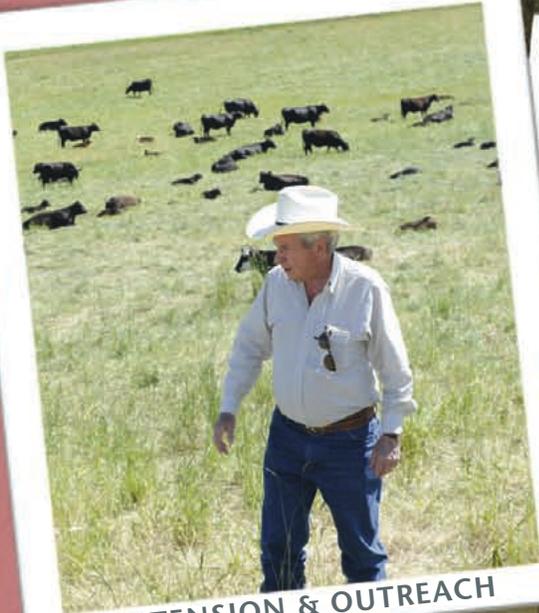


# Animal Sciences

# The Inside Scoop

## Spring 2010

APPLIED RESEARCH



EXTENSION & OUTREACH



INNOVATION & TECHNOLOGY



TEACHING

WASHINGTON STATE  
UNIVERSITY



*World Class. Face to Face.*

## Views from Inside

Greetings from the Department of Animal Sciences. In the following pages you will see a brief overview of some of the recent activities of our students, faculty, and staff. Our students and alumni continue to make impressive contributions across the country and globally in increasingly diverse career paths. A few of these are highlighted in this issue.

Combining classroom teaching with a variety of experiential learning options is a long and successful tradition for our department, and this tradition continues to serve our students well. We also highlight several research projects demonstrating the important contributions the faculty make to science and animal agriculture. Our contributions span the continuum from fundamental discovery science to solve tomorrow's problems to research of immediate relevance and applicability to our stakeholders and society. We recognize the need for breadth in our teaching, research, and extension missions to prepare our students for diverse careers that rely on applying the latest knowledge and technolo-



*"Combining classroom teaching with experiential learning options is a long and successful tradition."*

Dr. Margaret E. Benson,  
Chair, Department of  
Animal Sciences

gies in addition to the foundational knowledge and skills required of preceding generations.

Research and Extension demands are also changing as agriculture, biotechnology, and medicine respond to the application of new technology, dynamic regulatory policies, and changing social climates. The Department of Animal Sciences is on the move, contributing to the fields of animal sciences in ways that you may never have considered. When I inventory all that the faculty, staff and students in the Department of Animal Sciences have accomplished, I am proud to be associated with this productive, capable, caring, and engaged team. On behalf of our department, I invite you to stop by and visit or attend some of our events.

Finally, I want to express my sincere appreciation and thanks for all who have played a part in our successes by contributions of resources, time, and talent. Many of our undergraduate and graduate students have had their academic programs enhanced, and in some cases made possible, by our generous donors who have contributed to scholarships and a variety of student activities and travel awards. My thanks are also extended to the stakeholders with whom we work to conduct on-farm research projects, host field days and student field trips, and partner in program delivery. We have an amazing group of alumni and friends who have supported us and for whom we will continue to work to make you proud. Thanks for all you have done, and remember...

**—GO COUGS!**

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## Animal Sciences—The Inside Scoop

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# Animal Sciences Students

## *Who are they, and where do they go after graduation?*

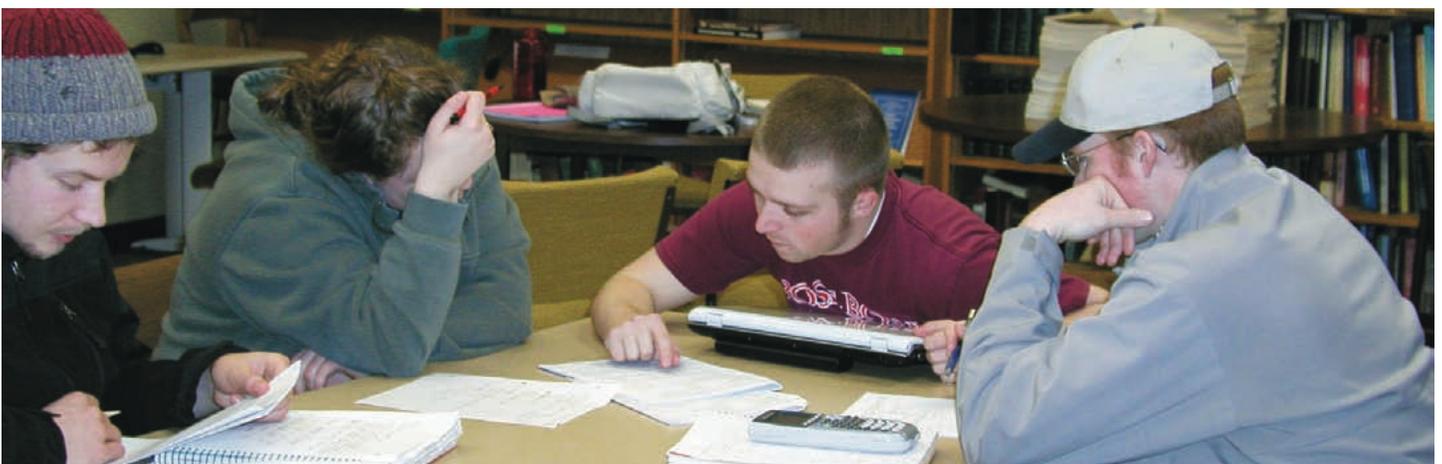
Animal Sciences faculty currently advise approximately 230 students from 12 states. Washington, as expected, accounts for the largest percentage of students. Western Washington, especially the Seattle-Tacoma area, is home to the largest portion of our students; however our Animal Science majors hail from throughout the state. The most common home states of our students who are not from Washington are: California, Idaho, Oregon, Hawaii, and Alaska.

