

COLLEGE OF AGRICULTURE AND NATURAL RESOURCES

# AG NEWS

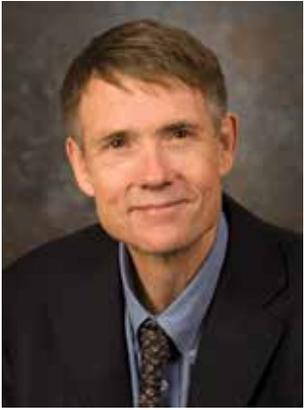
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Dean Frank Galey at farm and ranch expos this winter presented updates on brucellosis in Wyoming. See page 10 for information about the college's brucellosis efforts.



UNIVERSITY OF WYOMING



Dean Frank Galey

“ Everyone is entitled to their own opinions, but not their own facts. ”

Daniel Patrick Moynihan  
American statesman  
and sociologist

## Dear Friends and Colleagues,

Most would agree the Internet is an amazing tool that has helped make everything from the Library of Congress to your grandmother’s stuffing recipe readily accessible to millions.

There is a flip side to information access.

Not all information is created equal, and we all now have the ability to read only that information that comes from sources whose opinions we agree with rather than seek out differing opinions or evaluate sources of information.

Agriculture and natural resource management practices are not exempt from opinion impersonating fact. Topics range from whether genetically modified organisms (GMO) are beneficial or harmful, livestock grazing debates, water quality, the superiority of minimally processed or natural foods, and a host of other issues. Our role as a research and teaching institution is providing scientifically based information to the public, policymakers, fellow scientists, and producers. Unfortunately, scientific consensus doesn’t seem to grab attention like rhetoric.

GMOs have become the focus of a swelling national debate that has seen a number of states propose new food labeling regulations. Few seem to ask, “What does the science say?” The overwhelming scientific consensus is GMOs are safe, and there is no evidence they are dangerous. To help our students and Wyoming citizens understand more about the debate surrounding genetic engineering, **Andrew Kniss**, associate professor of plant sciences, recently presented a webinar titled *What have they done to our food* in which he gives an overview of modern agricultural production practices and addresses misconceptions about genetically engineered crops. You can view his webinar at <http://bit.ly/knissgmo>.

**Cole Ehmke**, a faculty member in agricultural and applied economics, recently shared a video cast of a debate on genetically modified food. The debate was hosted by a group called Intelligence Squared and can be viewed at <http://bit.ly/modifyfood>.

GMO use is an emotional topic for many. Perhaps that is because eating is a daily activity for everyone. For others, their opinions are influenced more by the prognosis that the human race will need to feed 34 percent more people (9.1 billion people worldwide) by 2050. A United Nations Food and Agriculture Organization white paper titled *How to Feed the World in 2050* summarizes the many facets of this problem. The authors are cautiously optimistic but conclude this task is possible only if the necessary financial investment is made and policies conducive to agricultural production are put in place. This is no small task.

Today, the average American farmer feeds about 155 people. In 1960, that number was 25.8. Plant genetic modification helped increase yields and improved crop resistance to pests and drought. Land-grant institutions, with their networks of agricultural experiment stations and their mission to educate and train young people in the agricultural sciences, are certainly part of the food supply equation.

We need to move forward as a society and be willing and able to sustainably feed all peoples around the globe. Those involved in agricultural sciences and those who work with a broader audience that may have no firsthand knowledge of how modern farms operate are in a unique position to send a positive message about our industry and help debunk myths.

This is my challenge to you as alumni – become knowledgeable about modern food production science, share that knowledge with a broader audience, and help promote agriculture as an environmentally conscious and sustainable industry.

Dean Frank Galey  
College of Agriculture and Natural Resources

## ERNEST HOLDS THE WYOMING EXCELLENCE CHAIR IN DISEASE ECOLOGY

The University of Wyoming's efforts to combat diseases affecting wildlife, livestock and humans in the state have received a boost with the arrival of a new faculty member in the Department of Veterinary Sciences.

Professor Holly Ernest has joined the university as the Wyoming Excellence Chair in Disease Ecology. She comes from the University of California-Davis, where she has been a professor of wildlife genetics and population health since 2010.

Her expertise lies in the ecology, population health, and genomics of wildlife populations and veterinary medicine.



*Professor Holly Ernest*

### Research Focus

Her research will focus on population-level impacts and genetics of diseases of wildlife and domestic animals such as respiratory illness in bighorn sheep and domestic sheep, blue tongue/epizootic hemorrhagic disease, brucellosis, chronic wasting disease, tularemia, and plague. Her work will take into account climate, habitat alteration, land use, and other environmental factors as they relate to animal disease ecology and management.

"The simple diseases, we know how to control. However, at least some of the inability of human and veterinary medicine to contain more complex diseases lies in our failure to consider the impacts of the interrelationships of environment, human activity, climate, and other factors on the emergence and spread of infectious diseases in and between people and animals," says Will Laegreid, head of the Department

of Veterinary Sciences and director of the Wyoming State Veterinary Laboratory. "The knowledge and expertise Dr. Ernest brings to UW will help us to understand these relationships and, hopefully, use that knowledge to prevent or control disease."

### Senior Faculty Positions

The 2006 Wyoming State Legislature established the Excellence in Higher Education Endowment, which included a \$70 million endowment to create senior faculty positions for highly distinguished scholars and educators at UW. The legislation states the endowed positions must expand university instruction and research in disciplines related to economic and social challenges facing Wyoming.

