have them stick with it for multiple semesters has allowed them to really take ownership of the research. They came in doing my project but they are starting to drive the future direction. They've stuck with it and are developing their own projects."

To view Lindberg presenting the students' research at the Community Lecture Series visit https://www.youtube.com/watch?v=FW2tHqvVg-s.

Pointers help chart new course on Cuba

In December 2014, when President Obama announced the U.S. would reestablish diplomatic relations with Cuba, that small Caribbean nation suddenly became front-page news for most Americans. Experts speculated on the business, tourism and political impacts that such a move would have on both countries.

Students and faculty at the University of Wisconsin-Stevens Point had a head start on the rest of the country in learning about Cuba firsthand. Led by **Anju Reejhsinghani**, assistant professor of history, Pointers have taken study abroad Winterim trips to Cuba in 2013 and 2014, with a third trip planned for May and June 2016.

The seeds for the Cuba program were planted in 2001, when Reejhsinghani – then a graduate student in Latin American and Caribbean history – attended a writers' conference in Havana. Attending such "people-to-people" conferences was then one of the only ways that Americans could legally visit Cuba. Her unforgettable experience persuaded her to deepen her study of the country, and she returned many times during the ensuing decade.

Almost immediately upon joining UW-Stevens Point in Fall 2010, Reejhsinghani pitched the idea of a study abroad trip to Cuba. Chancellor **Bernie Patterson**, Provost **Greg Summers**, and Director of International Programs **Eric Yonke**, along with her dean, chair and colleagues in the Department of History, supported her efforts. It took a year and a half for Reejhsinghani to develop a program that met her vision for blending a strong educational component with on-the-ground cultural immersion. Fourteen students, including nine from UW-Stevens Point signed up for the inaugural 2013 trip.

Student recruitment (aided by intern **Randa Meyer**) involved larger challenges than the typical "how will I afford this?" consideration. "I feared getting in and out of the country," recalls **Erin Jensen**, who participated in both trips – first as a student and later as an assistant. "During my first visit ... relations between Cuba and the U.S. were much different than they are now. I worried that we would be questioned and seen negatively both in Cuba and on our return to the U.S. My mom worried about my safety, and

whether a country that seemed to 'hate' the U.S. would welcome us. My friends thought I was a bit nuts and asked how I was going to legally enter the country since 'Americans can't go there!'"

Jensen, who graduated in 2014 with a broad-field social science degree and minors in Spanish and history, found those concerns to be overstated. "Our presence was welcomed by all the Cubans we encountered," she says. "They were adamant in telling us that they are not their government, and that they would love to see Cuba and the U.S. become good neighbors one day."

The educational component of the trip began before students left campus. Reejhsinghani led in-person orientations (inviting students' parents to attend) and developed extensive preparation guides, a detailed syllabus and a course website. Students had the option of doing assigned readings ahead of time, since Reejhsinghani predicted that they might experience culture shock upon arrival. Once in Havana, the program's home base, students gave oral presentations, discussed readings, kept writing journals, and were tested on Cuban geography, history and current events.

Cuba's technological limitations presented a challenge for Reejhsinghani. "We didn't have access to computers, printers, or Wi-Fi – you can get it, but it's costly," she says. "I had to print every quiz, every test, and bring it with me." Though she warned students at orientations about the challenges of being "off the grid," she wasn't sure how they would handle it. Surprisingly, most enjoyed the break from constant connectivity, welcoming a slower pace that allowed them the opportunity to befriend Cubans their age – and each other.

A key on-the-ground contact became **Ernesto Domínguez López**, professor of political science and history at the University of Havana. Domínguez López was impressed by the intensive educational nature of Reejhsinghani's program and accepted her invitation to give a guest lecture on Cuban foreign policy. "This guy's fantastic, incredibly knowledgeable, likeable, enthusiastic," Reejhsinghani says. "He talked without notes for an hour and a half. Our students were blown away by his expertise."

