Showcasing Academic Programs & Experiential Learning Opportunities
Believe it or not, there are institutions of higher education who currently advertise “pajama degrees.” That is, a student can get a degree in one of their academic programs without leaving their dorm rooms or apartments. They brag that a student can learn all they need to know from online courses.

Once I got over the shock of that concept, I contrasted it with the experience, expectations and opportunities we are providing for students in the degree programs in the College of Agriculture and Biological Sciences at SDSU. And I was still shocked.

In our college, we offer 19 undergraduate degree programs and 16 minors. And while we are proud of our online courses, and I understand and appreciate their role in modern higher education, the backbone of our programs is an engaged learning experience. In everything from advising to career counseling, seminars to guest speakers, travel courses to internships, undergraduate research projects to part-time jobs in our labs or on our farms, our faculty and staff are actively engaged and committed to providing our students a rich, experiential based, learning environment.

This approach is not only one of the historic strengths of the academic programs of our college, we continue to invest in it as part of our strategic plan for the future. From our Davis Dairy Manufacturing Plant, to the construction of our cow-calf and swine teaching and research facilities, to our new First Dakota National Bank e-trading Laboratory, “hands-on” is the clear path we are following.

We have chosen this path for two key reasons. First, we sincerely believe it is the best approach to prepare young people to be successful in their chosen careers. Secondly, it follows the resounding advice we have received from our College of Agriculture and Biological Sciences Advisory Board and feedback we have received from both alumni and employers.

The development and production of Barry Berry ice cream provides an example of how our students can engage in experience based learning that has real life application. The story starts at the SDSU Dairy Research and Training Facility north of Brookings, where students care for and milk the cows. The milk is transported to campus, where it enters the Davis Dairy Plant. There, students gain experience handling the raw milk and processing it for human consumption. Students developed the recipe and manufacturing procedure for Barry Berry, and then perfected the taste and texture of the mix through trial and error. The result is a simply delicious new ice cream flavor at the SDSU Dairy Bar and a wealth of experiences that make our Dairy Science students more competitive as they enter the work force.

The opportunities and challenges faced by our students as they move on after graduation will require them to be prepared in a wide range of traditional, as well emerging, skills and competencies. Skills in topics such as animal handling and husbandry are re-emerging as important areas for animal science students. Skills in “coding” will certainly emerge as an important communication ability for many of our students in biology, economics, agricultural engineering, and agricultural systems technology. And understanding and using “data” will be required of all.

Oral and written communication skills continue to be mentioned as important by all of the employers we interact with. Leadership skills and the ability to work as part of a team are also expectations.

The experiential learning our students are exposed to gives them important opportunities to get messy and study material from multiple angles. Mistakes are part of the learning process, and having a safe environment to acquire this type of knowledge makes our students more effective in their careers.

We stand behind our commitment to providing our students the best education possible. Providing opportunities to gain first-hand knowledge in real-life situations is key to fulfilling that promise.

BARRY H. DUNN, PH.D

Pictured above: South Dakota State University students, from left, Geena Mott, Minneapolis, Della Stage, Vesta, MN, and Samantha Berg, Pipestone, MN, join Barry Dunn, the South Dakota Corn Utilization Council Endowed Dean of the College of Agriculture and Biological Sciences and Director of SDSU Extension, as he samples Barry Berry ice cream - named in his honor - at the Davis Dairy Plant.

Correction: An important, long time supporter of the SDSU Pork Classic was incorrectly identified in the summer issue of the Growing South Dakota magazine. The pork loins used for the barbeque and the pork bundles auctioned off are donated by John Morrell & Co., with proceeds benefitting student scholarships within the Animal Science Department. We apologize for the error, and we are grateful for all that John Morrell & Co does to support South Dakota State University. Plan to enjoy Jackrabbit basketball at the Pork Classic to be held February 6, 2016, at Frost Arena.
Internships Lead to Career Opportunities

By Sydney Sleep

SDSU College of Agriculture and Biological Sciences students have unique opportunities to gain hands-on experience in their career fields through a vast array of internships. This experiential learning provides students with insight about what types of careers are available in their field of study. Many students in the College of Agriculture and Biological Sciences have gotten to develop new skills while having positive and educational experiences through internships, some even leading to future careers.

Brady Wulf, Jorgensen Land and Cattle

Brady Wulf, a sophomore Agricultural Science major from Morris, MN, spent the summer interning with Jorgensen Land and Cattle located in Ideal, SD. Wulf learned about Jorgensen Land and Cattle at the 2014 Ag-Bio Career Fair, and interviewed for the internship after the fair. When Wulf learned that he had gotten the internship, he toured the Jorgensen operation during spring break and learned what he would be doing over the course of the summer.

Through his internship, Wulf had a wide variety of experiences. “I got to work with cattle, crops, and in the shop, so I learned a lot about everything,” he said. Jorgensen Land and Cattle is the largest bull marketer in the nation, so the first part of the summer Wulf spent sorting bulls individually for customers. He also fed the bulls over the course of the summer. After sorting was done, he spent the rest of the summer haying.

Wulf has a mainly livestock background, so he really enjoyed learning about the crop side of things. “I need a knowledge of crops to raise cattle, too, and will definitely use it when I go back to the family operation,” Wulf remarked. “It was also very beneficial to work with another family to get a different perspective and learn from the ways that they do things.”

Jessica Eibs, Purina

Jessica Eibs learned about a whole new facet of the livestock industry during her feed sales internship. The senior Animal Science major from Arlington, MN, spent the summer as a swine feed salesman for Purina in Gibbon, MN. Having heard about the internship opportunity earlier, Eibs interviewed for the position at the 2014 Ag-Bio Career Fair.

Eibs spent the summer visiting producers and promoting swine feed to customers. During that time, Purina released a new product, giving her the opportunity to inform and educate producers. Eibs was also responsible for monitoring pigs as they were moved from barn to barn, checking to see if any were injured and conducting saliva tests for the Porcine Reproductive and Respiratory Syndrome (PRRS) swine disease.

In spite of her previous lack of experience with this particular livestock species, Eibs enjoyed the learning process. “I really got to know the pork industry; the entire process from when feed is ordered to when it’s delivered to the farm,” Eibs said. “I also learned the importance of building customer relationships and different approaches to use when selling products.” She says she would enjoy making a career with Purina in the future.
Kelli Garry, John Deere

Kelli Garry's internship experience this summer opened the doors to a job when she graduates from SDSU in the spring. The senior Agricultural Education, Communications and Leadership major from Lake Preston, SD, spent the summer as the media relation's intern for John Deere in Olathe, KS. Garry learned about the John Deere internship while attending an Agriculture Future of America Conference.

During her internship, Garry helped coordinate and write press releases about 16 pieces of John Deere equipment. She also put together a pocket price book that would help the company's employees share product information with their customers at farm shows.