Ernest received a bachelor's degree in biology from Cornell University in 1980; a master's degree in veterinary physiology and pharmacology (1982), and a Doctor of Veterinary Medicine Degree (1986), both

"The work of my new disease ecology and genomics research team will help provide practical answers for better prevention, control, and management of diseases that threaten wildlife populations, livestock well-being, and human health."

*Professor Holly Ernest*

from Ohio State University; and a Ph.D. (2001) in ecology from UC-Davis.

At UC-Davis, her research included wildlife health in species ranging from bighorn sheep, black bears, mountain lions, and sea otters to great gray owls, Swainson's hawks, and hummingbirds – and their disease-causing agents including nematode worms, bacteria, and viruses.

"I genuinely look forward to working on the health challenges facing wildlife, livestock, and people in our rapidly changing environments," Ernest says. "The work of my new disease ecology and genomics research team will help provide practical answers for better prevention, control, and management of diseases that threaten wildlife populations, livestock well-being, and human health. My work at the University of California-Davis and background as a veterinarian prepared me well for these challenges and included research, veterinary medicine, and public outreach."

## COLLEGE'S FACULTY, STAFF MEMBERS RECEIVE HONORS

University of Wyoming Extension specialists **Karen Panter** and **Cole Ehmke** received Outstanding Educator Awards during the college's annual employee recognition program in December.

Both received \$2,500. Panter, a member of the Department of Plant Sciences, is the horticulture specialist, and Ehmke, in the Department of Agricultural and Applied Economics, is the agriculture entrepreneurship and personal financial management specialist.

An anonymous donor established the award to recognize classroom and extension educators in the college. Nominations are peer-reviewed by a committee comprised of a dean's office representative, an academic department head, and a previous award recipient.

Students present two awards through the Office of Academic and Student Programs, with each recipient receiving \$500. Veterinary sciences Professor **Donal O'Toole** received the Lawrence Meeboer Agricultural Classroom Teaching Award. He was nominated by rangeland ecology and watershed management student Catherin-Jane Angwin, who graduated this December.

Molecular biology Associate Professor **Pamela Langer** received the Outstanding Adviser Award. She was nominated by Bill Trebelcock, a senior molecular biology student.

### Outstanding Employee Award

Dean Frank Galey presented two Dean's Outstanding Employee Awards. Recipients were **Tracy Bennett**, senior accounting associate in the Department of Family and Consumer Sciences, and **Casey Seals**, greenhouse operations manager at the Laramie Research and Extension Center. Each received \$500.



*Department of Veterinary Sciences Professor Donal O'Toole receives the Lawrence Meeboer Agricultural Classroom Teaching Award from student Catherin-Jane Angwin and dean Frank Galey.*



*Student Bill Trebelcock, left, and dean Frank Galey present the Outstanding Adviser Award to Associate Professor Pam Langer.*



*Tracy Bennett, senior accounting associate in the Department of Family and Consumer Sciences, receives a Dean's Outstanding Employee Award from dean Frank Galey.*



*Dean Frank Galey presents the Outstanding Educator Award to Cole Ehmke, University of Wyoming Extension agriculture entrepreneurship and personal financial management specialist.*



*Casey Seals, manager of the greenhouse complex at the Laramie Research and Extension Center, receives a Dean's Outstanding Employee Award from dean Frank Galey.*



*Extension horticulture specialist Karen Panter receives an Outstanding Educator Award from dean Frank Galey.*

## UW EXTENSION HONORS OUTSTANDING EMPLOYEES

UW Extension employees were recognized for excellence during In-depth, the organization's annual training session in Laramie late last year.

Cole Ehmke, an agriculture entrepreneurship and personal financial management specialist, received the Jim DeBree Excellence in Education Award – extension's highest honor.

Ehmke is in the Department of Agricultural and Applied Economics.

The award, named in honor of the retired extension administrator, is given to those who demonstrate a high level of professionalism, performance, and leadership within their program areas and communities.

Ehmke is involved with several extension teams, including community development and financial literacy, and provides support to the Agriculture and Horticulture State Initiative Team.

Ehmke joined extension in 2005.

### Newer Employee

Hannah Swanbom, the community development educator based in Natrona County and also serving Converse and Niobrara counties, received the Newer Employee Recognition Award.

"This is a great honor, and I would like to thank my peers and colleagues who nominated me for this award," she notes.

She joined extension in 2012.

### Diversity Enhancement

Tina Russell, who serves the Wind River Reservation and Big Horn, Fremont, Hot Springs, Park, and Washakie counties, was presented the Diversity Enhancement Recognition Award.

Russell, also a 4-H educator, is based in Ethete.

Russell's specialties include agriculture and natural resources, forestry, energy efficiency and conservation, and recycling education.

Russell joined extension in 2008.

### Creative Excellence

Innovative avenues in information delivery and professional expertise led to the manager of the Office of Communications and Technology receiving the Creative Excellence Recognition Award.

Nominators cited Tana Stith's professionalism of the office reflected in numerous interdisciplinary and cross-campus projects. Her collaboration is friendly, energetic, and goal-oriented producing a professional presence at the University of Wyoming and across Wyoming, nominators stated.