Acting on student feedback from the first trip, for the 2014 program Reejhsinghani added more interaction with Cuban young people. In addition to relying on Jensen and intern **Bailey Abraham**, she turned to Domínguez López and his wife and fellow academic, **Seida Barrera Rodríguez**, to coordinate afternoon mixers with University of Havana students. Jensen found these to be one of the high points of the 2014 trip, as did several other students who ended up befriending young Cubans.

Upon her return to Stevens Point, Reejhsinghani and her colleagues on the Latin American/Caribbean Speaker Series invited Domínguez López to become the university's first official Cuban guest. After a months-long effort to secure his visa, Domínguez López came to campus in Fall 2014 to guest-teach several COLS classes and to deliver an impactful public lecture on U.S.-Cuban relations. The announcement of impending normalized ties between the nations came just a few months later.

Reejhsinghani is now gearing up for the next UW-Stevens Point Cuba trip, in May-June 2016. The program has blossomed from two weeks to four (and from three credits to six) and includes weekend excursions to several different parts of Cuba. "Students felt that two weeks were not enough, so this should give them a more immersive experience, as well as a more interdisciplinary one," Reejhsinghani notes. Associate professor of political science **Jennifer Collins** is co-directing the program, which includes a focus on how Cuba is changing in the wake of normalization and what may lie ahead following the impending retirement of Raúl Castro in 2018.

For more information on the 2016 program, contact Reejhsinghani at areejhsi@uwsp.edu or International Programs at intlprog@uwsp.edu.

Participants in the 2013 Cuba trip (From left): Adelhaide Stanley, Lindsey Bixby, Rachel Maslakow, Megan Van Sambeek, Stephannie Regenauer, Brittany Waited, Wendy Brooke, Steven Garza, Colin Destache, Bailey Abraham, Jennifer Myers, Erin Jensen, Nicole Weber, Rachael Rubin. (Opposite) Assistant professor of history Anju Reejhsinghani.

"I was ecstatic! For too long the U.S. isolated Cuba and consequently lost out on some of the great things Cuba has to offer the world. I was also excited for Cuba — to have relations with the U.S. would mean a more modern, efficient life for Cubans. This does not mean I hope there is a Starbucks or McDonald's on every corner of Havana or Cuban cigars become the new big ticket item for tobacco companies, but I am thrilled to see what each country has to offer the other.

— Erin Jensen, on hearing the news of U.S. normalization of relations with Cuba

Profs bring LIFE to community survey

Determining a community's quality of life can be a difficult undertaking. A proper assessment looks beyond easily-accessible statistics and census data and takes into consideration variables like health care options, child care availability, public safety and accessibility to food. University of Wisconsin-Stevens Point sociology professors **Robert Enright** and **David Chunyu** are assisting with such an initiative to measure quality of life for Portage County residents.

The Portage County Local Indicators for Excellence is a comprehensive overview of county residents' quality of life, coordinated by the United Way and Ministry St. Michael's Foundation. Roughly 4,000 county residents were sent a mail survey asking questions about a wide range of social indicators.

Enright and Chunyu reviewed the questionnaire for scientific validity, trained volunteers on the process for transferring data from questionnaire to a computer readable format, and will process the data for presentation to the organizing groups.

"We can provide scientific and social science expertise on getting this done," says Enright.

Enright notes that the university has a long history of involvement in projects like LIFE, primarily through the Community Research Center. Professor emeritus **Gary Itzkowitz**, who died in 2012, was the primary point person, and since his retirement CRC activity has slowed. "We see this as an opportunity to resurrect this idea," Enright says.

> ***"Without some kind of evidence, statements about what the community needs are all anecdotal."***
>
> ***— Robert Enright, on the Local Indicators for Excellence survey***

United Way of Portage County executive director **Sue Wilcox** is happy to hear it. Wilcox, who worked with Itzkowitz and the CRC, says Enright and Chunyu's involvement in this and potentially other similar projects helps quantify the effect various initiatives have on the community.