In addition, Garry was able to put her graphic design skills to good use on employee communication materials. She also wrote stories to keep employees updated on what was going on in the company. "It was really neat to use the skills I had gained from my graphic design classes in a new setting and learn how to work within (company) guidelines," Garry explained.

Her internship gave Garry a good opportunity to learn more about the culture of the company. "Everyone that worked for John Deere really seemed to care about the customers," Garry said. "The heart that employees put into their jobs was really cool to see."

During the first weeks of the fall semester back at SDSU, Garry received and accepted an offer to join John Deere’s marketing representative program after graduation. This will then lead into a full-time position with the company.

Joshua Way, Summit Farms

Another student who gained valuable experience from his internship is Joshua Way, a senior Agricultural Systems and Technology student from Cologne, MN. Way was a row crop intern with Summit Farms in Springview, NE. He learned about Summit Farms at the 2014 Ag-Bio Career Fair, went through an interview process, then visited the farm and was offered the internship.

"I did everything related to operating a farm," Way explained. "I helped with planting, crop scouting, maintaining center pivot irrigation, and whatever field tests needed to be done."

Overall, according to Way, the most valuable thing he learned was what to look for when crop scouting. "I most enjoyed being involved in all the variety of activities on the farm," Way said. He noted he would gladly participate in the internship again because he gained a lot of beneficial experience and learned that he would enjoy pursuing a career related to precision agriculture.

Through the various internships these and many students are offered, they gain valuable work experience and build skills for their future career fields.
IN 2003, SDSU HAD SIX UNDERGRADUATE STUDENTS accepted into professional school; in 2015 that number has proudly grown to 54 students.

What’s prompted the growth? Greg Heiberger, who is undergraduate program manager and lecturer within the Department of Biology & Microbiology, attributes it to several factors that have helped build support – and energy – among SDSU faculty and students pursuing pre-medicine (M.D. and D.O.), pre-dental, pre-optometry, pre-physician assistant, pre-chiropractic and pre-mortuary science as careers.

Heiberger says, “We have focused on doing everything we can to help students be academically successful, and the results can be seen in the growth and acceptance rates of our program.”

Heiberger reports that students pursuing pre-professional programs at SDSU are supported from the day they arrive to the day they matriculate to medical school. Over the past decade, SDSU has invested notable resources to advance student preparation for professional health care careers. This includes offering a high school health professions career camp each July, a first-year seminar series, a career seminar series, upper-class peer mentors for all first-year students, a high level of engagement with department faculty – both in and out of the classroom, free tutoring, admissions application preparation, admissions test preparation and a full-time academic advisor dedicated to pre-professional health care students. As well, students have the opportunity to gain experience in modern facilities and laboratories.

DISSECTION EXPERIENCE
SDSU offers specialized technology and numerous newly renovated biology laboratories, and houses the state’s only undergraduate dissected human cadaver-based anatomy lab.

Heiberger explains that very few universities in the region have human cadaver labs, and most only allow faculty and medical students to dissect. But at SDSU, undergrad students who are successful in the course can further their training through an anatomy internship and hands on dissection. Each year, nearly 100 students gain experience teaching and dissecting through SDSU’s internship program in anatomy. From those interns, 15 undergrads each year are selected and gain 100 hours of dissection experience while completing a full dissection of a human cadaver.
Avera Physician Credits SDSU For Providing Foundation To Excel

"As an alumnus of South Dakota State University, I am so proud. It is an honor and a privilege to represent our alumni as a physician in Sioux Falls." That was the message Benjamin Solomon (pictured at left) shared with 2015 SDSU Pre-Professional graduates recognized during the Stethoscope Ceremony hosted by the Biology & Microbiology Department last April.

The Stethoscope Ceremony was established in the department in 2015 to recognize students accepted into professional school and present them a stethoscope personalized with the student's name and an SDSU insignia. In its inaugural year, 54 SDSU students were recognized in the ceremony.

During his remarks at the spring 2015 ceremony, Solomon, a 2003 SDSU graduate who is now a hematology and oncology specialist with Avera, said, "I look back on my time here so fondly...knowing that it was the foundation that was laid here in Brookings, South Dakota, which allowed me to excel during medical school and pursue subspecialty training at the Mayo Clinic. I never once felt outmatched amongst my medical school peers. Never once did I notice a gap in my undergraduate education. I was prepared, and so are you. So it is truly an honor and a privilege to call SDSU home."

Solomon, who served a term as Students' Association Vice President during his time at SDSU, reminded graduates, "You are the future leaders amid a changing healthcare landscape. There will be many opportunities for you to be effective leaders. When you are met with roadblocks, do not lose sight of how far you have come to reach your goals. The virtue of patience can provide you with a sense of calm amid turbulence. As a leader in healthcare you will work every day with people with opposing opinions and goals. Remember that we can always find common ground. And that common ground provides the foundation for healthy relationships and progress...Most importantly, remember as you study, as you take exams, as you work long hours to achieve your goal. Remember that it is an honor and privilege to provide healthcare."

"Students on the dissection team gain hundreds of hours of dissection experience. It takes a lot of dedication, but it also affords them valuable opportunities as they develop essential skills for future health care professions," explains anatomy Professor Scott Pedersen, who teaches the human gross anatomy laboratory.

"The anatomy internship is very beneficial for the development of our students' anatomical knowledge, as well as important skills in communication and leadership," Pedersen adds.

Additionally, Heberger notes that the unique lab experience boosts SDSU students' acceptance into professional school. He reports that the national average for acceptance is about 45%; SDSU's anatomy interns gain admission at nearly 70%.

Heberger says another boon for SDSU pre-professional undergrads is the opportunities to gain practical research experience working with SDSU faculty. Each semester, numerous undergrads take part in Biology & Microbiology research projects such as virology, microbiology, immunology, cell biology or genomics. Many get to present their findings at regional conferences of the American Society for Microbiology, American Society for Biochemistry and Molecular Biology, American Society for Plant Biology or the South Dakota Academy of Science.

ADVISING & MENTORING

Establishing a foundation for student support has also been key to the success of SDSU's pre-professional health care program. In 2007, a full-time pre-professional advisor position was created to work with students across pre-professional healthcare programs. "This commitment was made to support students with the increasing complexity of preparing for, applying to and gaining admission to professional school," explains Heberger. Currently, Marj Thompson serves as the full-time pre-professional adviser. She advises all pre-professional students, the American Medical Student Association, Pre-Professional Science Club, coordinates MCAT prep and teaches the first year seminar series.

As another effort to foster student success, a peer mentoring program has been created, which pairs junior and senior pre-professional students with incoming freshmen. "They have class together for 2 hours each week, which includes case studies in biology and human health, and the upperclassmen share knowledge, engage with them throughout campus and in the Brookings community, and help freshmen build a 4-year plan to be successful. It has been very well received," says Heberger.

