Working at the Intersection of Environmental, Animal and Human Health

Danielle Buttke ‘04, Biology, Political Science

It’s a typical Thursday for Danielle Buttke, M.P.H., D.V.M., Ph.D., and One Health Coordinator for the National Park Service. Between one meeting on how best to communicate public health risks to visitors at national parks and another on preserving endangered species, she received a call about visitors interacting with bats at a park. Buttke also had an eye on the chikungunya mosquito-borne viral disease outbreak in the Caribbean and another on a large project to protect national park employees from zoonotic diseases.

“Every day it’s something new,” she said. “It’s an exciting place to be because I get to work on so many things on any given day.”

Buttke’s undergraduate years set the stage for her later career. The Corona, S.D., native grew up on a dairy farm and came to USD in 2000 with the intention of majoring in biology and political science to become a veterinarian. Once at USD, however, she was exposed to different aspects of science and expanded her horizons.

“Most of the credit goes to Karen Olmstead, who was chair of the biology department at the time,” Buttke said. “She really was incredibly energetic and enthusiastic about science and got me excited about it, too.”

Involvement in research projects, including developing a prairie habitat atop Vermillion’s waste water sludge ponds and studying endangered plant species in Kenya, spurred her interest in the process of scientific investigation.

“I knew then and there that I probably wasn’t going to just go to veterinary school,” she said. “I knew I had to have research in my life, too.”

Buttke went on to earn both a doctorate in veterinary medicine and a doctorate in comparative medical biology at Cornell University, in addition to a master of public health in global and environmental health from Johns Hopkins University. After earning her degrees, she investigated disease and environmental contaminant outbreaks as an epidemic intelligence service officer at the Centers for Disease Control. In 2012, she moved on to her current position at the National Park Service in Fort Collins, Colo.

“I feel as if this job was made for me,” Buttke said of her position at One Health. “My job at the National Park Service offers an amazing and unique opportunity to protect the health of our natural resources as well as our visitors and employees. I get to work right at the intersection of environmental, human and animal health, and I think it’s one of the most exciting and meaningful places to be for someone interested in health.”

Recalling the impact her education had on her career, Buttke said one of the best parts of her job is working with students who undertake research projects and summer internships at the park service.

Being close to her home state of South Dakota also suits her well. “It’s really important for me to have ties to South Dakota,” Buttke said. “Some of my favorite projects are working in parks in South Dakota or working with the state health department. I still feel a strong connection there.”
From the Dean’s Desk…

One of the great pleasures of serving as dean of the College of Arts & Sciences is meeting with some of our more than 22,000 alumni all around the world. Listening to their stories and learning of their professional and personal successes in life is extremely gratifying, especially when they mention that their USD education helped pave the way.

We’re still going to do our annual newsletter in early fall, as we’ve done for many years, but we decided to stop and share a few stories about some of our young alumni, all of whom have graduated from the College of Arts & Sciences within the last 15 years. Some of these young people left here with undergraduate degrees in the sciences or mathematics, while others majored in English or political science. All of them have interesting stories to tell.

We hope these stories convey the genuine, if sometimes intangible, worth of an education in the liberal arts and sciences. Our featured alumni do everything from running pension funds to tracking diseases in national parks, united by their common desire to make the world a better place.

Matthew C. Moen, Ph.D.
Dean, College of Arts & Sciences
Lohre Distinguished Professor

South Dakota Transplant Directs Indian University of North America

Jason Murray ’11, Ph.D., English

Jason Murray, Ph.D., had never been farther north than Kansas before he traveled to USD to become a graduate student in the Department of English. “I knew I wanted to attend graduate school in Indian country, so I looked at schools in the Dakotas,” said Murray, who grew up in Oklahoma and is a member of the Chickasaw and Choctaw nations.

Nearly 10 years after he first set foot in the state, South Dakota has become his permanent home. The Black Hills are where Murray now lives and works as the director of the Indian University of North America at the Crazy Horse Memorial Foundation.

The university administers an eight-week summer higher education program in which Native American and non-Native college-age students complete courses that equal one semester of college. The program is a joint collaboration between the Crazy Horse Memorial Foundation and USD and features an intensive academic and a structured residential component.

“Each year we bring in 32 freshman students from all over the United States,” Murray said. “This past summer we completed our fifth year and, overall, we’ve had 130 students come through the summer program, representing 25 different tribes and 16 different states.”

In addition to taking part in classes, students live in a structured residential setting, preparing them for life on campus, and participate in paid internships—all in the context of Native American history, traditions and perspectives.

Murray credited the people he met at the University of South Dakota with his fond memories of graduate school.

“I had read a little bit about USD, and I called and talked to John Dudley, the graduate program coordinator,” he said. “After a 15-minute conversation, I knew I was going to come to the University of South Dakota based on his willingness to take the time to engage me and send me information.”

After graduating from USD with a doctorate degree, Murray served as the associate diversity officer and assistant professor of English at the institution. “USD is a great place,” he said, adding that he is a steadfast booster for the institution.

“I’ll beat the proverbial drum of appreciation for USD from here forward.”

—Jason Murray
Even though she had one semester’s worth of French to take before she could graduate, Katie Douglas knew the opportunity to move to Washington, D.C., in January 2011 was too good to pass up. The Pierre native and political science major had just been offered a position as press assistant in the office of Kristi Noem, South Dakota’s sole representative in the U.S. House.

