Scholarship program to train math, science teachers receives funding

A program that encourages SDSU students majoring in math and science to become teachers has received a three-year grant for nearly $800,000 from the National Science Foundation Robert Noyce Teaching Scholarship Program to continue its work.

Students majoring in mathematics, biology, chemistry or physics can receive $5,000 per semester during their junior and senior years through Rural Enhancement of Mathematics and Science Teachers, known as REMAST, according to program coordinator Sharon Vestal, associate professor of mathematics and statistics.

Students must pursue teaching certification for seventh through 12th grades and maintain at least a 3.0 GPA to qualify. After graduation, they must teach one year in a high-need school for every semester that they received the scholarship.

Supporting success

Since the program began in 2007, REMAST has awarded $690,000 in scholarships and produced 44 math and science teachers, Vestal explained. Through the new grant, she will be able to offer 25 to 30 semester-long scholarships. Vestal will begin taking applications next spring for fall 2015 scholarships.

“Our students are very comfortable with their content knowledge,” said Vestal, pointing out that SDSU students get a major in their content area in combination with teaching certification.

“We’re producing some amazing teachers,” Vestal said, and they tend to stay in teaching and in the Midwest. Fourteen alumni have completed their service and 37 will be teaching this fall. Though the graduates can go to any high-need school in the country, Vestal reported that more than 75 percent stay in South Dakota.

After graduation, REMAST students choose a mentor who works with them during their first two years of teaching. A yearly summer conference allows them to exchange experiences and ideas. REMAST alumni also keep in touch.
The complete Harvey Dunn collection on display at S.D. Art Museum

For the first time, visitors can view the South Dakota Art Museum’s full collection of Harvey Dunn artwork in one gallery. All 116 drawings and paintings, the largest compilation of Dunn’s pieces in the world, will be displayed in the museum through Jan. 11, 2015.

Dunn began his studies at SDSU, then called Dakota Agriculture College, in 1901. In 1950, years before the South Dakota Art Museum opened, he donated about one-third of the total collection now displayed in the museum. He had been so overwhelmed by the public’s response to an exhibition held in De Smet that he gifted 37 pieces to the people of South Dakota, designating SDSU as the collection’s caretaker. When the museum opened in 1970, additional gifts and donations brought the total number of Dunn pieces owned by the university up to 56. All of these works were transferred to the museum’s ownership when it opened.

“It’s really been a cornerstone. The fact we already had a collection of Harvey Dunn pieces here played a huge role in the decision to build the state art museum in Brookings, ‘ said Jodi Lundgren, coordinator and curator of exhibitions at the South Dakota Art Museum.

Since the museum’s opening, the collection has more than doubled in size and continues to grow. One of the latest acquisitions is a seascape painting donated by the Peeke family this past summer.

Dunn had given the painting to his doctor and friend, Alonso “Doc” Peeke, with a personalized inscription on the back, “To Doc Peeke, who is more than just a doctor.”

The exhibition is displayed salon style, grouped tightly together so visitors are surrounded by Dunn’s work at every turn. Portraits and drawings are mixed in with prairie images and scenes of weather, allowing patrons who may have seen these as separate exhibits to experience them as part of a whole body of work.

“The range of what Dunn did was really amazing. I don’t think people realize how differently he could really handle paint from one piece to another,” said Lundgren.

“Harvey Dunn: The Complete Collection” also allows for some of Dunn’s pieces that have not fit into other shows to be showcased. According to Lundgren, when the exhibition appeared on the museum’s calendar, donors began to come forward and sponsor conservation for some of the works to prepare them for display.

“The museum’s entire Harvey Dunn collection consists of 121 pieces, with two works unable to be displayed and three recent acquisitions that occurred shortly after the exhibit opened.

“We hope visitors enjoy the breadth, range and cohesion that can be found among Harvey Dunn’s artworks when allowed to see so many altogether,” said Lundgren. “Enjoy. These gifts to us are gifts to you.”

Contribute to IMPACT State

Is there something or someone in your college, department or unit that our colleagues should know about? Is a long-time employee retiring? Has someone received an award or published a book? Is there a story that should be told?

If so, send a note at sdunews@sdstate.edu with the information, and we’ll consider it for publication in an upcoming issue.

Board of Regents name Rames interim president at Dakota State University

The South Dakota Board of Regents appointed Maryz Rames, vice president for student affairs at SDSU, as SDSU’s interim president. Jack Warner, the regents’ executive director and CEO, said Rames will be full time on the Madison campus by the middle of September. Rames has been SDSU’s vice president for student affairs and an assistant professor of education since 2000. She spearheaded a 24 percent increase in undergraduate enrollment and focused on strategies to improve the academic quality of incoming freshmen.

Part of those strategies created the Jackrabbit Guarantee, a freshman scholarship program that increased enrollment by 17 percent in its first four years and greatly improved student retention.

Rames also implemented a student success model at SDSU to identify key programs and initiatives that support student success from initial recruitment to graduation. One example is a summer “bridge” program to help students complete remedial coursework prior to the fall semester. She also focused on increasing diversity on the Brookings campus and helped to create a veterans’ resource center for military veterans returning to college.

Prior to her current post, she served as associate dean of students and director of the University Student Union. She has been employed on the SDSU campus for the past 27 years. She holds a doctorate in adult and higher education from the University of South Dakota. She also has a master’s degree in educational administration and a Bachelor of Science degree in business administration, both from the University of Northern Colorado.

SDSU English Associate Professor Emerita Mary Woster Haug held a book signing Sept. 11 at the South Dakota Art Museum.

Haug is a regionally and nationally published writer and taught at State from 1989 to 2010. A 1968 graduate in English, she added a master’s degree in educational administration and a Bachelor of Science degree in business administration, both from the University of Northern Colorado.

Former professor holds book signing at art museum

Haug’s book signing Sept. 11 at the South Dakota Art Museum.

Haug is a regionally and nationally published writer and taught at State from 1989 to 2010. A 1968 graduate in English, she added a master’s degree in educational administration and a Bachelor of Science degree in business administration, both from the University of Northern Colorado.