Additionally, an MCAT workshop is offered to SDSU pre-professional undergrads to aide preparation for professional school admissions tests. And, in the last few years, Mathews Hall on campus has been designated as the Health Professions Living Learning Community, and the Van D. and Barbara B. Fishback Honors College's Honors Hall has allowed dedicated pre-professional students to live in the same residence hall. This facilitates the formation of study groups and provides access to programming, mentoring and community building.

FACILITATING NETWORKING

Most recently, the SDSU pre-professional program has turned to LinkedIn to foster expanded opportunities for its students. "We wanted to utilize social media to allow for professional networking connections among our students, faculty and alumni," shares Heberger.

Using LinkedIn, which bills itself as the "World's Largest Professional Network," a group page was created during the Spring 2015 semester and within six months has garnered nearly 550 members.
Heiberger reports that the effort has served as an effective tool to enhance communication among students and faculty on campus, as well as outreach with alumni. “We’ve been able to post internal undergraduate research opportunities and also use it to post internships and job shadow opportunities. Our alumni have responded to discussion forums, and some have also used it to share job opportunities with our students. It has created the professional engagement we were hoping for,” he states. To join the LinkedIn group, search Biology & Microbiology Department SDSU and request to join.

Interested SDSU students can also join the Pre-Professional Club and/or the American Medical Student Association (AMSA), both of which allow opportunities to network with others in their field, visit professional schools, attend professional meetings, connect with other students and participate in community service. Heiberger notes that the AMSA chapter is another unique benefit SDSU offers as very few universities across the nation have chapters for undergraduate students.

**TESTAMENT TO SUCCESS**

Heiberger says the multitude of efforts to provide SDSU pre-professional students a wide scope of experiences and professional networking experiences has resulted in a very competitive program that prepares students for professional careers.

One further testament to these efforts is a formal admission agreement with three Doctorate of Chiropractic programs – Northwestern Health Sciences University, National University of Health Sciences and the University of Western States – when SDSU undergraduates meet specific criteria. “The programs allow matriculation after three years or prerequisite coursework which expedites the time to professional school by one year and still allows our students to graduate with a B.S. in Biology. This agreement is a huge benefit to our students,” notes Heiberger.

Editor’s Note: For more information visit www.sdstate.edu/biomicro. High school students interested in SDSU’s pre-professional programs can learn more by attending the Health Professions Career Camp held on campus in July.

**Pre-Veterinary Students Also Recognized**

In addition to human health care pre-professional programs, SDSU offers a pre-veterinary program for students intending to pursue a degree in veterinary medicine. During the last four years, a special Stethoscope Ceremony has become an annual event held for students completing pre-veterinary coursework at SDSU and gaining acceptance to veterinary school.

The stethoscopes are presented to each student by an individual of the student’s choosing, someone who played a special role in their education while at SDSU. The stethoscopes are personalized with the student’s name and an SDSU insignia. The event is sponsored by SDSU’s Veterinary and Biomedical Sciences Department and the South Dakota Veterinary Medical Association.

Of the ceremony, SDSU Professor and Extension Veterinarian Russ Daly says, “This has been a nice addition to our program – a way to honor our students and give them a platform to thank those who have been instrumental in their success.”

In 2015, 8 SDSU pre-veterinary students were recognized. Since the ceremony’s inception, 45 students have been honored.
GROWING UP, KELSEY DUCHENEAX was immersed in the culture of the Cheyenne River Sioux. “I was raised with the mindset that the plants and animals are my cousins. All elders are my grandparents and first, second and even third cousins are my brothers and sisters. We are all related, and as family, we need to help each other out,” says the tribal member, Gates Millennium Scholar and 2015 Range Science graduate of South Dakota State University.

Ducheneaux pursued a degree in Range Science because she was impressed by how closely the overall philosophy of the program at SDSU mirrored her own. “The Range Science program teaches its students that everything in nature is connected – and as humans we have a responsibility to care for it,” says the 21-year-old who plans to use her Range Science knowledge and the leadership skills she enhanced during her time at SDSU to abolish food deserts in Indian Country.

Helping members of the Cheyenne River Sioux Tribe succeed is a task Ducheneaux takes seriously. Ultimately, the fourth-generation rancher sees education and food sovereignty as key components to a healthy community.

With less than 14% of tribal members holding degrees past high school, the first step in Ducheneaux’s plan is to empower tribal youth to pursue post secondary education. “Education is critical to improving life on the Reservation – and that applies to food sovereignty. Now more than ever, the Tribe needs members involved in agriculture – whether that is agricultural law, marketing, policy, production, advertising – the list goes on,” she says.

Ducheneaux recently became the program director of Project H3LP!, which was founded in November of 2013 by her uncle, Guthrie Ducheneaux. He worked for the Cheyenne-Eagle Butte School for 14 years and now works for the Indian Health Service in Eagle Butte. The non-profit, which received its 501(c)3 status in October 2014, will primarily serve local Native American youth.

Lifemanship lessons are developed through horsemanship and ranch work on the Ducheneaux family ranch and are made available at no cost to Native American youth. To accommodate Project H3LP!, the Ducheneaux family recently constructed an indoor arena and bunkhouse on their ranch.

“We’ve had youth come in after a day of riding and working cattle truly changed. There’s something about accomplishing a day’s work that provides a sense of accomplishment,” Ducheneaux says. “The 3 in its name stands for Horses, Humans and Honesty – but truly, depending on your experience and needs, it may represent happiness or hope.”

Project H3LP! will also travel to other reservations for demonstrations and discussions on being a catalyst for change. To learn more about Project H3LP! visit www.projecth3lp.org.

— By Lura Roti

MORE THAN A DEGREE

While pursuing a Range Science degree at SDSU, Kelsey Ducheneaux honed her leadership skills. She served as an Ag Bio Ambassador, was president of the Range Club, was a member of the Range Judging Team and Alpha Zeta agriculture honor society, and attended the Agriculture Future of America leadership conference and Agriculture Policy Institute. She also served as a student leader for Native Youth in Food and Agriculture and is an Intertribal Agriculture Council youth conclude leader.

“T was a leader before attending SDSU, but the opportunities provided to me as a student helped to further develop my leadership skills,” says Ducheneaux, who was the 2015 Commencement speaker.
Preparation students for a lifetime of learning and opportunities

By Don Marshall, College of Agriculture & Biological Sciences
Associate Dean and Director of Academic Programs

CURRENT PREDICTIONS suggest a global human population that will grow to 9 billion by the mid-21st century. As a result, major challenges to society will include how we go about meeting the increased demand for food, water, energy, living space, and health care, while sustaining the planet for future generations and using production methods that are socially acceptable and economically viable.

