

# TRUE NORTH

NORTHERN STATE UNIVERSITY | FALL 2017

## Internships

In the College of Arts and Sciences, all programs have embraced the internship experience for majors. Internships are a proven way to gain relevant knowledge, skills and experience while establishing important connections to one's chosen field.



**Carefully structured internships** offer a unique experience for students and allow multiple advantages to both the student intern and agencies and programs that host interns. In the past year, students in the College of Arts and Sciences have completed internships with many agencies and programs including Aberdeen Community Theatre, Aberdeen Police Department, archives in the NSU Beulah-Williams Library, Avera Hospital, The Exponent at NSU, Glacial Lakes Energy, NSU Writing Center, Redfield Energy and South Dakota Child Protective Services.

**Matthew Remmich**, a fall 2016 graduate with a major in history, completed the competitive South Dakota Legislative Internship in Pierre in spring 2017. Remmich said: "I gained a stronger grasp on general legislative process, including the importance of committees. Most importantly, I learned



## New Regional Science Education Center

Construction has not started yet, but great strides have been made over the last six months to build NSU's new Regional Science Education Center (RSEC).

**Faculty, staff and administrators** have worked closely with our team of architects, designers and engineers to bring the design phase to a successful conclusion this fall.

Everything is proceeding smoothly to begin construction in spring 2018 and open the building for classes for the fall 2019 semester. The RSEC will be located at the corner of South State Street and Twelfth Avenue Southeast on the site currently occupied by the football practice field. It will be a two-story facility totaling approximately 50,000 square feet including state-of-the-art laboratories, classrooms and offices for biology, chemistry, physics and GIS. The building will also feature a new greenhouse and an outdoor instructional space, as well as several spaces to facilitate communication and collaboration among students and between students and faculty.

"This new building will provide countless opportunities for both students and faculty in the sciences," said Department Chair and Professor of Biology Dr. Jodie Ramsay. "Classrooms and labs will be arranged in ways that encourage active learning. Student and faculty research will also greatly benefit from the shared lab space and common lab prep areas. In addition to the building itself, we will have an outdoor classroom and multiple gardens with native plantings that will not only be aesthetically pleasing but will also provide hands-on learning opportunities for our students."

Once finished, the RSEC will allow expanded and enhanced opportunities for education,

research and outreach for Northern, the Aberdeen community and the region for decades to come. The RSEC's primary purpose will be to support science education and train K-12 science teachers for schools across South Dakota and beyond. The new building will also help Northern meet the continued growth in the numbers of students interested in majoring in science, especially in the fields of allied health, environmental science and biotechnology.

"Our students deserve to learn in a space that maximizes their interaction with faculty and peers," said Assistant Professor of Biology Dr. Andrew Russell. "The new Regional Science Education Center provides several collaborative spaces and new learning environments that Northern doesn't currently have. It will be much easier for faculty to engage students in classroom and laboratory activities that mimic the skills and techniques that they will need in the medical field. It will also enhance our undergraduate research experience by providing far more dedicated laboratory space for independent research projects."

The RSEC is being funded through over \$25 million in private donations contributing to Northern's broader strategic campus master plan. "The Regional Science Education Center will be a gateway to campus," said NSU President Dr. Tim Downs. "I know our faculty, staff and students are excited to have a new academic building, and we're thankful for the generosity of our donors. A goal we all have at Northern is to enhance our students' experience; this building will do just that."

## Internships *continued...*

that the concerns many people have for possible corruption in our state legislature are unfounded. I learned that a majority of the legislators are there to do the right thing for the citizens of South Dakota and protect our Constitution. I have gained a stronger respect for our legislative process and those lawmakers who uphold that process.”