Haug’s book “Daughter of the Grasslands,” is a compilation of memoirs of Haug’s family’s life. “I grew up on the grasslands west of the Missouri River in South Dakota. I am the middle child of a Bohemian father, from whom I inherited a Gypsy spirit, and an Irish mother, who offered us the security of home. I write here of my childhood and the ways in which family, church and land have shaped me,” said Haug.

Haug explains that the book began during her time as an exchange professor at Chungnam National University in Daejeon, South Korea. The experience sparked memories of South Dakota. “Mary Haug’s book began simply as a record of a visit to a fascinating but alien world. As she delved more deeply into Korea’s culture, listening to its people, she began exploring parallels to her own upbringing in South Dakota. The result is a love song to all that is best about the people of both places and a testament to our faith in human nature,” said Linda Hasselstrom, author of “Windbreak: A Woman Rancher on the Northern Plains.”

Haug and her husband Ken live in Brookings. Their daughter Maura lives in Minneapolis with her husband and two children.

Scholarship program to train math, science teachers receives funding continued from page 1

“While we’re building a sense of community,” Vestal noted.

Making a difference

Chelsey Loney, who has started her second year teaching seventh- and eighth-grade science in Flandreau, said, “The REMAST program has done amazing things for me.”

The financial assistance allowed her to focus on her studies and the faculty support has helped her move forward in her professional career, the Humboldt, Iowa, native explained.

The biology major tried field research, lab research and even zoology before she decided to become a teacher.

A survey of REMAST alumni showed that 35 percent would not have pursued teaching without the program, according to Vestal. “It’s the support network that helped get me started,” noted Diedra Nissen, who began her third year teaching algebra I and geometry at Roosevelt High School in Sioux Falls.

Nissen was in general studies her freshman year, but graduated to mathematics and teaching as a sophomore. The PreXho native received the Noyce scholarship for two years.

Nissen credits REMAST support for motivating her to start an online master’s degree at SDSU this fall.

Former professor holds book signing at art museum

Maryz Rames

SDSU English Associate Professor Emerita Mary Woster Haug held a book signing Sept. 11 at the South Dakota Art Museum.

Haug is a regionally and nationally published writer and taught at State from 1989 to 2010. A 1968 graduate in English, she added a master’s degree in educational administration and a Bachelor of Science degree in business administration, both from the University of Northern Colorado.

Former professor holds book signing at art museum

Maryz Rames

SDSU English Associate Professor Emerita Mary Woster Haug held a book signing Sept. 11 at the South Dakota Art Museum.

Haug is a regionally and nationally published writer and taught at State from 1989 to 2010. A 1968 graduate in English, she added a master’s degree in educational administration and a Bachelor of Science degree in business administration, both from the University of Northern Colorado.

Haug’s book “Daughter of the Grasslands,” is a compilation of memoirs of Haug’s family’s life. “I grew up on the grasslands west of the Missouri River in South Dakota. I am the middle child of a Bohemian father, from whom I inherited a Gypsy spirit, and an Irish mother, who offered us the security of home. I write here of my childhood and the ways in which family, church and land have shaped me,” said Haug.

Haug explains that the book began during her time as an exchange professor at Chungnam National University in Daejeon, South Korea. The experience sparked memories of South Dakota. “Mary Haug’s book began simply as a record of a visit to a fascinating but alien world. As she delved more deeply into Korea’s culture, listening to its people, she began exploring parallels to her own upbringing in South Dakota. The result is a love song to all that is best about the people of both places and a testament to our faith in human nature,” said Linda Hasselstrom, author of “Windbreak: A Woman Rancher on the Northern Plains.”

Haug and her husband Ken live in Brookings. Their daughter Maura lives in Minneapolis with her husband and two children.

Scholarship program to train math, science teachers receives funding continued from page 1

“While we’re building a sense of community,” Vestal noted.

Making a difference

Chelsey Loney, who has started her second year teaching seventh- and eighth-grade science in Flandreau, said, “The REMAST program has done amazing things for me.”

The financial assistance allowed her to focus on her studies and the faculty support has helped her move forward in her professional career, the Humboldt, Iowa, native explained.

The biology major tried field research, lab research and even zoology before she decided to become a teacher.

A survey of REMAST alumni showed that 35 percent would not have pursued teaching without the program, according to Vestal. “It’s the support network that helped get me started,” noted Diedra Nissen, who began her third year teaching algebra I and geometry at Roosevelt High School in Sioux Falls.

Nissen was in general studies her freshman year, but graduated to mathematics and teaching as a sophomore. The PreXho native received the Noyce scholarship for two years.

Nissen credits REMAST support for motivating her to start an online master’s degree at SDSU this fall.
Graduate scholarship winner works on renewable energy storage

Doctoral student Hong Jin has been named recipient of the Joseph P. Nelson Graduate Scholarship Award. Since August 2011, Jin has been working in the agricultural and biosystems engineering department as part of a project to use biochar, a byproduct of transforming plant materials into biofuel, to develop more cost-effective ways of storing renewable energy. His adviser is assistant professor Zhengrong Gu. The research is supported by the U.S. Department of Agriculture and the North Central Regional Sun Grant Center.

The Nelson scholarship, which is given each year to an outstanding graduate student, recognizes original scientific research and provides up to $8,900 for tuition and expenses.

Developing skills

Jin, originally from eastern China, earned his bachelor’s degree in applied chemistry from Harbin Institute of Technology in 2006. For the next two and a half years, he worked on coatings for BYD Electronics, which makes handset components and assembles mobile phones for clients such as Nokia and Motorola.

After that, Jin studied marine chemistry for two years at East China Normal University. He performed research on water and sediment samples from the China Sea to determine changes in the elements present, particularly heavy metals.

Using biochar for energy storage

Jin seeks to replace the expensive, activated carbon that coats the electrodes of current energy storage devices, such as supercapacitors, with a carbon material derived from inexpensive biochar.

“Without good graduate students, a professor cannot do a good job,” Gu said. Professors design a system, he explained, “but don’t have time to work on the hands-on details.” That’s where talented students like Jin come in.