Efficient use of renewable resources through improved technology will be a key, but we also want to ensure a good quality of life in terms of clean air and water, health care, opportunities for leisure and recreation, and preservation of unique natural ecosystems and landscapes.

These societal “grand challenges” are daunting, but also represent outstanding career opportunities for students majoring in the core disciplines of the SDSU College of Agriculture and Biological Sciences.

SDSU offers an array of majors across our Departments that offer career paths that address the grand challenges of the future; from food production, processing, marketing, and agribusiness to resource preservation, environmental sustainability, seed technology, bioenergy, food safety, and pharmaceuticals. As well, SDSU offers outstanding pre-professional curricula for students intending to apply to health-related professional schools (medicine, dentistry, veterinary, etc.).

History tells us that many of our current students will change jobs multiple times or be employed in future careers that don’t even exist today. Thus, it is critical to prepare our students to be lifetime learners who are capable of updating their educations, learning on the job, and retooling their training over time. This point emphasizes the importance of basic skills and knowledge, including the general education core, so that students have a strong educational foundation on which to build future learning.

The volume of new knowledge created around the globe each week is astounding, and thus learning how to find, filter, and analyze information for decision-making will be more useful than memorizing facts in most occupations. Successful employees will be able to learn new technologies rapidly and work in teams to find creative solutions to complex problems. And, as employers of ABS students frequently remind us, the so called “soft skills,” such as communications, interpersonal relations, global awareness, and professional integrity and ethics will continue to be critical for career success.

To ensure that our students will be prepared to thrive in an ever-changing future, ABS College faculty are working hard to update curricula and develop new programs. Academic majors in Food Science and Natural Resource Law Enforcement were offered this fall for the first time in our college, along with minors in Food Safety and Meat Science. A new minor in Precision Agriculture was started a year ago and already has more than 50 students enrolled, leading us to propose a new major which we hope to offer starting fall of 2016.

We are also in the midst of major renovation and replacement of educational facilities so that our students have opportunities for hands-on learning in top-notch facilities. New livestock facilities, dairy processing plant, McCrory Gardens education and visitor center, an electronic financial trading room, precision ag technology, and new and repurposed classrooms are among the improvements. We anticipate a new teaching laboratory for human anatomy classes in the near future, as well. Our sincere gratitude goes to the many donors who are helping make possible these outstanding learning environments!

While it may not be possible to predict the future, it seems clear that the global grand challenges associated with food, water, energy, health (human, plant, and animal), and environment will present outstanding career opportunities in the 21st century. Essentially every academic program in the SDSU College of Agriculture and Biological Sciences is designed to prepare students to tackle one or more of these challenges in careers that seem destined to be important, rewarding, and in high demand.
Investing In The Future
Scholarship Donors Share Commitment
To Supporting Student Success

“WE WANT TO MAKE SURE THE FUTURE OF AGRICULTURE STAYS STRONG,” says Dan Murphy of the scholarship support Wells Fargo has established with SDSU’s College of Agriculture & Biological Sciences over the past two decades. Murphy is region president for Wells Fargo in North and South Dakota.

Similarly, other scholarship donors share that sentiment of investing in the future generation of agriculture. Al Miron resides near Sioux Falls. After dedicating 40 years to his career as a nutritionist in the feed industry, he and his wife Joan recently established an endowed scholarship at SDSU. Of the ag-focused scholarship, he says, “We feel education is very important and want to see young people in South Dakota have opportunities for their futures.”

Larry Trebesch, COO of the privately-held agronomic technology company Farmers Business Network, adds, “With SDSU being the state’s land-grant university, we recognize that many students are interested in returning to their family farms. Our hope is that the scholarships we support will help contribute to their educational goals and career pursuits.”

Trebesch notes that in the rapidly evolving agricultural industry, technology and data management are quickly becoming essential skills — today and into the next generation. He continues, “Many of our employees come from multi-generation farms themselves. We are committed to the entrepreneurial farmer.”

Wells Fargo holds a similar view. Murphy explains, “We know that agriculture is more volatile and complex than almost any other industry, and that’s exactly why we made this investment [in Ag & Bio scholarships]. One day, SDSU students will take over their family farms and ranches, and ensuring they have the tools and resources to be successful is a priority for us.”

For Miron, giving back to SDSU is also very personal. He and his wife have felt fortunate to have lived in South Dakota for the past 45 years and raise their family here. As a result, they view supporting scholarships at SDSU as a way to give back to their community.

He adds, “Agriculture is my love and my background. We are trying to help people in that field.” Though he didn’t attend SDSU, Miron worked with SDSU frequently during his career, and says, “I always had the assistance I needed from people at SDSU and I want to do the same for others.”

Likewise, Murphy concludes, “At Wells Fargo, we believe we’re only as successful as the communities we serve, so we’re committed to providing the resources that our communities and educational institutions need to grow and prosper.”

For more information about supporting scholarship programs within the SDSU College of Agriculture & Biological Sciences contact Mike Barber or Abbie Cribbs at the SDSU Foundation toll-free at 888-747-7378.

MORE ABOUT THESE SCHOLARSHIP DONORS

The Alfred and Joan Miron Endowed Scholarship was established in 2015 and is directed toward students majoring in Animal Science, Dairy Science or Plant Science. Also established in 2015, the Farmers Business Network Scholarship is directed toward students studying Ag Business, Ag & Bio Systems Engineering, Plant Science, Plant Pathology, Precision Ag or Agronomy.

In 1999, Wells Fargo created an endowed scholarship program at SDSU to support student scholarships within the College of Agriculture & Biological Sciences. Through the endowment, they have provided $88,000 in scholarships to 94 students over the past 10 years. Additionally, Wells Fargo has contributed to the fundraising campaign for the SDSU Cow-Calf Research and Education Unit and is planning an additional gift in the near future to support SDSU’s sustainable agriculture efforts. Wells Fargo also supports an endowed scholarship program for mathematics and statistics, with a focus on Financial Engineering.
Housing Updates Underway For Ceres, FarmHouse

Two new housing developments are underway in SDSU's Greek Village. FarmHouse Fraternity is building a two-level house on the organization's lot, while Ceres Women's Fraternity is constructing its first house in SDSU's Greek Village — it also marks the first Ceres chapter in the country to construct living quarters for its members.

The SDSU FarmHouse Chapter was founded in 1966. “The current house, which was built in 1978, has served our members well, but it was time to update and look to the next 50 years,” says former member Craig Weber, a Minnesota native who graduated from SDSU in 1989. Weber, now farms near Arlington, SD, and is currently serving as treasurer of the SDSU FarmHouse Association committee that is overseeing fundraising contributions toward its new building.