Stith joined the University of Wyoming in 1988 and UW Extension in 1990.



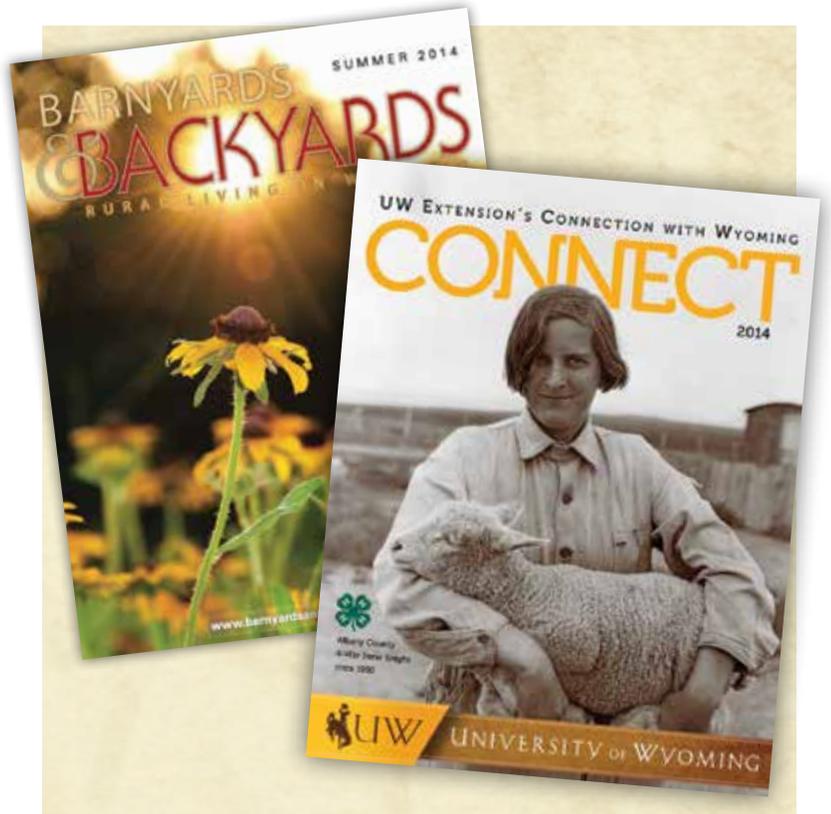
*Specialist Cole Ehmke, center, was presented the Jim DeBree Excellence in Extension Award by dean Frank Gale, left, and UW President Richard McGinity. The award is the highest an educator can receive in UW Extension.*



*Educator Hannah Swanbom receives the Newer Employee Recognition Award from dean Frank Gale, left, and UW President Richard McGinity.*



*Educator Tina Russell receives the Diversity Enhancement Recognition Award from dean Frank Galey, left, and UW President Richard McGinity.*



## COLLEGE PUBLICATIONS RECEIVE HONORS

College publications won awards in the Wyoming Press Association associates contest earlier this year.

*Barnyards & Backyards* magazine, produced by the Small Acreage Issue Team, in the University of Wyoming Extension, received first place in publications. *CONNECT*, the magazine of UW Extension, received third place in the same category.

The Office of Communications and Technology publishes both publications.



*Tana Stith, manager of the Office of Communications and Technology, was presented the Creative Excellence Recognition Award by dean Frank Galey, left, and UW President Richard McGinity.*



# Military honors professors for

A major general and senior master sergeant were present but the salute was to four professors at the University of Wyoming.

Major General Luke Reiner, Adjutant General for the Wyoming Military Department, presented custom-designed – by him – coins to four professors teaching business courses honoring their efforts to accommodate fulltime student Wyoming Air National Guardsman SSgt. Chelsea Nelson in her studies while she is deployed overseas.

Reiner is responsible for the Wyoming Air and Army National Guard and directs the Wyoming Military Department.

“It seems the right thing to do to recognize somebody for, in our mind, going above and beyond,” Reiner said during the December presentation in the Old Main Building.

Nelson, from Loveland, Colorado, is a senior with triple majors: economics, history, and English.

## A General Thank You

With flags of the United States and state of Wyoming as a backdrop, Reiner gave ceremonial coins to assistant professors Alexandre Skiba and Felix Naschold, Associate Professor Thorsten Janus, and Professor Steve Smutko.

“To put it bluntly, a “coining” is a big deal amongst military,” says Marty Martinez, project coordinator of the UW Veterans Service Center. “Many soldiers may go an entire career having never received a

coin. So it doesn’t happen often, but when it does, it is meaningful.”

And getting a general onto a campus? “With their schedules, it is hard coordinating a general to be anywhere,” says Martinez, who served 29 years in the military. “He set this up himself – he wanted to come here and recognize these four professors because their efforts meant that much to him and to SSgt. Nelson.”

The coins have “Presented for Excellence” and an image of a Minuteman holding a rifle in one hand and the other on a plow, representing the citizen soldier. An image of Steamboat is on the other side with the National Guard motto “Always Ready, Always There.”

## Superior Student

Smutko, the Spicer Wyoming Excellence Chair in the Ruckelshaus Institute, credited Nelson for her success as a student and airman.

“She is maybe one of the few students who could pull this off,” says Smutko, who is also a member of the Department of Agriculture and Applied Economics in the College of Agriculture and Natural Resources. “Chelsea is probably one of the most intelligent students I’ve had in a couple years come through my classes. There are some things we can do to help, but it’s Chelsea that put it all together.”