Using his knowledge in chemistry and industrial coatings, Jin is investigating different methods of converting biochar into nanostructured carbon materials that will hold more energy. His dissertation research focuses on developing biochar-based carbon materials for supercapacitors.

For a lithium battery, the carbon must have a relatively high graphene content. However, for use on the electrodes of a supercapacitor, “the carbon must have well-developed hierarchical pores,” Gu explained.

The two devices can be used in combination—supercapacitors to capture the energy from wind turbines, for instance, and lithium batteries to provide stable, long-term storage.

To manufacture these storage devices, the United States now imports most of its activated carbon from Asia—including Japan, Thailand and China. With America’s abundance of wood-based biomass and agriculture residue as raw materials, Gu said, “we can use those materials as biofuel so the U.S. does not have to depend heavily on petroleum, and at the same time, generate good active carbon to export.”


canadian professor conducts research for a biography on s.d. artist

University of Manitoba professor Gregory Bryan, right, is conducting research on award-winning children’s author Paul Goble, left. Bryan has recently been viewing the South Dakota Art Museum’s collection of Goble’s works.

From the Down Under to the great white north, international academic Gregory Bryan set his sights on South Dakota as he embarks on a new journey researching the life and work of artist and award-winning children’s book writer, Paul Goble.

Originally from Australia, Bryan now lives in Canada as a professor specializing in children’s literature at the University of Manitoba in Winnipeg, Manitoba. He has already made several trips to South Dakota pursuing his research but most recently has been spending time at the South Dakota Art Museum in Brookings, where the majority of Goble’s artwork is now housed.

In collaboration with the museum, Bryan has been granted research funding from the South Dakota Humanities Council to work toward two published books, a biography of Paul Goble and a selection of his artwork to be published with accompanying notes about the work and process of its creation.

“This is a wonderful example of what the South Dakota Art Museum can do,” said Lisa Scholten, coordinator and curator of collections at the South Dakota Art Museum. “There is a lot more to the museum than just art on the walls.”

Bryan said that he has “a huge appreciation for the assistance of the museum and their commitment of time, resources and expertise.”

While the museum has only recently begun aiding Bryan in his research, he’s been working on the project for nearly two years now. Bryan, a longtime fan of Goble, says that the books will give people insight into the life of Paul Goble and provide a chance to see more of the artist’s work than what can otherwise be displayed at a given time.

While the museum has only recently begun aiding Bryan in his research, he’s been working on the project for nearly two years now. Bryan, a longtime fan of Goble, says that the books will give people insight into the life of Paul Goble and provide a chance to see more of the artist’s work than what can otherwise be displayed at a given time.

With the rare opportunity of doing such a project on a living artist, Bryan said it’s essential to have Goble’s voice in the undertaking. “He’s 80 years old,” said Bryan. “It’s important to do this now, properly, with his expertise and knowledge.”

While Goble received some formal design training early in his career, the mostly self-taught artist and writer has produced 40 books and hundreds of works of art. The fifth book he wrote, “The Girl Who Loved Wild Horses,” was the 1979 Caldecott Medal winner, an award given to the most distinguished American picture book for children by the American Library Association. “It’s one of the premier children’s literature awards in the world,” said Bryan.

Bryan has visited Goble at his home in Rapid City on several occasions.

“He’s such a humble man,” said Bryan. “It’s been difficult to get him to talk about his work because of his humility. He worries about people thinking he is ‘too big for his own boots’ and is genuinely surprised by the appreciation of his work and his contribution to the world.”

“arTists

Canadian professor conducts research for a biography on S.D. artist

University of Manitoba professor Gregory Bryan, right, is conducting research on award-winning children’s author Paul Goble, left. Bryan has recently been viewing the South Dakota Art Museum’s collection of Goble’s works.

From the Down Under to the great white north, international academic Gregory Bryan set his sights on South Dakota as he embarks on a new journey researching the life and work of artist and award-winning children’s book writer, Paul Goble.

Originally from Australia, Bryan now lives in Canada as a professor specializing in children’s literature at the University of Manitoba in Winnipeg, Manitoba. He has already made several trips to South Dakota pursuing his research but most recently has been spending time at the South Dakota Art Museum in Brookings, where the majority of Goble’s artwork is now housed.

In collaboration with the museum, Bryan has been granted research funding from the South Dakota Humanities Council to work toward two published books, a biography of Paul Goble and a selection of his artwork to be published with accompanying notes about the work and process of its creation.

“This is a wonderful example of what the South Dakota Art Museum can do,” said Lisa Scholten, coordinator and curator of collections at the South Dakota Art Museum. “There is a lot more to the museum than just art on the walls.”

Bryan said that he has “a huge appreciation for the assistance of the museum and their commitment of time, resources and expertise.”

While the museum has only recently begun aiding Bryan in his research, he’s been working on the project for nearly two years now. Bryan, a longtime fan of Goble, says that the books will give people insight into the life of Paul Goble and provide a chance to see more of the artist’s work than what can otherwise be displayed at a given time.

With the rare opportunity of doing such a project on a living artist, Bryan said it’s essential to have Goble’s voice in the undertaking. “He’s 80 years old,” said Bryan. “It’s important to do this now, properly, with his expertise and knowledge.”

While Goble received some formal design training early in his career, the mostly self-taught artist and writer has produced 40 books and hundreds of works of art. The fifth book he wrote, “The Girl Who Loved Wild Horses,” was the 1979 Caldecott Medal winner, an award given to the most distinguished American picture book for children by the American Library Association. “It’s one of the premier children’s literature awards in the world,” said Bryan.

Bryan has visited Goble at his home in Rapid City on several occasions.

“He’s such a humble man,” said Bryan. “It’s been difficult to get him to talk about his work because of his humility. He worries about people thinking he is ‘too big for his own boots’ and is genuinely surprised by the appreciation of his work and his contribution to the world.”