Weber says support from FarmHouse alumni has been amazing, and nearly $1 million has been raised. More information about the project is available online at www.buildinguponthebrick.com. Construction on the new 50-man house is expected to be completed in December 2015.

Established in 1991, the SDSU Ceres Chapter is for female members who share an interest in agriculture. Membership and support of the chapter has grown to the point that the need for a house was imminent. The house will feature 18-single rooms that can be changed to double rooms as the chapter continues to grow.

For the building project, Ceres was able to partner with the State College Development Association and FarmHouse to utilize a portion of the former FarmHouse structure. The two-level Ceres house will feature a lower level with the former Farmhouse structure placed on that foundation to create a second level, reducing construction costs. It is anticipated the Ceres house will be completed in April 2016.

SDSU student Molly Reifenberger, a junior athletic training major from Watertown, SD, is the current president of Ceres, and is excited about Ceres having a house in SDSU’s Greek Village. She says, “I strongly believe having this will help us grow tremendously as a chapter. Having a presence in Greek Village will also allow us to grow better bonds with members of other chapters.”

Angela Loftness, advisor to Ceres, shares that the Ceres house has been made possible through generous partnerships and support. A fundraising effort is underway to raise funds for the Ceres house through the SDSU Foundation, for more information contact Abbie Cribbs at (605) 697-7475.

Animal Science Student Nationally Recognized

SDSU student, Erin Doherty, won the American Society of Animal Science (ASAS) national undergraduate poster competition at the ASAS's 2015 Joint Annual Meeting in Orlando on July 15. She is an SDSU senior from Luverne, Minn., pursuing a biotechnology major and chemistry minor.

Doherty is the first SDSU undergraduate to win the poster competition, which showcases student research from universities nationwide. Her poster highlighted research investigating ways to increase the efficiency of how starch is digested in the small intestine of cattle, which has the potential to allow for increases in efficiency of cattle gain and an increase in marbling of the beef.

PLAN TO VISIT SDSU IN 2016

**Pork Classic**, February 6, Frost Arena  
**Lamb Bonanza**, February 27, Frost Arena  
**Little International**, April 1-2, Animal Science Arena  
**Campus Ag Day**, April 5, University Student Union

Doherty’s research is the result of a collaborative project she has worked on for the past year under the guidance of Derek Brake, SDSU Assistant Professor of Ruminant Nutrition, and George Perry, SDSU Professor and SDSU Extension Beef Specialist.
Joe Roybal, Woodbury, MN, was recognized as the 2015 South Dakota State University Friend of the Beef Industry during the SDSU Beef Bowl football game in Brookings, Sept. 25.

Pictured (left to right) presenting the award are David Chicoine, President of SDSU, Joseph Cassady, Head of the SDSU Animal Science Department, Roybal and his wife Peg, and Barry Dunn, South Dakota Corn Utilization Council Endowed Dean of the SDSU College of Agriculture & Biological Sciences and Director of SDSU Extension.

A SDSU Journalism graduate, Roybal is widely recognized as a beef industry leader. The Rapid City native most recently contributed his time and talents during a 30-year career with BEEF magazine, a national trade journal for U.S. beef producers.

SDSU Enrollment Maintains Growth For 2015-16 Academic Year

Figures released by the South Dakota Board of Regents show 12,589 students are enrolled at South Dakota State University, an increase of 32 students from last year. Overall undergraduate enrollment increased by 52 students from last year with 10,844 students enrolled.

Figures also show 2,222 first-time freshmen enrolled for the fall semester, the university’s sixth-largest freshman class. South Dakota State has reached its strategic enrollment range of 2,200 to 2,300 freshmen for the sixth consecutive year.

According to President David L. Chicoine, the enrollment figures are a snapshot of the university and match well with goals and performance indicators of IMPACT 2018, the university’s five-year strategic plan. Chicoine stated, “Undergraduate enrollment increased again even as the number of high school graduates in South Dakota alone has reached its lowest point in recent years. While graduate enrollment shows a slight decline, it remains competitive based on research expenditures and the increased number of successful grant applications produced by faculty.”

Nonresident enrollment, students attending the university from outside South Dakota, increased by 77 students to 5,185. The Dakota Return program – which awards children of SDSU alumni outside of South Dakota in-state tuition – yielded 72 students, exceeding the goal by 28 students.
THIRTY-SIX SEATS POSITIONED IN front of eighteen dual-monitor computer stations, a wall of screens for displaying charts and news, and a long digital board scrolling with the latest stock market data greeted SDSU Economics students as they returned to class in Berg Agricultural Hall Room 139 this fall. The newly created “e-Trading lab” is designed to give students real-world experience as they prepare for their future careers.

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Officially named the First Dakota National Bank e-Trading Education Laboratory, the specialized classroom was made possible through Provost Laurie Nichols’ classroom enhancement initiative and through donations from First Dakota National Bank, CHS, CoBank, Farm Credit Services of America, Wheat Growers and South Dakota Association of Cooperatives. Their contributions also support annual subscriptions to real-time financial and commodities market data and information services provided by Bloomberg, Morningstar and DTN, which provide students with the means with which to analyze agricultural, financial, and stock markets within the classroom.

With classes in Agricultural Finance, Business Finance, Investments and Advanced Agribusiness Marketing underway for the fall semester, the new lab has exposed students to the fast pace and flurry of change common to global
Outside the classroom, SDSU Economics students have an abundance of opportunities to hone their career and leadership skills through a variety of student clubs and competitions. A decade ago, the lone student club in the Department was the Economics Club. Now, it is joined by four additional undergraduate student clubs, including CEO (Collegiate Entrepreneurs’ Organization), NAMA (National Agri-Marketing Association), FIRE (Finance, Insurance, & Real Estate) and a student Investment Club. Additionally, an Economics Graduate Student Association (EGSA) allows for professional development and networking for graduate students.

Of the expanded student clubs Professor Nicole Klein notes, “Our department has really focused on providing opportunities for students to pursue their interests and showcase their skills.” To coordinate communication and activities within the Department’s student organizations, the Internal Council of Economics (ICE) was founded by the student leaders and includes representatives from each of the five student clubs on the council. These student leaders then coordinate several department-wide events: the fall Kick-Off which targets freshmen and sophomores and introduces the extra-curricular activities and programs of study to students, the Celebration of Excellence banquet, and a leadership retreat each spring for outgoing and newly elected officers from all the student clubs in the Economics Department.

SDSU Economics students also have opportunities to compete in several national and international competitions related to their fields of study, reports Klein. Student teams have competed in the Academic Quiz Bowl at the American Applied Economics Association academic meetings each of the past three years, coached by faculty member Tim Meyer. They placed second nationally in 2014. In addition, SDSU has had students selected to attend the USDA Agricultural Outlook Forum Student Diversity Program in Washington, D.C.