**Sienna Wessel**, a senior majoring in biology and environmental science, completed a volunteer internship for the Nature Conservancy in summer 2017. She continues to work for the Game, Fish and Parks Department as a seasonal habitat technician. Wessel said: “This summer, I started out with two volunteer positions and ended up with one paid technician job and one internship, which took me through the prairie of northeastern South Dakota all the way to the Black Hills. Both agencies invited me to come back as an employee next year. Working for two different habitat conservation agencies gave me insight into different methodologies for restoration and land management. I also learned about the unique challenges that each organization faces in regards to funding and public engagement.”

**David Hales**, a history major, completed a public history internship at Fort Sisseton State Park in northeastern South Dakota. He worked as an archivist and museum guide at the fort, which was built in 1864. He was supervised by Melinda Quade, another graduate of NSU’s public history program, who has been working every summer at the fort since completing her first internship there in 2014.

**Zack North**, also a history major, completed a public history internship at NSU’s Williams Library this past summer. North worked with NSU Archivist Sarah Jones to catalog and create finding aids for Northern’s extensive fine arts collection, which chronicles NSU’s theater and music productions back to its founding in 1902.

**Alison Byrd**, a biology major, spent the summer as an intern at the Henry Doorly Zoo and Aquarium in Omaha, Neb. She worked with a variety of sea animals, including sharks, rays and sea turtles. As an intern, Byrd was involved in a variety of activities, both behind the scenes and with the public. One of her favorite activities was to help draw blood from the sea turtles. She plans to pursue a graduate degree in marine biology after graduation.

## Alumni Spotlight: Michael Dixon

Northern State University alumnus Dr. Michael Dixon is in the business of getting research and technological discoveries from the lab to the marketplace where they benefit public health.

**Dixon** is president and CEO of UNeMed Corporation, which works with faculty, students and staff of the University of Nebraska Medical Center to help commercialize innovative ideas.

“One way we describe ourselves is [that] we’re the people between the lab coats and the suit coats,” said Dixon, who was in Aberdeen this fall as a keynote speaker for the Create ‘N’ Festival.

When faculty, students or staff come up with a new discovery, it’s UNeMed Corporation’s job to protect it, Dixon said. That includes filing patents and working with companies to develop that technology into a product.

Dixon works with a wide variety of products, including medical devices, therapeutics and software. Instead of getting specialized in one area, as is often the case with science, Dixon gets to be more of a generalist.

“I like the variety of that,” he said. “It gives me the opportunity to play in a lot of different sandboxes and have a chance to talk and work with people who are doing amazing things and really changing the way medicine is deployed.”

Dixon said he was honored to speak at Create ‘N’: A Festival Celebrating Entrepreneurship, Creativity, Innovation and Workforce, held on Sept. 19 at NSU. He was also happy for the



opportunity to come back to visit Northern.

“I was really excited to get back to campus, just to see it all again,” he said.

Growing up, Dixon was familiar with NSU since his parents, Ivan and Elizabeth (Strutz) Dixon, are both alumni. He chose Northern because he received the Presidential Scholarship and because he felt comfortable on a smaller campus where he could easily interact with professors.

At NSU, Dixon ran track, served as president of Jerde Hall, and participated in

Student Senate. The Presho, South Dakota native was a double major in biology and chemistry, graduating in 1998. While at NSU, he conducted research with his advisor and mentor, Dr. Lenore Koczon, a professor in organic chemistry, which helped give him the confidence to enter a research facility in pursuit of his career.

Dixon said he also gained confidence from social interaction at Northern, a small campus that was like a community.

“It had a big, family feel to it,” he said. “You got to know everyone.”

Dixon’s advice to current students is to take advantage of the opportunities they have at NSU. “You’re focused on your studies,” he said, “but there are so many things outside of that available, that if you’re able to take advantage of them, it can open up so many more doors.”

## Student Success

**Tessa Durnin**, a biology and environmental science major with a certificate in organismal biology, was the recipient of two prestigious awards this year. She received an Instars Fellowship from the Society for Freshwater Science that provided support for her to join over 800 freshwater scientists from around the world at the society’s annual meeting in Raleigh, N.C.