“The Girl Who Loved Wild Horses,” by Paul Goble, was the 1979 Caldecott Medal winner, an award given to the most distinguished American picture book for children by the American Library Association.
The trend toward the big guys dominating in terms of feedlots and processing makes the watchdog role of economists like Fausti even more important to South Dakota producers.

With this in mind, Fausti seeks to analyze differences in marketing strategies and feeder cattle procurement strategies between small and large feedlots. The small lots will be those with less than 1,000 head of cattle.

Mutating virus suppresses cow’s immune response

Bovine viral diarrhea virus infections result in one of the most costly diseases among cattle with losses in U.S. herds estimated at $2 billion per year, according to professor Christopher Chase of the SDSU Veterinary and Biomedical Sciences Department.

“It is an immune-suppressive disease,” he explains. The virus shuts down the immune system and makes the animal vulnerable to pneumonia and other respiratory diseases.

Dealing with persistent infections

When a pregnant cow becomes infected, the developing calf is at risk. If the infection occurs between 40 and 120 days of gestation, the calf will be born persistently infected according to the U.S. Department of Agriculture.

The calf appears healthy, but is what Chase refers to as a “walking time bomb” that can infect the entire herd. “It’s like Typhoid Mary, a BVDV Bos,” he said. The animal will shed the virus for its entire life. Approximately 0.5 percent of all cattle in the United States are persistently infected, according to Chase.

Most cattle producers vaccinate yearly, but when testing is done, anywhere from 1 to 15 percent of a herd can test positive. BVDV spreads via direct contact through nasal discharge, saliva, such as when cows drink from a tank with unchlorinated water. It can also be transmitted through semen, urine and feces and even milk.

Identifying variations

In 2003-2004, an SDSU research station in northwestern South Dakota bought 136 cattle and wound up with 60 persistently infected calves. Of these, 26 died prior to being weaned, but the rest were brought to SDSU. The surviving calves, which born within a year of mucosal disease, provided Chase and his graduate researchers “a gold mine of samples.”

Chase and his team found two viruses and one mutation. In some cases, the virus incorporated part of a cow gene or another virus in the part of the genome in which most mutations take place, Chase said. This makes developing a vaccine to prevent the virus challenging.

Triggering immune response

Through a five-year SDSU- USDA Experiment Station grant, Chase, his colleague, immunology expert Alan Young, and assistant professor Adam Hoppe of SDSU chemistry and biochemistry department are examining how BVDV suppresses the cow’s immune response. The ultimate goal is to develop better-modified live vaccines.

Hoppe’s unique microscope setup allows the researchers to use fluorescence to see what’s happening at the molecular level in live cells. “Adam has helped devise constructs that make these cells fluorescent all the time,” Chase said. “When certain pathways get turned on, BVDV grows even better.”

The researchers want to understand “how this persistence occurs and what can be done in regard to natural immunity,” Chase said.

They surmise that different virus strains will require different vaccine strategies. Ultimately, the best kind of immunization would be to increase the mucosal immune response, antibodies secreted on the surfaces of the throat, gastrointestinal tract and respiratory system, Chase said.

Research performed with Colorado State University showed that the virus quickly infects Kupffer cells in the liver, which help trigger the body’s immune response. This discovery may help the scientists figure out how persistence occurs, according to Chase. That will lead to new developing ways to prevent the virus from infecting the fetus and creating a persistently infected animal that is a threat to the entire herd.
Former Senate leaders to speak Oct. 1

Arends chosen for Future Leaders Program

SDSU assistant professor Robin Arends has been selected to participate in the American Association of Nurse Practitioners (AANP) Future Leaders Program. Arends, who teaches in the College of Nursing’s family nurse practitioner program, will join other participants in early October for an initial two-day formal training focusing on leadership development and other components of the program.

AANP, the largest national professional membership organization for nurse practitioners (NPs) of all specialties, recently launched the 12-month program. It is designed to develop the next generation of NP leaders through a variety of initiatives that provide broad visions of the NP role in the current and future health care environment. Those selected for the program are early in their NP careers, serving in clinical, administrative and education roles, with demonstrated potential to assume increasing national leadership both within AANP and throughout the nation.

"I hope to gain more experience in building teams and gain new insights into and refine my leadership style," Arends said. "Health care is changing and it is important for NPs to help guide and manage these changes to promote health outcomes in our state.

Arends graduated with her master’s degree in 2008 with a family nurse practitioner specialization and received her doctor of nursing practice degree from South Dakota State in 2014. Her practice improvement project focused on developing a diabetics nutrition education to low-income patients with Type 2 diabetes.

Arends has been a valued member of the SDSU faculty for the past eight years, and recently took the opportunity to get involved in the leadership program. She is a South Dakota native and enjoys giving back to the community by mentoring future leaders. The program is open to all clinical and academic disciplines.

The AANP Future Leaders Program is a yearlong program that allows current and early career NPs to develop leadership skills and network with peers.

The program is open to all clinical and academic disciplines.

The AANP Future Leaders Program is a yearlong program that allows current and early career NPs to develop leadership skills and network with peers.

The program is open to all clinical and academic disciplines.

The AANP Future Leaders Program is a yearlong program that allows current and early career NPs to develop leadership skills and network with peers.

The program is open to all clinical and academic disciplines.

The AANP Future Leaders Program is a yearlong program that allows current and early career NPs to develop leadership skills and network with peers.

The program is open to all clinical and academic disciplines.

The AANP Future Leaders Program is a yearlong program that allows current and early career NPs to develop leadership skills and network with peers.

The program is open to all clinical and academic disciplines.

The AANP Future Leaders Program is a yearlong program that allows current and early career NPs to develop leadership skills and network with peers.

The program is open to all clinical and academic disciplines.

The AANP Future Leaders Program is a yearlong program that allows current and early career NPs to develop leadership skills and network with peers.

The program is open to all clinical and academic disciplines.

The AANP Future Leaders Program is a yearlong program that allows current and early career NPs to develop leadership skills and network with peers.

The program is open to all clinical and academic disciplines.

The AANP Future Leaders Program is a yearlong program that allows current and early career NPs to develop leadership skills and network with peers.

The program is open to all clinical and academic disciplines.