Nelson, in an email read by Reiner, says there’s nothing more she could ask for to complete her courses.



*From left, Wyoming Air National Guard Senior Master Sergeant Andy Davis, Thorsten Janus, Steve Smutko, Sasha Skiba, Felix Naschold, and Major General Luke Reiner, Adjutant General for Wyoming.*

# accommodating student on deployment

“My professors have been incredibly flexible with deadlines and available for questions and are encouraging,” she wrote. “They keep me engaged in the courses through email and occasionally speak to the camera directly, which helps me feel less like an outside student in the classroom.”

Nelson maintains and checks survival equipment needed if a C-130 Hercules crashes.

Martinez said UW has been recognized as one of the top schools in the nation for its programs and services offered to veterans. The professors’ accommodation allowed Nelson to not lose an entire semester or more while serving her country. Saying an institution is veteran friendly in advertising is easy, Martinez said, but UW’s faculty and staff members and administration make that true.

“You gentlemen did that for this student,” Martinez told the professors. “You made our soldiers, our students, our veteran students understand that UW is behind them, supports them, appreciates their military service, and their commitment to become students here.”

## Academics and Deployment

Often, students deployed overseas are advised to dis-enroll and take a “military drop.” Or, explore Outreach School options, but while there may be excellent Internet connectivity where the soldier is deployed, that may not be available for personal use.

Beyond connectivity issues, multiple time zones, limited time, and mission-related stress can make studying from



*Major General Luke Reiner, right, visits with, from left, Professor Steve Smutko, assistant professors Alexandre Skiba and Felix Naschold, and Major Robert Rickgauer.*

afar nearly impossible. Students, if they maintain motivation, can re-enroll after deployment.

Martinez, who has been with the Veterans Service Office two years, has noticed if a student is willing to try, the instructor is willing to help if possible. When able, professors have been creative in restructuring assignments to accommodate their students during a deployment, but nothing has come close to what the four professors did.

“The opportunity given to SSgt. Chelsea Nelson is truly a first since I have been working in the Veterans Services Center,” he notes.

“You made our soldiers, our students, our veteran students understand that UW is behind them, supports them, appreciates their military service and their commitment to become students here.”

*Marty Martinez,  
Project Coordinator,  
UW Veterans Service Center*

# UW seeks better brucellosis control though

College of Agriculture and Natural Resources scientists at the University of Wyoming are hopeful their brucellosis studies may produce a better vaccine for livestock and are studying whether a change in vaccination procedures could offer better control.

Brucellosis can cause elk, bison, and cattle to abort fetuses. The highest risk of brucellosis transmission to other animals occurs after an animal has an abortion. The organism can also be transmitted to humans, often through consumption of unpasteurized milk or dairy products such as soft cheese, which may result in a severe disease called undulant fever.

## Disease Spillover from Elk

Brucellosis is an exotic disease that came from Europe and European cattle and was then transmitted to wildlife in the U.S., establishing the reservoir in elk and bison seen in the Greater Yellowstone Area.

“We have eradicated the disease from livestock but occasionally get a disease spillover from elk transmitting the organism to livestock,” says Bruce Hoar, University of Wyoming brucellosis research coordinator. “One of the ways we try to control brucellosis is through the use of vaccinations.”

Scientists are interested in pursuing vaccines for wildlife, particularly elk; existing vaccines for cattle are not very effective at preventing disease in elk. The emphasis, though, is on livestock vaccines, says Hoar.

## Strain 19, then RB51

Cattle in the U.S. have been vaccinated since the 1930s with a vaccine called Strain 19. That vaccine was moderately effective preventing 60-70 percent of cattle from



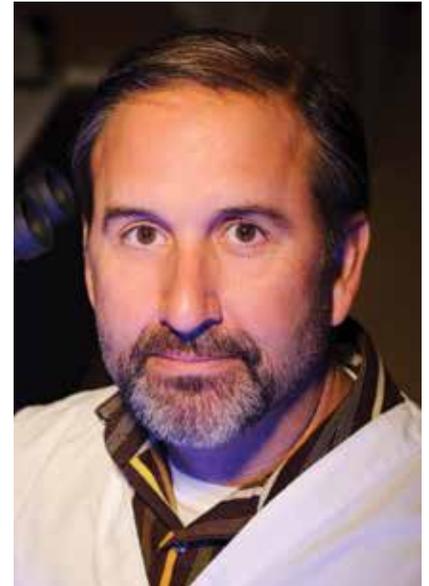
*Associate Professor Gerry Andrews*

aborting after becoming infected, notes Hoar. Strain 19 was replaced by a vaccine called RB51 in the 1990s and is the currently licensed vaccine for cattle.

“It, too, only protects 60-70 percent of animals in the herd, so that leaves 30-40 percent of the herd vulnerable, and, because of that, we are looking for better vaccines, and that is what a team of researchers here at the University of Wyoming have been involved in for a number of years,” says Hoar.

Several investigators at UW are looking at different vaccines. Gerry Andrews, associate professor in the Department of Veterinary Sciences and a medical microbiologist, has developed unique vaccines.

“These vaccines have been tested in the mouse model of brucellosis,” notes Hoar. “They are in the early stages of development, but we are very excited and hopeful this will lead to a better vaccine for cattle.”