"What Bob and David, and ultimately what the Community Research Center, can do for the community and other organizations in Central Wisconsin is demonstrate the results of their work and of their direction," Wilcox says.

Getting involved with LIFE allows Chunyu and Enright to provide UW-Stevens Point sociology students with real-world experience shaping survey results into clean, meaningful charts, tables and other summaries. In previous research methods classes, Enright's students have used the general social survey, which is a nationally representative sample of the United States.

"We have identified some very good students from the classes I have taught, and this will be a wonderful opportunity for them to put their learning into practice," says Chunyu.

Those survey results will then be used by community organizations to drive policy and other initiatives aimed at improving quality of life. Gathering scientifically vetted support for such actions is a critical step in making the best possible decisions.

"Without some kind of evidence, statements about what the community needs are all anecdotal," says Enright. "It's easy to dismiss; policy makers have no reason to believe it. But when you've produced some evidence regarding various populations and their quality of life, it gives them a strong basis to be able to say this is where attention should be focused.

"Those of us interested in community sociology think this is really vital because you cannot reduce all problems to simply economic problems. What are the social consequences of the economic issues that are raised? More than the results, this gives residents a voice in what they define as issues and what they don't."

Wilcox says the conclusions drawn from the survey can help generate future funding to address areas of concern. "This information could be helpful for grant writing – organizations can cite the report to reference what we're hearing from the community," she says.

For more information on the Community Research Center visit www.uwsp.edu/cols-ap/CommunityResearchCenter/Pages/default.aspx.

Promotions and Retirements

Promotion from Assistant to Associate Professor

- Thomas Leek (World Languages and Literatures)
- Valerie Barske (History)
- Shanny Luft (Philosophy)
- Adriana Durbala (Physics/Astronomy)
- Weimin He (CNMT)
- Rob Harper (History)

Promotion from Associate to Full Professor

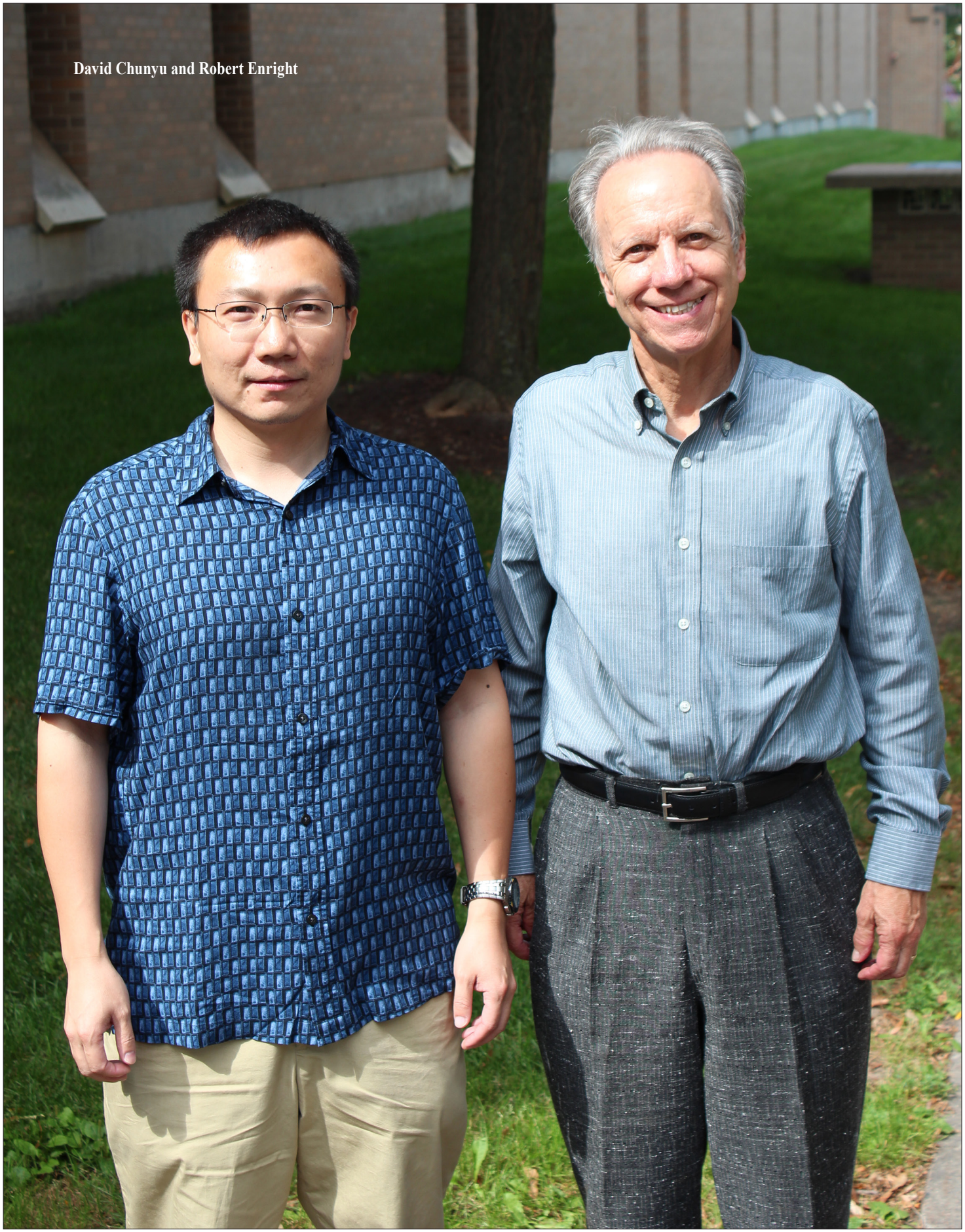
- Tobias Barske (World Languages and Literatures)
- Katie Stern (CNMT)