The AANP Future Leaders Program is a yearlong program that allows current and early career NPs to develop leadership skills and network with peers.

The program is open to all clinical and academic disciplines.

The AANP Future Leaders Program is a yearlong program that allows current and early career NPs to develop leadership skills and network with peers.

The program is open to all clinical and academic disciplines.

The AANP Future Leaders Program is a yearlong program that allows current and early career NPs to develop leadership skills and network with peers.

The program is open to all clinical and academic disciplines.

The AANP Future Leaders Program is a yearlong program that allows current and early career NPs to develop leadership skills and network with peers.

The program is open to all clinical and academic disciplines.

The AANP Future Leaders Program is a yearlong program that allows current and early career NPs to develop leadership skills and network with peers.

The program is open to all clinical and academic disciplines.

The AANP Future Leaders Program is a yearlong program that allows current and early career NPs to develop leadership skills and network with peers.

The program is open to all clinical and academic disciplines.

The AANP Future Leaders Program is a yearlong program that allows current and early career NPs to develop leadership skills and network with peers.

The program is open to all clinical and academic disciplines.

The AANP Future Leaders Program is a yearlong program that allows current and early career NPs to develop leadership skills and network with peers.

The program is open to all clinical and academic disciplines.

The AANP Future Leaders Program is a yearlong program that allows current and early career NPs to develop leadership skills and network with peers.

The program is open to all clinical and academic disciplines.

The AANP Future Leaders Program is a yearlong program that allows current and early career NPs to develop leadership skills and network with peers.

The program is open to all clinical and academic disciplines.

The AANP Future Leaders Program is a yearlong program that allows current and early career NPs to develop leadership skills and network with peers.

The program is open to all clinical and academic disciplines.

The AANP Future Leaders Program is a yearlong program that allows current and early career NPs to develop leadership skills and network with peers.

The program is open to all clinical and academic disciplines.
French students advance wheat research during summer internship

The computer shows the results of one of Krishnan’s inventions, which expands dough in a vacuum and takes pictures to calculate dough volume. In a vacuum, the dough behaves in the same fashion as it does in an oven. The researchers, Krishnan, and the French interns are predicting bread loaf volume, which is a “holy grail” in the baking industry.

SDSU-ENSAT partnership

The relationship between SDSU and ENSAT emerged from personal relationships at both institutions, and these individual links continue to form an important basis of the ongoing connection. Over the years, SDSU leadership and coordination of the exchange program has been taken on by SDSU faculty in departments, including plant science, sociology and rural studies, and physics.

The summer laboratory internship program was first instituted between SDSU and ENSAT nearly 30 years ago. The program began from a working relationship between faculty colleagues at both SDSU and ENSAT, incorporating one to three students per year. In recent years, the summer internship program served between 12 and 16 students per year. This year, three ENSAT students are pursuing internships at SDSU.

The students worked with department of health and nutrition sciences professor Padmanaban Krishnan, are also trying to figure the wheat samples, with the Brabender Mill in the background. The French students, along with department of health and nutritional sciences professor Padmanaban Krishnan, are also trying to figure out ways to incorporate the bran back into the flour–after minimal processing—to retain health qualities.

Two college students from Toulouse, France, completed a 10-week internship milling wheat and researching how to expand the loaf volume of bread. Elodie Payrau and Floriane Bouchet are agrology food science and management students in their second year at Ecole Nationale Supérieure Agronomique of Toulouse.

The students worked with department of health and nutritional sciences professor Padmanaban Krishnan in the Seed Technology Laboratory as part of a long-standing partnership between SDSU and ENSAT. Krishnan sponsored the two interns with funds from the National Polytechnic Institute of Toulouse, France.

For nearly 30 years, French students have come to Brookings through the summer internship program. Most interns have done research on campus, but Schadé already had a structured program in place that was well-suited to Bezault’s interests, according to economics professor Evert Van der Sluis. He and his colleague, assistant professor Kuo-Liang Chang, were Bezault’s SDSU coordinators. Bezault began her internship in June.

French students advance wheat research during summer internship

SDSUENSAT partnership

The relationship between SDSU and ENSAT emerged from personal relationships at both institutions, and these individual links continue to form an important basis of the ongoing connection. Over the years, SDSU leadership and coordination of the exchange program has been taken on by SDSU faculty in departments, including plant science, sociology and rural studies, and physics.

The summer laboratory internship program was first instituted between SDSU and ENSAT nearly 30 years ago. The program began from a working relationship between faculty colleagues at both SDSU and ENSAT, incorporating one to three students per year. In recent years, the summer internship program served between 12 and 16 students per year. This year, three ENSAT students are pursuing internships at SDSU.

SDSUENSAT partnership

The relationship between SDSU and ENSAT emerged from personal relationships at both institutions, and these individual links continue to form an important basis of the ongoing connection. Over the years, SDSU leadership and coordination of the exchange program has been taken on by SDSU faculty in departments, including plant science, sociology and rural studies, and physics.

The summer laboratory internship program was first instituted between SDSU and ENSAT nearly 30 years ago. The program began from a working relationship between faculty colleagues at both SDSU and ENSAT, incorporating one to three students per year. In recent years, the summer internship program served between 12 and 16 students per year. This year, three ENSAT students are pursuing internships at SDSU.

SDSUENSAT partnership

The relationship between SDSU and ENSAT emerged from personal relationships at both institutions, and these individual links continue to form an important basis of the ongoing connection. Over the years, SDSU leadership and coordination of the exchange program has been taken on by SDSU faculty in departments, including plant science, sociology and rural studies, and physics.

The summer laboratory internship program was first instituted between SDSU and ENSAT nearly 30 years ago. The program began from a working relationship between faculty colleagues at both SDSU and ENSAT, incorporating one to three students per year. In recent years, the summer internship program served between 12 and 16 students per year. This year, three ENSAT students are pursuing internships at SDSU.

SDSUENSAT partnership

The relationship between SDSU and ENSAT emerged from personal relationships at both institutions, and these individual links continue to form an important basis of the ongoing connection. Over the years, SDSU leadership and coordination of the exchange program has been taken on by SDSU faculty in departments, including plant science, sociology and rural studies, and physics.