*Assistant Professor Jeff Adamovicz*

Another, more recent, effort is to simply vaccinate with more doses of RB51 vaccine, said Assistant Professor Jeff Adamovicz in the department.

“We recently completed a vaccine study in Black Angus cattle and have promising results that show multiple doses of RB51 vaccine reduced abortions in cattle and may also reduce the risk of transmission,” says Adamovicz. “We hope to pursue a recommendation to change the vaccination practices in Wyoming based on our findings.”

Other efforts to model the risk of brucellosis transmission and development of economically feasible ranching practices are also of interest.

These efforts parallel vaccine development efforts but are an important part of the overall goal of reducing transmission and economic impacts to Wyoming ranchers,

# vaccine development, vaccination practices

according to Brant Schumaker, an assistant professor in the Department of Veterinary Sciences, and Dannele Peck, associate professor in the Department Agricultural and Applied Economics.

## Stopping Disease Transmission

Other on-going efforts to break disease transmission are also important, says Hoar. These include the work of the Wyoming Game and Fish Department, a crucial partner in the effort to control the disease, he says. Elk calves on the feeding grounds are still vaccinated with Strain 19.

Game and fish department personnel are able to vaccinate the elk with a “bio bullet,” which contains a freeze-dried vaccine pellet. The bullet is shot into a rear muscle of the animal and then breaks down, slowly releasing the vaccine into the animal. That technique works well but in a non-feeding ground elk population, the process becomes more challenging, notes Hoar.

In northwestern Wyoming, 20-40 percent of elk will test positive on a blood test, which means they were at some point exposed to the bacterium. That doesn't necessarily mean they are actively spreading the organism, says Hoar.

As one goes east of Yellowstone National Park into Park County, 5-15 percent of elk can be seropositive, which shows they have been exposed to the disease and that brucellosis has spread farther east. Most recently, seropositive elk have been found in Big Horn County raising concerns about the spread to local cattle, although no seropositive cattle have been found in this area, says Hoar.

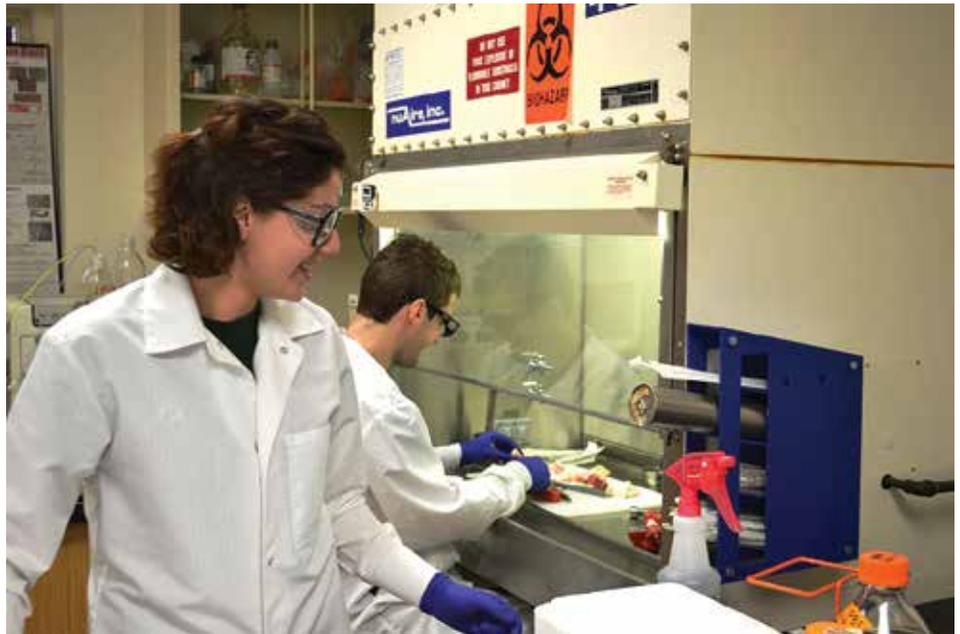
“It is still a concern, because we are seeing it where we historically haven't been seeing it in our elk,” notes Hoar.

The most recent farm bill approved use of funds for brucellosis vaccine research.

“There could be significant funding for brucellosis vaccine research, and that would be a really good thing,” says Hoar. “The University of Wyoming would be a great competitor for these grant funds, as we already have a well-qualified team in place that can perform the research. Our long-term goal is to develop vaccines, vaccine strategies, and diagnostic tests that will enhance our ability to control the potentially devastating effects that this disease could cause to Wyoming cattle and wildlife.”

“We recently completed a vaccine study in Black Angus cattle and have promising results that show multiple doses of RB51 vaccine reduced abortions in cattle and may also reduce the risk of transmission. We hope to pursue a recommendation to change the vaccination practices in Wyoming based on our findings.”

*Jeff Adamovicz,  
Assistant professor,  
Veterinary Sciences*



*Ph.D. student Alexis Dadelahi and undergraduate student Matthew Rorke conduct brucellosis research at the University of Wyoming.*

# PROGRAM NOTES

## Agricultural and Applied Economics

**Kate Harlan** has been selected to receive the ninth-annual Andrew and Connie Vanvig Fellowship.

The fellowship is the premier award for graduate students in the department, says **Tom Foulke**, research scientist in the department and representing the graduate committee.