While at the conference, Durnin presented the results of her research conducted at Northern; her presentation was titled “Effects of Prescribed Burns on Chironomidae (Insecta: Diptera) Communities.” Durnin also presented the results of her research work in this area during the National Science Foundation South Dakota EPSCoR (Established Program to Stimulate

Competitive Research) RII Track 1 site visit at McCrory Gardens in Brookings in September.

The second award Durnin received is the Mary E. Baylor Memorial Scholarship from the South Dakota Ornithologists’ Union, a prestigious and competitive scholarship given annually to one undergraduate student attending a South Dakota college or university. Durnin is the second NSU student in the past three years to receive this award, following in the footsteps of 2015 recipient and NSU alumna Christina Renz. After completing her degree at Northern, Durnin is planning to attend graduate school to continue her work in environmental research.

**Taylor Bice**, an NSU senior with a double major in human services and English, was



## Student Success *continued...*

the recipient of the prestigious Fulbright U.S. Student Program Award from the U.S. Department of State and the J. William Fulbright Foreign Scholarship Board.

Bice is the third NSU student in recent years to receive a grant from the Fulbright program, a U.S. government-sponsored scholarship program that promotes international educational exchange. He is one of over 1,900 U.S. citizens who will conduct research, teach English, and provide expertise abroad for the 2017-18 academic year through the Fulbright program.

Bice's program of study at Northern was aimed at a career in teaching English overseas: in addition to completing his dual-major degree, he earned a Certificate in Teaching English to Speakers of Other Languages, and spent a semester as an exchange student at Anyang University in South Korea in 2014. After his Fulbright year overseas, Bice plans to pursue a master's degree in teaching, and then to teach in another country or stay in the U.S. to work with refugee students.

**Kevin Heilman**, a chemistry major, and Zach Mohs, a biology major, participated in the Project 8: Crystal Structure Identification in Natural Organic Matter as part of the National Science Foundation Research Experience for Undergraduates (REU) Program.

With NSU's Associate Professor of Chemistry Dr. Guangwei Ding as their mentor, they began their work with an orientation session in Pierre in May, and in the next 10 weeks engaged in review of the literature, sample collection, sample analysis at South Dakota State University (Dr. Rice's lab) and Northern State University (Dr. Ding's lab), data processing and analysis, poster preparation and presentation.

The results of the experiment were presented in August at the statewide REU Undergraduate Research Symposium in Pierre in two posters titled "Divergent molecular structures of natural organic matter" and "Suitability of different spectroscopic techniques in the characterization of natural organic matter." The symposium was sponsored by the South Dakota EPSCoR Program.

## Faculty Spotlight



**Dr. Courtney Waid-Lindberg**, associate professor of sociology and criminal justice, won Northern State University's 2016-2017 Outstanding Faculty Award based on her achievements in teaching, research and service.

Before coming to Northern, Waid-Lindberg earned a bachelor's degree in psychology at the University of Kentucky, a master's degree in criminal justice at the University of Alabama and a Ph.D. in criminology and criminal justice at Florida State University.

Since joining Northern in 2013, Waid-Lindberg has taught a range of engaging classes and established a strong rapport with students, a record recognized by colleagues around the region who selected her to receive the Great Plains Sociological Teaching Award.

Waid-Lindberg has published numerous peer-reviewed articles and book chapters in academic venues and is a regular presenter at professional conferences. Most recently, she won Northern's 2017 Nora Staal Evert Research Award for her project titled "Understanding the Needs of Victim Advocate Service Providers in South Dakota."

Waid-Lindberg's service contributions also have an impact across campus, including serving as a member of Undergraduate Student Research Committee, University Athletic Committee, Institutional Review Board Committee, and Academic Affairs Committee at Northern.