The summer laboratory internship program was first instituted between SDSU and ENSAT nearly 30 years ago. The program began from a working relationship between faculty colleagues at both SDSU and ENSAT, incorporating one to three students per year. In recent years, the summer internship program served between 12 and 16 students per year. This year, three ENSAT students are pursuing internships at SDSU.

SDSUENSAT partnership

The relationship between SDSU and ENSAT emerged from personal relationships at both institutions, and these individual links continue to form an important basis of the ongoing connection. Over the years, SDSU leadership and coordination of the exchange program has been taken on by SDSU faculty in departments, including plant science, sociology and rural studies, and physics.

The summer laboratory internship program was first instituted between SDSU and ENSAT nearly 30 years ago. The program began from a working relationship between faculty colleagues at both SDSU and ENSAT, incorporating one to three students per year. In recent years, the summer internship program served between 12 and 16 students per year. This year, three ENSAT students are pursuing internships at SDSU.

SDSUENSAT partnership

The relationship between SDSU and ENSAT emerged from personal relationships at both institutions, and these individual links continue to form an important basis of the ongoing connection. Over the years, SDSU leadership and coordination of the exchange program has been taken on by SDSU faculty in departments, including plant science, sociology and rural studies, and physics.

The summer laboratory internship program was first instituted between SDSU and ENSAT nearly 30 years ago. The program began from a working relationship between faculty colleagues at both SDSU and ENSAT, incorporating one to three students per year. In recent years, the summer internship program served between 12 and 16 students per year. This year, three ENSAT students are pursuing internships at SDSU.

SDSUENSAT partnership

The relationship between SDSU and ENSAT emerged from personal relationships at both institutions, and these individual links continue to form an important basis of the ongoing connection. Over the years, SDSU leadership and coordination of the exchange program has been taken on by SDSU faculty in departments, including plant science, sociology and rural studies, and physics.

The summer laboratory internship program was first instituted between SDSU and ENSAT nearly 30 years ago. The program began from a working relationship between faculty colleagues at both SDSU and ENSAT, incorporating one to three students per year. In recent years, the summer internship program served between 12 and 16 students per year. This year, three ENSAT students are pursuing internships at SDSU.

SDSUENSAT partnership

The relationship between SDSU and ENSAT emerged from personal relationships at both institutions, and these individual links continue to form an important basis of the ongoing connection. Over the years, SDSU leadership and coordination of the exchange program has been taken on by SDSU faculty in departments, including plant science, sociology and rural studies, and physics.

The summer laboratory internship program was first instituted between SDSU and ENSAT nearly 30 years ago. The program began from a working relationship between faculty colleagues at both SDSU and ENSAT, incorporating one to three students per year. In recent years, the summer internship program served between 12 and 16 students per year. This year, three ENSAT students are pursuing internships at SDSU.
Eight chosen as SDSU Distinguished Alums

Eight alumni from five decades will be honored as the 2014 class of Distinguished Alum at SDSU prior to Hobo Day. Those to be honored are:

• David Anderson, class of 1966, Loveland, Colorado;
• S.K. Dash, class of 1970/73, Edina, Minnesota;
• Leon Ellwine, class of 1964/66, La Jolla, California;
• Roxie Romness Foster, class of 1967, Arvada, Colorado;
• Jake Krull, class of 1960, Watertown;
• Michael Relf, class of 1988, Durham, North Carolina;
• Lisa Richardson, class of 1991, Sioux Falls; and
• Frank Blalark, class of 2002/04, Lafayette, Indiana.

The distinguished alumni banquet is 6:30 p.m. Oct. 24, the evening before Hobo Day, at the Swiflet Center. Tickets are $30 ($10 for age 12 and younger). They can be purchased from the SDSU Alumni Association at 605-697-5198 or 888-735-2257 or online at www.statealum.com. Reservations and payments are due by Oct. 16. There is also a free public reception at Tompkins Alumni Center, 905 Medary Ave., from 3 to 4:30 p.m. Oct. 24.

Leon B. Ellwine
Professional Achievement
Ellwine used his mechanical engineering degree from State to become one of the world leaders in ophthalmology. An education that began in a one room country school near Roscoe extended to a doctorate in industrial engineering from Stanford and advanced management training at Harvard. He has provided scientific leadership in eye research projects around the world and has helped develop FDA guidelines. Currently, he is a special volunteer with the National Eye Institute, National Institutes of Health.

David Anderson
Service to SDSU
"Few individuals have contributed to SDSU in a more unique or compelling way than David Anderson," said Steve Erpenbach, president of the SDSU Foundation.

That's because Anderson, an animal science graduate, is sculptor of 8-foot tall bronze statues of Weary Wil (unveiled 2011) and Darcy Lil (2013). They stand duty on the north side of the University Student Union, just outside the Hobo Day Gallery. He undertook the work as a member of the SDSU Foundation, which he has served on for seven years.

S.K. Dash
Professional Achievement
Dash is founder of UAS Laboratories, a leading manufacturer of probiotics with headquarters in Waunau, Wisconsin, and distribution into more than 50 countries. He started his own probiotic company in Minneapolis in 1979, reintroduced probiotics in the United States and has been a driving force in the growth of the probiotic industry from an estimated $10 million worldwide in 1979 to $31 billion today.

Roxie Romness Foster
Professional Achievement
An expert in the assessment and treatment of children's pain, Foster has been principal or co-investigator on more than 20 research studies on pain, several funded by grants from the National Institutes of Health. Recently retired, she held a joint appointment from the University of Colorado and Children's Hospital Colorado. In 2000, she was selected as a fellow, the most prestigious honor in nursing, in the American Academy of Nursing.

Michael Relf
Professional Achievement
Relf is a nationally recognized HIV/AIDS nurse clinician, scientist and leader. While serving as president of the HIV/AIDS Nursing Certification Board, he led a successful effort to develop a national certification exam in advanced HIV/AIDS nursing for advanced practice nurses.