Graduate student teams have competed in case analysis in the U.S. (Atlanta and Minneapolis), Canada and South Africa over the past three years. A case writing team, advised by Carol Cumber, took third place in the national competition at the U.S. Association of Small Business and Entrepreneurs conference in Tampa this spring.

Klein says that seeing the students represent SDSU in these noteworthy national and international events is energizing for the entire Economics Department. “It’s exciting to see the enthusiasm in the students. They are excited to showcase their skills, and the opportunities to be involved helps build confidence in themselves.”

In addition to coursework, the First Dakota National Bank e-Trading Education Laboratory will be utilized by the Economics Department’s student investment club, which attracted nearly 70 interested members at their first meeting for the semester.

In the future, the e-Trading lab may also be available to host summer workshops, high school camps, and SDSU Extension risk management classes for producers.

Editor’s Note: SDSU’s Department of Economics includes more than 750 undergraduate students and over 30 graduate students. Five majors are offered: Agricultural Business, Agricultural and Natural Resource Economics, Economics plus a specialization in Business Economics, and Entrepreneurial Studies. To help connect students with employers, the Economics Department also hosts the Economics & Management Career Fair on campus during the fall and spring semesters. For more information about the Department visit www.sdstate.edu/econl.
Lessons In Leadership
Student Organizations Help Hone Real World Skills

BLOCK AND BRIDLE, COLLEGIATE 4-H, Alpha Zeta, Ag Bio Ambassadors – there are several dozen agriculture and biological sciences-related student organizations within the ABS College and nearly 200 student groups across campus to match student interests. Activities offered by organizations range from intramural sports and community service to professional development for careers.

What do students value from these experiences? Of her involvement in student organizations, Andrea Rief, a junior animal science major from Missouri Valley, IA, says, "It has taught me how to manage my time, how to become an effective leader, as well as utilizing my skills while working in a team. I know the leadership skills and people connections I have made through my extra-curricular involvement will positively benefit me in the future with my classes and in my career."

Rief’s involvement has included Collegiate 4-H, serving as an Ag Bio Ambassador and being a representative on Ag&Bio Prexy Council, which holds monthly meetings to enhance communication and collaboration among clubs and organizations in the College. The Council also hosts special events such as the fall semester Ag-Bio ice cream social and the spring campus-wide Ag Day. This school year, Rief is President of the Council.

Through her activities with student organizations, Rief says she has gained experience organizing large group events, leading group discussions, and even reaching out to others.

Similarly, Maggie Stiles, a senior dairy production and speech communication major from Lakeville, MN, credits her involvement in student organizations like Ag&Bio Prexy Council and Dairy Club with creating opportunities to work with others on a team. She says, "Since Prexy Council encompasses all of the clubs within the College, we have a wide range of experiences and interests. It has been great to work with and learn from my teammates. Teamwork skills are priceless in classes and jobs."

Stiles is also currently the Vice President of the SDSU Dairy Club, and Treasurer for Sigma Alpha Professional Agriculture Sorority. She also participated in Little I for two years, winning Dairy Showmanship as a sophomore. Of that experience she says, "It really taught me a lot about time management because that year I had 21 credits and decided to show a beef bull and a dairy heifer. It was a wonderful experience."

Stiles advises other students, "Do not be afraid to jump in and join. I joined everything I could my freshman year. I made so many great friends and connections through my involvement and learned a lot along the way."

Rief adds, "Everyone’s journey at SDSU is totally different and unique. It is your own choice to get involved in activities..."
outside the classroom, and from my experiences I am so happy that I did. The networking and the different people that I have met has only benefited me in my journey here at SDSU."

Mary Christensen, who is Coordinator of Advising and Student Retention within the ABS College and also serves as a faculty advisor to the Ag&Bio Prexy Council, notes value from student involvement. She says, "I believe getting involved in a club or organization can help students feel connected to the university and their involvement can foster student success. Additionally, participating in club activities provides a space for students to learn valuable skills that will benefit them in future careers."

For more information about SDSU's Clubs and Organizations visit: http://www.sdstate.edu/campus/clubsorg/

LITTLE I – 93 YEARS OF LEADERSHIP

Each spring the SDSU campus hosts a two-day agricultural exposition called Little International – or Little I – which features livestock shows and ag-related judging competitions. The event typically attracts more than 2,000 FFA students from surrounding states for the judging contests and showcases 160 animals representing six species being fit and shown by college students in the Animal Science Arena, which is set up to include a large red barn, white fence and green wood chips.

The 2016 Little I will be held April 1-2, and represents the 93rd year for the event. Perhaps most unique about Little I is the fact that it is entirely student run – and encompasses a staff of about 150 students. Each staff member is responsible for ensuring that the specific task of the committee they serve on is accomplished. Committees include everything from publicity to livestock superintendents and contest coordinators.

Adam Kruse (pictured above at left), a senior ag business major from Clear Lake, SD, is manager for the 2016 Little I. Krause got involved with the event as a freshman showing a pig – as a sophomore he became the swine superintendent, then was elected assistant manager last year, which prepared him for his manager role.

Krause reports that work is already underway by the staff to prepare for another successful event this year. He credits Little I with bringing a diverse group of students representing different majors from across campus – several even outside of the ABS College – together to spotlight and celebrate agriculture.

That’s indeed another benefit of Little I – the opportunities students have to develop time management skills, responsibility, teamwork and networking with others, as well as advocate for agriculture on campus and within the community. Last year’s Little I event focused on a theme of “Beyond the Barn” to reach out to others with positive stories about agriculture.

From his own personal Little I experiences, Krause says he has learned to work with a variety of people – many of whom are your friends, which can sometimes be challenging. Krause says, “I strive to maintain a balance of the relationships, but also realize at the end of the day business needs to get done.” Krause believes those people skills will benefit him after graduation when he returns to the family farm to work with his dad and brother.

Krause notes that Little I often brings many SDSU alumni back to campus and for 2016 some alumni social events are being planned.

Follow SDSU Little International on Facebook for more details about the 2016 event.
Evolving Student Curriculum
New Majors, Minors & Masters Opportunities Available Within ABS College

AS AGRICULTURE, TECHNOLOGY, AND RESOURCE needs advance and evolve so too is the curriculum within SDSU's College of Agriculture and Biological Sciences. For the 2015-16 academic year several new degree programs are being offered to meet student and industry interests.

New degree programs include a food science major offered through the Dairy Science Department, a meat science minor offered through the Animal Science Department, a natural resource law enforcement major offered through the Natural Resource Management Department, a precision agriculture minor, and pending major, through the Ag and Biosystems Engineering and Plant Science Departments, and an online masters in ag education through the Teaching, Learning & Leadership Department.