Academic Staff Promotions

- Tenille Nowak (Senior Lecturer)
- Donna Kitchens (Lecturer)
- Doug Miskowiak (Senior Admin Program Specialist

Retirements

- Patricia Jaberg (Mathematics)
- Randy Olson (Physics/Astronomy)
- Gayle Huglen (CDP)
- Richard Ruppel (World Languages and Literatures)
- Joseph Waligore (Philosophy)
- Barbara Dixson (English)
- Emmett Judziewicz (Biology)
- Beverley David (World Languages and Literatures)
- Susan Brewer (History)
- John Droske (Chemistry)
- William Lawlor (English)



David Chunyu and Robert Enright

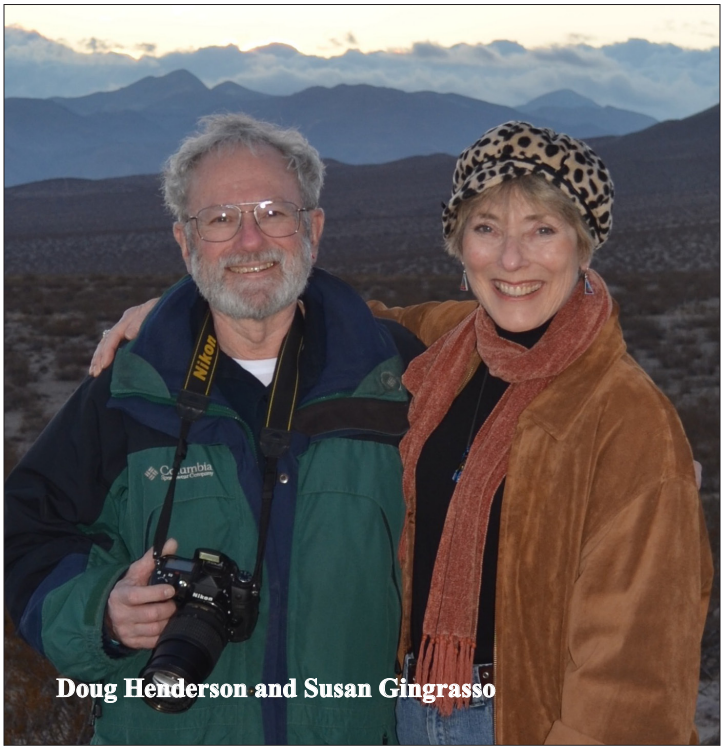
COLS Development Report

Each year at the University of Wisconsin-Stevens Point, alumni and friends display their willingness to make a difference in the lives of our students by making gifts to the UWSP Foundation. In 2014, 804 gifts totaling $584,019 were made to the College of Letters and Science. Total assets at UWSP Foundation for the college grew from $2,818,919 on December 31, 2013, to $3,398,636 on December 31, 2014. During that same year, the College of Letters and Science awarded more than 170 student scholarships totaling $90,045.

Transforming lives, departments and our university is often the result of passionate giving. We encourage our givers to match their passion with their generosity; a formula we hope culminates in deep and meaningful connections with faculty, staff and students to make our world a better place. Some of these transformational gifts include:

An anonymous gift of more than $400,000 was made to enhance the future of biology education on our campus. This generous gift will support the Department of Biology and provide additional funding for the **Charles and Mary Louise Tenley Scribner** professorship currently held by **Krista Slemmons**. Established in 2005, the Scribner Professorship plays a vital role in the training and continuing education of current and future biology teachers that graduate from UW-Stevens Point. The university's beginnings as a teacher's college and normal school, aimed at creating quality educators, continues to this day, and this gift ensures a bright future for biology teachers graduating from our institution.

The **Judd S. Alexander Foundation, Inc.** made a gift to expand research in nanotechnology, an aspect of research on campus that is aimed at contributing to manufacturing and innovative discoveries in nanowire and nanotemplate technologies. This research has resulted in simple but extraordinary education models that have created excitement about science at every level of education in our region.



Doug Henderson and Susan Gingrasso

A special gift was made this year by **Doug Henderson**, professor emeritus in the Department of Psychology, and his wife **Susan Gingrasso**, professor emeritus in the Department of Theatre of Dance. Their gift of more than $100,000 fundamentally transformed scholarships in the Department of Psychology and established the Douglas B. Henderson Fund for Psychology Student Excellence. This endowment will support scholarships in the department, and when possible, student participation and attendance at the annual department awards banquet.

Professor Henderson spent 25 years on campus and was best known for his strong support of his students and of the value of service to others. Between 1978 and 2004, the Department of Psychology created six awards to honor retired faculty members. One of the awards honored professor Henderson's leadership with the creation of the Doug Henderson Award for Student Service.

For years after retirement, professor Henderson imagined how he could continue to make a difference in the lives of psychology students at UW-Stevens Point into the future. He hopes this gift will inspire others to consider making a difference in lives of future students through their own generosity.

Doug Henderson graduated from the doctoral program at Ohio State University. He was a professor in the Department of Psychology at the University of Wisconsin-Stevens Point from 1976 until 2001. During his years at UW-Stevens Point, he was the faculty adviser for both the Psychology Club and Psi Chi and is credited for organizing the first Psychology Department Awards Program Banquet.

UW-Stevens Point professor emerita of history **Sally Kent** died Feb. 3 after a battle with lung cancer. Sally was a member of the history faculty from 1987 until her retirement in 2014. She won the Eugene Katz Letters and Science Distinguished Faculty Award in 2012 and was nominated for the University Service Award three times. Sally coordinated the international studies program and served as chair of the History Department. Gifts in her memory should be made payable and sent to the UWSP Foundation for the History Department Faculty Memorial Endowment.