The \$4,000 fellowship is made possible by an endowment from former department head **Andy Vanvig** and his wife, **Connie**. The fellowship is given annually to an outstanding graduate student in agricultural and applied economics. Harlan has a 4.0 GPA and is a leader within the program, says Foulke.

She is the daughter of Robert and Lynn Harlan of Kaycee. Her father is a UW agricultural and applied economics alumnus, graduating in the 1970s. Harlan received her bachelor's degrees, double-majoring in agricultural education and agricultural business, from UW in 2012. She joined the master's program in 2013. Her graduate research centers on building a tool to optimize ewe selection. The proposed title of her thesis is, "Valuation of Residual Feed Intake as a Selection Tool for Northeastern Wyoming Sheep Producers."

Agricultural economics graduate student **Susan Wells** is the first recipient of the \$1,000 Glenn P. Roehrkasse Scholarship.



*Kate Harlan*

The scholarship was established by Marion Roehrkasse in memory of her husband and former agricultural economics faculty member **Glenn Roehrkasse**. The scholarship is given to an outstanding graduate student in agricultural and applied economics whose research focuses on statistical or quantitative modeling, notes Associate Professor **Ben Rashford**, who announced the scholarship on behalf of the department's graduate committee.

Wells has maintained a 3.77 GPA while working toward a triple graduate major (master's degree in Agricultural and Applied Economics, Environment and Natural Resources, and Water Resources), and a reclamation certificate. Her thesis under the direction of Assistant Professor **Kristi Hansen** and Associate Professor **Chris Bastian** is entitled, "The economic impacts on Goshen Irrigation District of reservoir storage policies on the North



*Susan Wells*

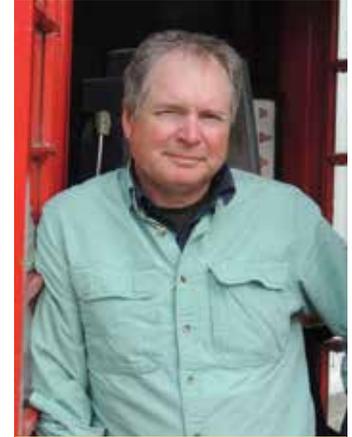
Platte River under different climate scenarios."

She is developing a detailed mathematical programming model of the North Platte River to analyze the economic impact of different policies the Bureau of Reclamation might implement to allow its contractors greater flexibility in storing water from year to year, says Rashford.

## Ecosystem Science and Management

Faculty and staff members and students have been very busy this semester, notes Professor **John Tanaka**, head of the department. "It seems like the busiest we've been in quite a while," he says.

**Cassandra Yanez** joined the department as senior office assistant and is quickly learning all the things that go on in the department. "We are currently searching for a computational hydrologist, a soil pedologist, a soil microbiologist, and a



*Professor Scott Shaw*

watershed management faculty member," says Tanaka. "Hopefully in the next newsletter, we will be announcing names to go along with those positions."

Professor **Scott Shaw** recently published a new book "Planet of the Bugs: Evolution and the Rise of Insects." The book has received very favorable reviews from such places as *The New York Times*, *New Scientist*, and *Times Higher Education* (UK).

The department has been represented at the Wyoming Section of the Society for Range Management meeting in Evanston, the Wyoming Weed and Pest Council meeting in Evanston, the Wyoming Association of Conservation Districts, and Wyoming Chapter of the Soil and Water Conservation Society joint meeting in Sheridan, the Wyoming Stock Growers Association meeting in Casper, the Soil Science Society of America meeting held in Long Beach, California, the Ecological Society of America meeting in Sacra-



mento, California, the National Workshop on Large Landscape Conservation in Washington, D.C., and the A Community of Ecosystem Services (ACES) in Washington, D.C. There were probably many more that faculty and students attended and gave presentation on their work, Tanaka says.

“Thirteen rangeland ecology and watershed management undergraduate students and three graduate students graduated at the end of fall semester,” notes Tanaka. “Congratulations to each of them and best wishes.”

## Family and Consumer Sciences

**Kristin McTigue**, director of the Didactic Program in Nutrition and Dietetics (DPND), and seven Student Dietetic Association (SDA) members – **Brianna Cusack**, **Megan Halles**, **Kaitlyn Livingston**, **Erin Kyle**, **Courtney Nordhus**, **Alyssa Renneisen**, **Abby Roich** – attended the 2014 Food and Nutrition Conference and Expo (FNCE) in October in Atlanta. FNCE is the world’s largest annual meeting of food and nutrition professionals, and the conference provides networking and educational opportunities for both students and professionals, says Associate Professor **Bruce Cameron**, head of the department. This year’s educational offerings spanned 16 specialty tracks, and Kristin and the students attended sessions on current nutrition issues related to



*Treva Sprout-Ahrenholtz*

wellness and prevention, medical nutrition therapy, and career development. Students also attended a dietetic internship fair with representatives from internships throughout the country. In addition, all UW attendees enjoyed visiting the exhibit hall, which showcased hundreds of new food products and emerging nutrition trends. “As a result of our high attendance rate at the conference, UW’s DPND program won the Academy of Nutrition and Dietetics’ 2014 Food and Nutrition Conference and Expo School Spirit Contest,” says Cameron. “Kristin and the students attended a private celebratory reception with Academy President Sonja Connor and other academy board members at the Omni Hotel at the CNN Center.”