FOOD FOCUS
“Food science is a growing career field with many career opportunities, and we have seen a lot of interest and support from industry for food science graduates,” says Professor and Department Head Vikram Mistry of the expanded food science curriculum now offered through the Dairy Science Department. Eighteen students declared majors in the program this fall.

Prior to the food science major being offered, a health and nutritional sciences degree with a food science emphasis was offered through SDSU's College of Education and Human Sciences (EHS). With the transition, 2.5 full-time faculty positions moved from EHS to the Dairy Science Department, and 1 additional full-time position will be added.

Mistry explains that moving the program to the Dairy Science Department and developing a four-year, full degree program was important to further enhance the curriculum and pursue professional accreditation from the Institute of Food Technologists within the next two years.

The Dairy Science Department now offers three majors: dairy production, dairy manufacturing, and food science. Mistry says the food science major will focus on broader aspects of food manufacturing and food quality differentiating it from the dairy manufacturing degree. However, he notes that SDSU dairy manufacturing graduates have experienced very lucrative career opportunities, and he anticipates as the food science program grows and becomes established it will experience similar industry support.

In the Animal Science Department, attention to the growing food industry has also prompted the addition of a meat science minor. Three students declared the minor this fall and several others have expressed interest, according to associate professor and Assistant Animal Science Department Head Rosie Nold.

“Meat science offers a wide range of career opportunities both from the processing and consumer marketing aspect. In the U.S. and internationally, the demand for high quality protein, specifically meat, just continues to grow. We're offering the meat science minor in response to industry need for graduates with this training,” Nold says.

She notes that the meat science minor also complements the curriculum of students pursuing the food science major. Course requirements for the meat science minor include options for several electives as well as an internship allowing students to tailor it to their interests, Nold says.
AG PRECISION
SDSU is in its second academic year of offering a precision agriculture minor, and the South Dakota Board of Regents gave approval in August 2015 for SDSU to develop plans for a four-year undergraduate degree in precision agriculture. Official Board of Regents approval for a precision agriculture major could occur before the 2016-17 academic year; currently no other university offers such a major.

The precision agriculture curriculum is designed to prepare students for careers involving diverse work in agronomy, agricultural machinery management, and data sciences, as well as learning to use data in agronomic decision-making processes. The program would involve strong collaboration among SDSU’s Departments of Agricultural and Biosystems Engineering, Plant Science, Mathematics and Statistics, Electrical Engineering and Computer Science.

Van Kelley, Agricultural and Biosystems Engineering Department Head, reports student interest in the precision agriculture minor has exceeded what was anticipated. Sixty students enrolled in the first offering of Electrical Diagnostics for Farm Machinery Lab, and a third lab section had to be added for the Emerging Technologies in Agriculture course.

Kelley adds, “Interest from the industry is very high. Businesses want to hire students who are trained in a diverse, strong curriculum. We are constantly working to develop our curriculum and strengthen ties with members of the industry so that students receive training which will be immediately useful to them as they enter the workforce.”

ONLINE OPPORTUNITY FOR MASTERS IN AG ED
In addition to the new degree offerings for undergraduate students, the opportunity to complete a Masters of Science in Agricultural Education via online coursework has also recently been made available.

Assistant Professor of agricultural education Scott Smalley says the online coursework is directed toward enhancing the education of agricultural educators, who are currently in the classroom or individuals who wish to enter the classroom as an alternatively certified educator. The program focuses on the teaching and learning processes across a variety of settings including non-profits, formal education environments, and the Cooperative Extension Service (CES). The program will also service instructors at a variety of community colleges.

The coursework involved in the graduate program includes curriculum development, educational psychology, foundations of agricultural education, research methods and several agricultural elective opportunities. For more information visit: http://catalog.sdstate.edu/preview_program.php?catoid=27&poid=6261&returnto=2931

NATURAL RESOURCE LAW ENFORCEMENT
The new degree offering in Natural Resource Law Enforcement also has had significant interest from students. Forty students declared the major this fall, with an additional 12 students double majoring.

Assistant Professor of wildlife ecology Troy Grovenburg explains that the curriculum for this program was developed in collaboration with SDSU’s Department of Natural Resource Management faculty and representatives from South Dakota Department of Game, Fish and Parks and U.S. Fish and Wildlife Service. The new program prepares students for employment opportunities with federal, state, and municipal natural resource agencies as conservation officers, game wardens, federal enforcement agents, and park rangers.

The interdisciplinary degree uses existing courses from the Department of Natural Resource Management and the Department of Sociology and Rural Studies to provide students with a strong academic foundation that integrates natural resource management with conservation and law enforcement.

For more information about these new degree programs visit www.sdstate.edu and select the “Academics” tab.
"International travel is a definite eye-opener," says SDSU alum Emily Helms (B.S. '12, M.S. '15). As an undergrad, the Agronomy and Range Science double major, traveled to Argentina and Uruguay with an SDSU student delegation in December 2012/January 2013. Then as a Range Science Master's student she traveled with SDSU to New Zealand in May 2015.

Of her trips, she says, "I really appreciate my experiences because they were agriculturally based; I was able to see how other countries do the same things we do. Some sites we visited were nowhere near to what the United States does, and others were the same." She says she realized "... what they were doing was working for them and they weren't looking to change, so who are we to say our way is right?"

Of her travel to Argentina, Helms says she most enjoyed the opportunity to experience a different culture, meet new people and get to know some of her fellow SDSU students better. Visiting New Zealand afforded her the opportunity to gain new knowledge related to her career path -- she is currently a USDA-NRCS range management specialist in Burke, SD. Helms says she values the opportunity she had to witness and learn about New Zealand farmers' grazing management and breeding of livestock for grass-based finishing and hill-side grazing.

Helms notes that these international travel experiences have broadened her horizons; she says she now has the confidence to travel more, and she is interested in pursuing job experiences in other parts of the country or the world -- even if for only a short time.

"My travel helped me make the decision to pursue a Master's degree in community development," says Lea Puckett. The Kyle, SD, student is majoring in Ag Leadership while also completing coursework for minors in Animal Science, Equine and American Indian Studies. Through SDSU's international academic programs, Puckett has visited China/Hong Kong in May 2014, Vietnam/Cambodia in March 2015, and New Zealand in May 2015.

She says, "What interested me in going on the trips was the opportunity to travel to and learn about another country. The fact that they were agricultural-focused trips was a perk!"

She adds that from these travel experiences, she values the great connections with fellow classmates, the rich culture of the different countries, and the broadened cultural perspective.