For his contributions to nursing, in 2008 Relf was elected a fellow of the American Academy of Nursing—the highest honor in nursing.

He now is associate dean for global and community affairs at Duke University in Durham, North Carolina.

Jacob J. Krull
Service to South Dakota
Krull left an impact on his university, his state and his profession. Krull joined the SDSU Foundation board in 2003 and served as chairman of the board of governors in 2009 and 2010. He was vice chair when the group approved a six-year, $200 million fundraising campaign.

Krull kept the board moving ahead despite a severe economic downturn that hit in 2009. He also has a 26-year career in the South Dakota Army National Guard, retiring as brigadier general in 1989. Also a leader in the insurance business, Krull eventually became president of National Farmers Union Insurance in Denver.

Lisa (Luttermann) Richardson
Outstanding Young Alumni
In a span of 10 years, Blalark has gone from minority student recruiter at SDSU to registrar at Purdue University.

The history major worked at SDSU while pursing his master’s degree with a specialization in administration of student affairs programs. After his year at SDSU (2003-04), he spent two years at the University of St. Thomas (St. Paul, Minnesota) in residential life and was at the University of Minnesota from 2006 to 2013 as student services director, associate director in the Office of Registrar, and Office of Registrar. On Nov. 1, 2013, Blalark became registrar at Purdue.

University holds McFadden Symposium on Wheat Research

SDSU honored renowned wheat geneticist Edgar S. McFadden with the inaugural McFadden Symposium on Wheat Improvement Sept. 23-24 at the Performing Arts Center.

The two-day event featured presentations by several internationally renowned wheat experts.

The opening day was highlighted by a presentation from SDSU vice president of research and economic development Kevin Kephart titled "SDSU’s Edgar S. McFadden with the inaugural McFadden Symposium on Wheat Improvement Sept. 23-24 at the Performing Arts Center." Kephart was joined by Noel Vietmeyer, a biographer on Norman E. Borlaug, and Ray Huey, McFadden’s grandson.


"The McFadden Symposium was an opportunity to recognize an individual who helped change food production throughout the world," said Kephart, whose presentation highlighted McFadden’s contributions to science and to global food production. "The work Edgar McFadden began in 1913 at SDSU is still impacting global wheat production today. Having the quality of individuals we had attend the symposium truly recognizes that work."

As a student from 1911 to 1918, McFadden envisioned and accomplished the first major breakthrough in conferring genetic resistance to stem rust. Born and raised on a homestead in Day County, he developed a spring wheat variety that was immune to stem rust. Aply, he named it ‘Hope’. From a single seed, his work is still making a critical difference today, feeding hundreds of millions of people.

McFadden was awarded a doctorate of science in 1950 and received the John Scott Medal in 1955. Fellow winners include Thomas Edison, Nikola Tesla and the Wright brothers.

Key event speakers included Catherine Witecki, Under Secretary for the United States Department of Agriculture’s Research, Education and Economics mission area, as well as the department’s chief scientist, Elsa Murano, interim director of the National E. Borlaug Institute for International Agriculture; Yue Jin, research plant pathologist with the USDA Agricultural Research Service; and Bikram S. Gill, Kansas State University’s distinguished professor of plant pathology.

SDSU Alumni
Filholm named August Civil Service Employee of the Month

Anthony Filholm has been named the August Civil Service Employee of the Month at SDSU.

Filholm has been a locksmith in the facilities and services department for 27 years. He has two children, Mariah and Delilah, and one dog, Jack. In his free time, Filholm enjoys woodworking and deer hunting. He is also a member of the Big Sioux Bowmen Archery Club.

In letters of support, coworkers said Filholm is an effective and professional employee whose positivity and wealth of knowledge benefit his department and others he works with.

“I have had the pleasure of knowing Tony for many years,” said Barbara Dyer, program assistant in the Jerome J. Lohr College of Engineering. “He is definitely a ‘can-do’ person. I always know that when I need something done, he is most willing and able to do it. He has instilled great work ethic in the men who work with him.”

“It is so nice to put a work order through the system and know that happy, helpful people will come to do the job led by Tony. He is very professional with a great sense of humor. Work can be fun when Tony is involved—light-hearted, yet efficient.”

“Tony is a valuable asset to SDSU,” said Marla Mitchell, senior secretary of the department and others he works with.

He is definitely a ‘can-do’ person. I always know that when I need something done, he is most willing and able to do it. He has instilled great work ethic in the men who work with him.”

New online tools help farmers use climate data

Two new online decision-making tools are available to farmers through the U.S. Department of Agriculture’s Useful to Usable, or U2U, research project, according to South Dakota state climatologist and SDSU Extension climate specialist Dennis Todey. The project is funded through the Agriculture and Foods Research Initiative.

The U2U Decision Dashboard and Climate Patterns Viewer help farmers use climate data to improve their crop yields and decrease their risk.

“Farmers can choose their location, when the corn was planted and the number of days it takes to reach maturity. The program then assesses current development compared to a 30-year average and projects tasseling and maturity dates, according to Todey.

“The farmer can then compare that with what he predicts should occur during any of the last 30 years,” Todey explained.

A second tool, the Climate Patterns Viewer, allows farmers to examine the landscape patterns of climate influences on soybeans, corn and wheat.

“Farmers can use these tools to help plan when to start planting, when to fertilize and when to harvest. They can also use the tools to help plan future years’ harvest,” Todey explained.

The farmer can then compare that with what he predicts should occur during any of the last 30 years,” Todey explained.

The Brookings Chamber Music Society announces fall season

The Brookings Chamber Music Society has announced its fall membership and season ticket drive.

BCMS is a nonprofit organization that presents concerts in the Performing Arts Center in Brookings and is allied with the SDSU Department of Music.

This season’s lineup features four memorable concerts scheduled throughout the year, beginning with an Oct. 19 performance by the Eastman Conservatory-trained pianist Igor Lipskis. Lipskis offers features a surprising element of illusions in his performances.