**Treva Sprout-Ahrenholtz** and **Erin Irick** will lead a textiles field study tour for family and consumer sciences students at the end of spring semester 2015. The field study tour

will involve travel to London, Paris, and Edinburgh as part of an art, fashion, and textiles tour. “Highlights of the trip will include visits to numerous designer studios and retail venues, tours of specialized textile factories, and, of course, several museum excursions,” notes Cameron.

The trip is still open to any student or community member and is May 20-June 1. Please contact Treva, treva@uwyo.edu, or Erin, eirick@uwyo.edu, for more information.

## Plant Sciences

Students who graduated this semester were **Brekke Peterson** (Ph.D.), **Judith Odhiambo** (Ph.D.), both from Assistant Professor **Urszula Norton**’s program, and **Henry Sintim** (M.S.) from Professor **Valtcho Jeliakov**’s program, notes Professor **Jim Heitholt**, head of the department.

In early December 2014, graduate student **Timm Gergeni** and undergraduate students **Jared Dillinger** and **Robert Herndon** were recognized by the Rocky Mountain Regional Turfgrass Association Annual Conference in Denver as scholarship recipients for 2014. Professor **Karen Panter** was recognized as recipient of the 2014 College of Agriculture and Natural Resources Outstanding Educator Award.

Last fall, the department began offering Friday afternoon seminars as webinars with Profes-



*Henry Sintim*

sor **Robin Groose**, Associate Professor **Andrew Kniss**, Assistant Professor **Brian Mealor**, and Associate Professor **Jay Norton** posting their talks on YouTube.

**Beth Fowers** joined the department on a longer term basis in January as an assistant research scientist and will be contributing significantly to the department’s research and extension efforts in weed science, notes Heitholt. Early in the fall semester, Assistant Professor **Randa Jabbour** invited Wyoming crop producer Vance Lungren to speak at her cropping systems management and ecology course. Later in the semester, students in her course prepared various management strategies for alfalfa and sugarbeet producers in the Worland area.

In early December, Assistant Professor **Gustavo Sbatella** was awarded a grant from the Wyoming Agricultural Experiment Station to study herbicide

efficacy and carryover in limited irrigation production systems. Later in December, Assistant Professor **Sadanand Dhekney** received a Wyoming Department of Agriculture grant to improve weevil resistance in alfalfa. In November 2014, Dhekney hosted Jinhua Chang from Hebei Agricultural University, China, who presented a talk in Laramie on grapevine mutagenesis for new cultivar development. Jeliaskov also hosted Ivan Salamon, from FHPV Presov University in the Slovak Republic, to speak in Laramie regarding research on plant medicines derived from blossoms. Unfortunately, in early December, Professor Jeliaskov departed the Sheridan Research and Extension Center and accepted a position with the Columbia Basin Agricultural Research Station in Pendleton with Oregon State University.

## Veterinary Sciences

**Mitchell Szymczak**, a microbiology major and undergraduate INBRE Research Fellow, took second place in post-doctoral poster competition at the Rocky Mountain Virology Club meeting in September. Working with Assistant Professor **Myrna Miller** in the department, Mitchell's project involved complete genome sequencing of Rio Grande virus, an insect-borne *Phlebovirus* related to Rift Valley fever and other emerging *Phleboviruses*, notes Professor **Will Laegreid**, head of the department. Mitchell's work enabled him to perform analyses to determine



*Mitchell Szymczak*

the relatedness of Rio Grande virus to other *Phleboviruses* and to identify diagnostic cross-reactions with Rift Valley fever virus. "This is very important work since a false positive Rift Valley fever virus diagnosis could lead to major public health concerns and economically costly agriculture regulatory responses including livestock quarantine and trade restrictions," says Laegreid.

A mountain lion study led by Wyoming Excellence Chair in Disease Ecology Professor **Holly Ernest** received national news attention this past fall. The study, published in the journal *PLoS One*, utilized a large genetic sampling of mountain lions from the Santa Monica and Santa Ana Mountains in Southern California to identify the impact of barriers to mountain lion movement, especially the network of freeways in the area, on genetic diversity and survivability of mountain lions in these areas. Low levels of genetic diversity have been associated with skeletal deformities in mountain lions in the study areas. It is possible relatively simple

interventions such as wildlife overpasses, similar to those built by the Wyoming Department of Transportation over Highway 191 in the Pinedale area, may allow interbreeding of isolated mountain lion populations, increasing their genetic diversity.

## Agricultural Experiment Station

The Wyoming Agricultural Experiment Station (WAES) committed funds to support several competitive grants again this past fall semester, notes **Bret Hess**, associate dean for research and AES director.

Research projects funded by the WAES competitive grants programs are mostly allocated by setting aside a portion of federal dollars to support the college's research capacity. Projects addressing the Production Agriculture Research Priorities ([http://www.uwyo.edu/uwexpstn/\\_files/docs/production-ag-research-priorities.pdf](http://www.uwyo.edu/uwexpstn/_files/docs/production-ag-research-priorities.pdf)) identified by Wyoming stakeholders are given special consideration.

WAES committed \$539,095 in federal funds to support producer-oriented projects, including \$483,815 through the WAES competitive grants program and \$55,280 in matching funds for projects also funded through the Wyoming Department of Agriculture's Wyoming Agricultural Producer Research Grant Program.