Beyond Northern, Waid-Lindberg's peers elected her president of the Great Plains Sociological Association with her term beginning in 2018. Her achievements are just one example of many of the dedication demonstrated by faculty throughout the College of Arts and Sciences to help our students succeed and contribute to our community and region.



## New Faculty and staff



**Dr. Erin Brownlee**, instructor of mathematics, grew up in Moorhead, Minn., where she also completed a B.S. in elementary education and a B.A. in mathematics at Minnesota State University, Moorhead. Brownlee went on to earn a Ph.D. in

mathematics at North Dakota State University. She is currently teaching intermediate algebra, calculus I and math concepts for teachers. Her research interests include graph algebras (or, more broadly,  $C^*$ -algebras) and elementary and undergraduate mathematics education. Over the years, she has enjoyed learning French and Italian and traveling in Europe, including studying abroad in Florence, a whirlwind tour through Europe, and most recently traveling with her husband on their honeymoon to Prague. They now have two children, Emilia and Dashel, and enjoy spending time playing and learning with them. Brownlee also enjoys reading memoirs and attending the opera.



**Mr. Gus Foote**, instructor of communication studies and director of forensics, is originally from Elk River, Minn. He earned a bachelor's degree at Saint Cloud State University and master's degree at Miami University, both in communication studies.

Foote is nearly finished with his Ph.D. from Ohio

University. His research seeks to rhetorically ground social media activism in order to further understand the persuasive capacities of these movements and explore the changing nature of political advocacy. In addition to his teaching public speaking, persuasion and rhetorical criticism, Foote also coaches the speech and debate team at Northern. When not at work, Foote enjoys spending movie nights with his wife, Rachel, and their two cats. He also looks forward to exploring the area and as much of the country as possible.



**Dr. Travis Trentham**, assistant professor of mathematics, grew up in Tennessee close to Great Smoky Mountains National Park. He attended the University of Tennessee, Knoxville, and graduated with a bachelor's in

philosophy. Trentham also took many math courses and could have earned a math degree had he taken one more course. He went on to earn a Ph.D. in mathematics from North Dakota State University. Trentham has taught a wide range of courses, including most classes one would expect to find in the curriculum of any math major. His research interests are in the field of commutative algebra, and he enjoys hiking, reading and following the stock market in this free time. Trentham and his wife, who is also an assistant professor of mathematics at Northern, have two children, Braedon and Rebekah.

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## Arts and Sciences at a Glance

(Academic Year 2016/2017)



Total  
full-time  
faculty

36



Total credits  
hours taught

27,609



Total majors

547

Degrees  
offered

23



Minors  
offered

18

8 Specializations  
offered



Degrees

158

Minors

43

Specializations

24



Honors

37

Total students graduating with



Graduates since  
Jan. 2000

1,627

Potential  
careers



1,000+



Outstanding  
faculty awardees  
(since 1995)

10

### Online Spanish Approved

The South Dakota Board of Regents has approved a bachelor's degree in Spanish in a fully online format through Northern State University. The request for adding the degree was formulated in response to growing demand for online delivery of Spanish courses already offered at the university. Only one other university in the country, the University of Arizona, currently offers a Spanish major online. The online program will be available in spring 2018.

### NSU Rising Scholars Program Accredited

The Northern State University Rising Scholars Program has been awarded accreditation by the National Alliance of Concurrent Enrollment Partnerships (NACEP).

The Rising Scholars program, which allows high school students to earn credit toward high school graduation and a college degree at the same time, began at NSU in 2005. The program partners with nine high schools in South Dakota, with one more school joining in fall 2017. As of fall 2016, 460 students were enrolled in the program.

"NACEP accreditation serves as a guarantee to students, administrators and postsecondary institutions that the Rising Scholars Program meets rigorous national standards in the areas of curriculum, faculty, student assessment, student support and program evaluation," said NSU Rising Scholars Program Director Terry Piatz.

NSU is the only university in South Dakota accredited by NACEP, the sole national accrediting body for concurrent enrollment partnerships.

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