The La Catrina String Quartet will grace the Performing Arts Center Feb. 22. The quartet has been recognized as the new vanguard for contemporary Latin American string quartet repertoire.

The Minneapolis Guitar Quartet completes the series April 12, returning almost 10 years to the day since their last performance in Brookings. Together since 1996, this quartet of classical guitarists will present a dusty array of first-rate repertoire from the Renaissance, Baroque, Spanish and Latin American styles.

Students experience multiple biomes on trip

Nine SDSU students recently returned from a 14-day trek from the Waswah National Wildlife Refuge to the Churchill (Manitoba) Northern Studies Centre. The adventure was for the course, “Arctic Biosoystems and Culture.”

The students, whose majors ranged from ecology to advertising, spent their time experiencing the Arctic wildlife, nature, research and culture. In addition to seeing polar bears and beluga whales in their natural habitat, the students toured Fort Prince of Whales.

“Being an ecologist in training, you generally deal with a single biome to analyze the biotic and abiotic features,” said senior Austin Hanson, who was also on the trip. The class is open to all students.

“Even though I wasn’t necessarily the target audience for this course, with a bit of focus I was able to study and learn about the social, cultural, economic characteristics of Canada, and how these shifted as we approached the far north,” said senior political science major Bryce Kummer. Kummer is from Sioux Falls.

Students experience multiple biomes on trip

The Brookings Chamber Music Society has announced its fall membership and season ticket drive. BCMS is a nonprofit organization that presents concerts in the Performing Arts Center in Brookings and is allied with the SDSU Department of Music.

This season’s lineup features four memorable concerts scheduled throughout the year, beginning with an Oct. 19 performance by the Eastman Conservatory-trained pianist Igor Lipskis. Lipskis offers features a surprising element of illusions in his performances.

The La Catrina String Quartet will grace the Performing Arts Center Feb. 22. The quartet has been recognized as the new vanguard for contemporary Latin American string quartet repertoire.

The Minneapolis Guitar Quartet completes the series April 12, returning almost 10 years to the day since their last performance in Brookings. Together since 1996, this quartet of classical guitarists will present a dizzying array of first-rate repertoire from the Renaissance, Baroque, Spanish and Latin American styles.

Season passes are available now from the SDSU music office in Lincoln Music Hall on the SDSU campus.

An adult season ticket is priced at $60 for all four concerts. Patron membership is $75 and a $200 sustaining membership package includes four season tickets.

Please note that an additional fee may be paid in order to obtain premium seating for The King’s Singers concert. For more ticket information, or to order tickets, call the SDSU Department of Music office at (605) 688-5187.
Impact State • September 2014

Running on a 10 percent incline can improve the overall performance of long distance runners, according to a study completed by Derek Ferley, education and research coordinator at Avera Sports Institution. He conducted the research as part of his doctoral work in health and nutritional sciences.

Most running magazines contain articles endorsing hill training for serious long distance runners, Ferley explained, “but there was virtually no research to support it.”

Previous studies had confirmed that interval training on a level grade would improve running performance. The six-week study involved 32 physically fit distance runners from the Sioux Falls area—14 men and 18 women. The participants’ average age was 27.

Each experimental group had a dozen participants running intervals on a treadmill twice a week, one on a 10 percent incline for 30 seconds and the other on a level grade for an average of two minutes and 16 seconds. Every two weeks the number of intervals increased by two for the incline group and one for the level grade group. The eight runners in the control group did not run intervals.

Two parameters were used to assess the runners’ performance, according to Ferley. Using running economy determined by measuring oxygen consumption while running at submaximal speeds, both experimental groups improved to the same extent. However, in considering how long the participants could run at a maximum intensity level, known as time to fatigue, he came to an unexpected conclusion. “The level grade group improved even more than the inclined grade group,” Ferley noted, which provides what he called “a great springboard for doing additional studies.”

All tests to determine fitness levels for the study were conducted on a level grade, he pointed out. If he had included some testing on an incline, he speculates that there might have been differences between the two experimental groups.

Savory, Allen highlight Common Read schedule

Allan Savory and author Will Allen highlight the 2014 SDSU Common Read activities.

Savory, who is known as the originator of holistic management, opened the university activities with his Sept. 17 talk titled “Importance of Livestock Grazing to our Grasslands.” He also visited several classes and participated in the upcoming Plain Green Conference in Sioux Falls.

Allen, the founder and CEO for Growing Power, is the author of “The Good Food Revolution” the 2014 Common Read. Allen speaks at State Oct. 27 as the Griffith Honors Forum Lecture, held at 7 p.m. in the Performing Arts Center.

According to Tim Nichols, dean of the Van D. and Barbara B. Fishback Honors College, this year’s Common Read themes are explore your roots, grow your awareness, feed your passion and nurture our community. These themes will be highlighted in courses across campus and in Common Read events throughout the semester. The campus Common Read kickoff took place Sept. 15.

“We are thrilled to welcome an impressive lineup of world-renowned leading thinkers as part of the Common Read series,” Nichols said. “Our activities will highlight people working locally and globally to make a positive difference in their communities.

“Through his work as a farmer, rancher, research biologist and game ranger, Allan Savory brought a unique perspective to confronting issues of poverty and resource management,” Nichols said. “Will Allen’s innovative, inspiring, grass-roots approach has established him as a leader in growing healthy food, people and communities.”

Aramark, the university’s food service provider, is joining the SDSU Common Read activities with special meals featuring local foods and southern cooking scheduled throughout the semester.

“The Common Read is a great opportunity for us to come together as a campus and community, and to consider together some of the most important issues of our time,” Nichols said. “I hope everyone will read the book, participate in the activities and join the good food revolution.”

William Wilson, an award-winning professor at North Dakota State University, will present “Major Developments in Crops and Agriculture: Pressures for Improving Technology” Oct. 14 at 7 p.m. in the University Student Union Volstorff Ballroom.

Other university activities include the HungerU Mobile Classroom, Oct. 20-21, Wagner Hall parking lot; and a Hunger banquet and community night, Nov. 10, University Student Union Volstorff Ballroom.

State’s Common Read series started in 2009.