The move paid off. Douglas worked in Noem’s office and then at a trade association for insurance agents and brokers as the manager of its political action committee. She also completed her final French class and graduated with a bachelor’s degree in 2013. This January, Douglas began a position as the press secretary for newly elected South Dakota Senator Mike Rounds.

“It’s going to be busy,” said Douglas in a phone interview before she began her new position.

Douglas said she enrolled at USD as an anthropology major but changed to political science after a class with Mary Pat Bierle, an instructor in the political science department. “Mary Pat Bierle became my advisor and my mentor,” Douglas said. “She really was the one that lit the fire that kindled my interest in politics as a career.”

That kindling caught quickly as Douglas soon joined the College Republicans, served in student government, and worked as an intern at the state legislature in Pierre. Some of her fondest memories, however, are as an active member of the Kappa Alpha Theta fraternity for women at USD. “My Kappa Alpha Theta sisters are still my best friends,” Douglas said.

Once in Washington, D.C., the active and involved undergraduate turned her energies to working in the political realm. After a year in Noem’s office, Douglas moved to Independent Insurance Agents and Brokers as the trade association’s manager of political affairs and grassroots activities. There, she managed the organization’s political action committee and served as part of a team that lobbied on Capitol Hill. “It was good to experience a different part of the political process.”

As of now, the young Capitol Hill staffer said she has no plans to run for office herself in the future; her political involvement will stay behind the scenes. “I’d rather be in the background,” she added.

Although he attended both USD as an undergraduate majoring in chemistry and math, and SDSU, where he earned a doctorate in pharmacy, Garrett Schramm, Pharm.D., R.Ph., doesn’t hesitate when asked which school’s team he roots for when the historic rivals meet up for an athletic competition.

“Always USD,” said the former pole vault competitor. “I was a track athlete, so all of my sport allegiances are definitely with USD.”

He won’t take sides, however, when it comes to the academic preparation for his current career as a doctor of pharmacy and pharmacy residency program director at the Mayo Clinic in Rochester, Minn. “Having been at USD and SDSU, I honestly think that I had an amazing post-high-school experience for higher education. Both places are outstanding,” Schramm said.

At Mayo, Schramm oversees eight postgraduate pharmacy residency programs and directs the continuing education program for pharmacists. “In my free time, I do clinical work, research and teach,” he said. “I wear a lot of different hats.”

Schramm grew up on a farm in Utica, S.D., just outside of Yankton. A chemistry teacher in high school sparked his interest in the field, and Mary Berry, Ph.D., professor of chemistry, further encouraged his academic pursuits and co-authored Schramm’s first professional research paper with fellow students.

“Looking back at my experience at the chemistry department at USD, I now realize how special it was to be at a place that really does represent students,” Schramm said. “If I could pass on advice to incoming students, I would tell them that these individuals are not only your teachers and professors but they are also your allies and will provide support long after you graduate. That’s something that Dr. Berry has been for me.”

While there’s little opportunity to take part in his former intercollegiate athletic sport, Schramm said his time competing in the pole vault under coach and Olympian Derek Miles and head coach Dave Gottsleben helped shape his professional future. “Athletics was a key experience for me and it influences my life now,” he said. “You have accountability to perform but there is also the bigger team aspect. That’s how health care works as well.”
As a computer science undergraduate during the peak of the technology bubble in the early 2000s, Jarrod Edelen’s post-college fantasy involved sporting flip-flops and working out of his living room for an up-and-coming technology firm. Instead, Edelen joined the finance industry and is more likely to wear dress shoes and a tie as he manages $450 million in funds for the South Dakota Investment Council in Sioux Falls.

“Those aspirations proved not to be realistic,” Vermillion-native Edelen said of his flip-flop fantasies. Yet Edelen—a Phi Beta Kappa member who majored in computer science, mathematics, and economics and minored in German—would be the first to point out that his professional life turned out all right.

Edelen is the small- and mid-cap portfolio manager responsible for equity research for the South Dakota Investment Council. The council manages the financial assets of the state, including the public retirement system, which rates at the top of the public pension systems in the country. “We were actually just rated the best in the last 30 years of performance in all pension funds,” he said. “It’s quite an honor and quite a result, too. We’re proud of it.”

Although computer science was his passion, Edelen recalls Curtis Olson, professor and chair of mathematics at USD at the time, as a major influence during his undergraduate years. “In his classes, Dr. Olson was always very encouraging and always challenged people to figure out how best to solve problems. That problem-solving ability is something that has overwhelmingly helped me in my career.”

Math at USD is something of a family tradition for Edelen, whose grandmother, Marjorie Beaty, served as a professor in the department from the 1950s through the 1970s.

Playing college football also had a great impact on his professional life, Edelen said. As the Coyotes’ all-conference punter and a recipient of an NCAA post-graduate scholarship, “I learned a lot about hard work and succeeding and failing as a team. Lots of great things come out of participating in athletics.”

This young former athlete and world traveler never expected to end up living and working in his home state. “That was more of an outcome than a plan,” Edelen said. “I don’t think that at age 23 I was really thinking about giving back to the state, but a very rewarding part of my career today is getting to know and appreciate all of the people who benefit from the South Dakota Retirement System.”