Another \$18,222 was committed by WAES to support Global Perspective Competitive



*AES director Bret Hess*

Grants. These projects will foster mutually beneficial, sustainable relationships with global partners and increase the international experience and expertise within the College of Agriculture and Natural Resources. Funding for Global Perspectives is made possible by a generous private donor, who established an endowment to further globalization of the college's personnel and programs.

## UW Extension

University of Wyoming Extension was one of seven organizations honored during a celebratory dinner by the Wyoming Business Alliance (WBA)/Wyoming Heritage Foundation during the 32nd annual Wyoming Forum in Cheyenne.

The event honored philanthropy, business, culture, and the arts, and the organizations were recognized for their contributions to help better Wyoming, according to the WBA. Extension is being recognized for its 100th anniversary.



*Coleman Griffith*

“We in University of Wyoming Extension are delighted and honored to be recognized by the Wyoming Heritage Foundation for a century of service to Wyoming’s communities and people,” says Glen Whipple, UW Extension director. “Our centennial has brought into focus our place in the fabric of communities and culture of this great state. It is gratifying to have others recognize us for the work we so love doing.”

The Wind River Reservation has a new part time 4-H educator who started in November. **Coleman Griffith** is working with 4-H after-school programs. Coleman has a bachelor’s degree in sustainability from Goddard College in Plainfield, Vermont. He oversaw creation of a sustainable farm and garden education program while in the AmeriCorps, stationed at a Maine Extension-run camp. Coleman is a 4-H alumnus who was raised in a farm and ranch setting in Colorado.

UW Extension held its annual award recognition banquet during In-depth training in Laramie. Extension educators and state specialists were recognized for outstanding programming and other achievements. Those receiving top extension awards included: **Cole Ehmke**, extension specialist in ag economics, received the Jim DeBree Excellence in Extension Award, **Hannah Swanbom**, community development area educator, was recognized with the Newer Employee Award; **Justina Russell**, project director for the Wind River Indian Reservation Extension program, received the Diversity Award; and **Tana Stith**, graphic designer and manager of UWE’s Office of Communications and Technology, was recognized for creative excellence.

## Academic and Student Programs

The Office of Academic and Student programs recently completed its third round of Student Engagement and Networking Drive (SEND) grant awards to students for fall 2014/early spring 2015 travel, notes Professor **Donna Brown**, associate dean and office director.

The SEND Student Travel Grants Program supports undergraduate student travel to professional meetings, conferences, research and extension center field days, field trips, and other educational travel experiences that enhance students’



*Associate dean Donna Brown*

academic goals and professional development. The fund may also support travel and/or housing for students completing internships.

Mini-grants of up to \$500 are available to undergraduate students in the College of Agriculture and Natural Resources who are in good academic standing. The SEND fund is donor-generated, with annual support provided by the Ellbogen Foundation and the Natural Resources Conservation Service, as well as several private donors.

Student grant awards for this round are supporting student travel to events such as the:

- AgriFutures Conference in Kearney, Nebraska;
- Entomologic Society meeting in Portland, Oregon;
- A food and nutrition conference in Atlanta, Georgia;
- Society for Range Management meeting in Sacramento, California;
- Northern International Livestock Expo in Billings, Montana, and

- World University Games in Strbske Pleso, Slovakia.

Student grant recipients are required to submit a one- to two-page report on the benefits to their educational experience and the impact the experience had on their educational engagement and networking. Grant recipients are also expected to share their experiences with their department or the college through oral and/or poster presentations.

An additional request for SEND proposals will be released this spring for later spring and summer 2015 travel. For more information about the SEND program, please contact our office at (307) 766-4135.

## College Relations

*By Pepper Jo Six*

*Major Gift Officer*

*Representing College of Agriculture and Natural Resources*

Even though the University of Wyoming has experienced many changes in the past eight years, I have to say that being reintroduced to the College of Agriculture and Natural Resources feels as if many things have stayed the same – in a good way!

After attending the college’s December annual faculty meeting, I was reminded of all the good UW possesses. The friendly smiles, hugs, and the can-do attitude of the faculty and staff members was the same as I remember.

However, there was one change; faculty seemed more



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### College Relations (continued)

engaged and ready to make an impact. After the department updates, I sat there trying to take it all in. I was getting ready to be part of something big, something that is going to make a difference for the student experience and the world around us.

Many of you may remember me. For six years I worked in the College of Agriculture and Natural Resources in the Academic and Student Programs Office. I was promoted as the associate director of the

University of Wyoming Admissions Office in 2006. This was an amazing opportunity to see UW through a new lens and gave me time to reframe and refocus. Hence, I am now ready to rejoin this team as the College of Agriculture and Natural Resources major gift officer.

I know and understand how diverse and impactful the college is and will be to our future. I am ready to be the “boots on the ground,” and I will work hard to find the right



*Pepper Jo Six*

donors to match up with the right projects. In addition to faculty and research support,

I hope to continue to bolster the already amazingly strong scholarship program.

If I can be of any assistance or if you know of someone who has a passion to be paired up with a potential project within the College of Agriculture and Natural Resources, please let me know. I feel confident the college is moving in the right direction, and together as a team, we can make a difference. I can be reached at (307) 766-4075 or [pepperjo@uwyo.edu](mailto:pepperjo@uwyo.edu)