COLS Majors, Minors and Facilities

Biology
Chair – Christopher Yahnke
ADA – Tanya Copas
■ • Biology
• Aquaculture/Fish Culture
• Museum Techniques

Chemistry
Chair – Paul Hladky
ADA – Cristina Altobelli
■ • Chemistry
■ Chemistry, ACS certified

Computing and New Media Technologies
Chair – Tim Krause
ADA – Jenny Wierzba
■ • Computer Information Systems
■ • Web and Digital Media Development

English
Chair – Michael Williams
ADA – Kim Siclovan
■ • English
• Biomedical Writing
• Creative Writing
• Professional Writing

Geography and Geology
Chair – David Ozsvath
ADA – Mary Clare Sorenson
■ • Geography
■ Geoscience
• Environmental Geography
• Geographic Information Systems and Spatial Analysis
• Geology

History
Chair – Lee Willis
ADA – Janis Swinford
■ • History

Mathematical Sciences
Chair – Andy Felt
ADA – Jenny Wierzba
■ • Mathematics
• Applied Mathematics

Philosophy
Chair – David Chan
ADA – Sue Wojciechowski
■ • Philosophy
• Religious Studies

Physics and Astronomy
Chair – Mick Veum
ADA – Nancy Stokosa
■ • Physics

Political Science
Chair – John Blakeman
ADA – Catherine Ligman
■ • Political Science
• Public Administration and Policy Analysis

Psychology
Chair – Craig Wendorf
ADA – Kay Hackett
■ • Psychology

Sociology and Social Work
Chair – Robert Enright
ADA – Pam Olson
■ • Sociology
■ Social Work
• Gerontology

World Languages and Literatures
Chair – Richard Ruppel
ADA – Donna Gear
■ • French
■ • German
■ • Spanish
• English as a Second Language

COLS Dean's Office
Dean – Christopher Cirmo
Assistant Dean – Dona Warren
Associate Dean – Todd Good
Dean's Assistants – Patricia Kleman, Dawn Haynes
Assistant to the Dean for Planning, Media and Events– Scott Tappa
Tech Support – Aaron Schaufenbuel
Development Director– Tony Romano

Interdisciplinary Programs
■ • American Studies
■ Biochemistry
• Comparative Literature
• Earth Science
• Environmental Studies
■ • International Studies
• Native American Studies
• Natural Science Broad-field (Edu.)
• Peace Studies
• Small City Analysis
■ • Social Science Broad-field
• Women's and Gender Studies

Master of Science in Teaching
○ Biology
○ English
○ English (reading certification)
○ History
○ Mathematics

Pre-Professional Studies
○ Pre-Chiropractic
○ Pre-Dental
○ Pre-Engineering
○ Pre-Law
○ Pre-Medical
○ Pre-Mortuary
○ Pre-Optometry
○ Pre-Pharmacy
○ Pre-Veterinary
○ Pre-Physician's Assistant

Outreach Centers and Facilities
○ Allen F. Blocher Planetarium
○ Aquaponics Innovation Center
○ Arthur J. Pejsa Observatory
○ Center for Athletic Scheduling
○ Center for the Small City
○ Collaborative Degree Program
○ Community Research Center
○ Geographic Information System (GIS) Center
○ Museum of Natural History
○ National Information Center for Polymer Education (POLYED)
○ Northern Aquaculture Demonstration Facility (NADF)
○ Wisconsin Association for Critical Thinking (WACT)

ADA = Academic Department Associate
■ = Major
• = Minor

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Disclosing the Secrets: The Transformation of the 10% by student Alexander Purdy.

Fixatives for Ovarian and Uterine Histology: A Pathway to Understanding by students Erica Kleist (above), Drake Rekowski and Cali Hagen.

Mindfulness and College Students by students Hillary Grgich (above) and Bridget Grzywacz.

Student research showcased at undergraduate symposium

Collaborative research between students and faculty members at the University of Wisconsin-Stevens Point was presented at the 16th annual **College of Letters and Science Undergraduate Research Symposium** on May 1, 2015. More than 100 research posters and presentations were featured from students representing 10 departments within the college. The next Undergraduate Research Symposium will be May 6, 2016. Visit www.uwsp.edu/cols/pages/researchsymposium to stay posted.

UWSPcols

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