Puckett concludes, "The experiences of these trips influenced my future not only from a career standpoint but the way I live my life in general. Eventually I would like to work in my local Extension office back home specifically with the youth."
MORE ABOUT SDSU’S ACADEMIC INTERNATIONAL STUDY ABROAD PROGRAMS

The international study abroad programs offered through SDSU’s College of Agriculture and Biological Sciences typically include tours of crop production, livestock, and feedlot operations, and provide an opportunity for students to visit with actual producers. Additionally, programs may include visits to export terminals, government and research entities, and cultural landmarks. Study abroad programs are for 12-14 days and are at the student’s expense. One or two faculty members will lead the delegation and coordinate travel details. Student delegations range from 10 to 30 student participants. Prior to the travel experience, students complete a semester-long course studying the countries that will be visited.

During the 2015-16 academic year, the following academic international study abroad programs are being offered by the ABS College:

Argentina & Uruguay, coordinated by Agricultural Leadership Assistant Professor B. Lynn Gordon. Travel planned for Dec. 2015.

Vietnam & Cambodia, coordinated by Animal Science Associate Professor Michael Gonda and Plant Science Professor Sharon Clay. Travel planned for March 2016.

Australia, coordinated by Animal Science Associate Professor Julie Walker. Travel planned for May 2016.

China, coordinated by Animal Science Professor Bob Thaler and Associate Professors Rebecca Bott and Erin Cortus. Travel planned for May 2016.

“I appreciate the support farmers have in the United States,” says Curtis Nagorske of the perspective he gained after traveling to Argentina and Uruguay as an SDSU student in December 2014-January 2015. Nagorske graduated with an Agriculture Science degree in May 2015 and returned to his family’s farming operation near Bingham Lake, MN. He says he was interested in the trip to Argentina because of the country’s reputation as a top competitor in soybean and cattle production. After touring farms and visiting with producers there, Nagorske realized, “It is a lot harder to be profitable there because of the government structure.” He also noted that they have few government programs to assist producers, especially beginning producers, and he says, the roads are “terrible.” Nagorske says he has a new appreciation for the support and opportunities American farmers have. In spite of the challenges South American farmers face, Nagorske credits them for being meticulous in knowing “every nickel and dime” of their input costs and for working together. “Farmers there have group meetings every month to discuss ways to improve production and cut costs. They really help each other,” he concludes.

“The U.S. is definitely a good place to be a farmer,” says Jonathan Kleinjan of the realizations he has had from his SDSU international travel experience. Kleinjan, who farms near Bruce, SD, is a PhD student studying plant genetics/agronomy and also works as an SDSU Extension Associate. He has participated in three SDSU international study abroad academic programs: China in March 2012, Argentina and Uruguay in January 2013, and Vietnam in March 2015.

Kleinjan says he has garnered many lessons from his travel experiences, and has especially gained “an appreciation for other cultures and a realization of the global reach of U.S. agriculture.” After visiting with farmers in Argentina who are frustrated by their government policies and high tax rates, he also has an appreciation for farming in America.

Additionally, he shares, “The number of people in both China and Vietnam who need to eat and are striving to improve their quality of life made me realize how much demand exists for our ag products.”
Kelly Keller

**Grew up near:** Keldron, SD, on her family’s ranch where they raised cattle, sheep, horses and dogs; graduated from Lemmon High School.

**Current Role:** Agricultural Instructor and FFA Advisor at Arlington (SD) High School, where she has taught for 9 years.

**Family:** Husband Nate works for Midland Contracting as a heavy equipment operator.

**Years Attended SDSU:** 2002-2007

**Degree:** Bachelor of Science in Agricultural Education

**Campus Activities:** member of Collegiate FFA/Agricultural Education Club, Alpha Zeta, Kappa Delta Phi, Alpha Tau Alpha, and Trio Student Support Services.

**Service To Community & State:** Keller is involved in the Arlington Education Association serving as one of the contract negotiators. She is past president of the South Dakota Association of Agricultural Educators (SDAAE) and has been the agriculture division representative for the South Dakota Association of Career and Technical Education (SDACTE). Keller also assists where needed with FFA activities at the local, district, and state level.

**On Choosing To Attend SDSU:** Keller says the decision to attend SDSU was an easy one for her for two reasons – she was familiar with campus, and she wanted to be an ag teacher and SDSU was the only school in-state that offered the degree. She tells “I had spent a lot of time on campus when I was in high school for State FFA Convention and Little I, so I knew my way around. Because of FFA, I also knew many people in the dorms, which made the transition to college very easy for me. I knew the first day in Hansen Hall that it was the college for me! I felt like I was home, when home was six hours away.”

**Philosophy As A Teacher:** “I believe that students need to be prepared for the real world and learn life skills. I strive to help them be college and career ready,” says Keller. She also believes that everyone can learn – but recognizes not everyone learns in the same way. Keller aims to have students leave her classes with the knowledge of the topics covered. She says, “If you take Animal Science you will know how to run and manage a livestock operation and understand the resources needed to do so. I teach students how to use tools and also know how to fix them. But most importantly, I expect my students to be good people and help others when needed. I try to instill in my students the words and actions of the FFA motto: ‘learning to do, doing to learn, earning to live, and living to serve.’ The words are important, but actions speak louder than words.”

**On Confidence & Failure:** Additionally, Keller says in her work with student she focuses on developing confidence – and learning from failure. She says, “You have to be confident in whatever you do if you want to succeed.” She adds, “I believe students learn more from failure than success, because students learn what to improve for the future and failure often fuels a drive to do better next time.”

**Value From SDSU:** Keller chuckle’s at SDSU’s motto “You can go anywhere from here,” saying, “I would like a disclaimer, because it doesn’t tell you how many miles. I only made it 20 [miles from Brookings to Arlington].” But in all seriousness she adds, “I really enjoyed my experience at SDSU, the friendships I made at SDSU are lifelong, and the adventures were endless.” To the next generation she advises, “Make the most of your time at SDSU and get involved in clubs and organizations, because the people you meet and the friendships you make will help build you into the person you want to be.”
SDSU Friends; Lifetime Bonds

This past July, for the 19th straight year, I made my annual pilgrimage north to spend three days with 11 of my very best friends in the world. The event has been informally named "Kes Fest" after Mike Kesler, the patriarch of the gathering.

These men are not simply acquaintances; they are like brothers. I would do anything for any of them or their families. I know they would say the same.

So why mention this in my Growing South Dakota column? If it were not for South Dakota State University, I would never have had the pleasure of getting to know any of them. These souls, who have enriched my life and left me with memories that I will cherish for as long as my mind will allow, all came together as 18-year-olds in Brookings to find out what, and who, they wanted to be when they grew up.

While I am grateful to have these friendships, I recognize that my story is not unique. That is what happens at SDSU. Young people leave the safety of home to embark on their life adventure. In doing so, they create bonds that will often last for their remaining days.

This unique experience is why these bonds are different than perhaps others we make during the course of our life. As it always seems to be, it is the people who have the biggest impact on our journey.

Thanks to all of you who support our students as they navigate their path. You are making a difference in their lives. I promise.

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