Females represent the largest part of the Animal Science community, which has been the trend across the country in recent years. Of the 230 students in the department, 193 (84%) are female. Veterinary medicine is the most popular career choice for incoming freshmen. However, only fifteen percent of graduates pursue veterinary school in the end. Exit interviews in 2009, including half of the graduating seniors, indicated 25% of students would continue their education in various graduate and professional degree programs around the country, including veterinary medicine. While the economy slowed the rate at which graduates were getting jobs compared to previous years, approximately 20% of students had accepted a job prior



to graduation. Another 40% were still job hunting, although most reported they had interviews scheduled, and in some cases students had multiple offers in hand and were considering their options. Animal Science graduates continue to have a record of securing positions for rewarding careers upon graduation.

Exit interviews also revealed the high value our students place on faculty advising and the career preparation they receive, including the experiential learning opportunities. These experiential learning opportunities include the student managed cooperatives (Cooperative University Dairy Students, CUDS; Cougar Cattle Feeders, CCF; and Student Swine Cooperative, SSC), faculty mentored student laboratory research projects, student employment at the farms and centers, and participation in department associated clubs. Over three quarters of graduating seniors reported participating in one or more of these activities during their academic program, and almost unanimously found them to be a rewarding investment which they believed would help them in their careers.



# National Institute of Health Funds Reproductive Research



*From top: Dr. Jim Pru*

*Cindy Pru—Research Assistant*

*Amanda Krull—Ph.D. student in Pru's Lab*

Faculty expertise in the Department of Animal Sciences has been strengthened with the addition of Dr. Jim Pru. Dr. Margaret Benson, Chair of Department of Animal Sciences, views Pru's arrival as a critically important addition to "enable us to maintain our strong tradition of excellence in the field of reproductive biology." Pru brings a well established program in the basic science of female reproduction and is off to a fast start at WSU. His position was part of the Unified Agriculture Initiative.

After three years at Massachusetts General Hospital in Boston, Pru joined the Animal Sciences Department a year ago. In this time, he has been successful in procuring funding from the NIH for his studies of the mechanisms of pregnancy maintenance and communication between embryo and mother. Answering the question of how the embryo announces its presence to the mother's system will help develop solutions for when communication goes awry. Focusing on a novel membrane progesterone receptor rather than the classical progesterone receptors, Pru explores signaling from the ovary and the impact of progesterone in preparation for and maintenance of pregnancy. His lab works with 'conditional knockout' mice, in which the progesterone receptor is absent from only certain tissues, in this case the uterus, and evaluates the impact on pregnancy success.

Finding and selectively altering genes for communication during pregnancy on the genome level, one can determine which are essential to proper functioning. Estimates vary, but between 25 and 60% of all conceptions end in a failed pregnancy. While some losses are attributable to poor egg or sperm qualities, accounting for failure due to communication errors will improve conception rates in agricultural and biomedical fields.

Pru enjoys teaching and mentoring, he currently works with one Ph.D. student, Amanda Krull, and undergraduates, and he will add more students to his program this year. Developing a class on 'Stem Cells and Regenerative Medicine,' he will be a strong influence in keeping Animal Science students at the forefront of reproductive technology.

# 'NSPIRE' Inspires Animal Sciences



*Dr. Johnson's team measures gas emissions at a beef feedlot.*

As the world looks at ways to promote sustainability, it needs a 360 degree view. A prestigious \$3 million grant from the National Science Foundation's Integrated Graduate Education Research Training Program (IGERT) is helping WSU graduate students achieve just that. The Animal Sciences Department is pleased to be a part of Nitrogen Systems: Policy-oriented Integrated Research and Education (NSPIRE) program, a Ph.D. program providing an opportunity for interdisciplinary research in animal, plant and soil sciences, geology, atmospheric science, hydrology, and ecosystem ecology, complimented with experience in policy making. Collaborating between programs, students will evaluate critical issues related to nitrogen (N) and its actions in the environment, and learn to communicate their results to stakeholders and policy makers. This program will enable WSU to attract top graduate students to study nitrogen cycling and its role in the environment, and train graduates who can communicate science.

Nitrogen is essential for growth and production in both animal and plant agricultural systems. However, there are environmental costs to the migration of nitrogen into the air and water. Understanding the biogeochemical pathways in the nitrogen cycle is essential for developing management strategies for preventing nitrogen migration. To learn the public policy component of this emerging issue, students will take an intensive public policy studio class in which they will work through comprehensive

case studies with stakeholders followed by a 3-month paid internship in a policy formulating organization either in the U.S. or abroad.

Dr. Kris Johnson, Animal Sciences Professor, studies the interface between the environment and agricultural animals to understand air quality issues and to develop mitigation strategies. Currently, Johnson is examining gas emissions (methane, nitrous oxide, ammonia, and nitrogen deposition) from beef cattle and dairy operations to quantify actual emissions and examine the biochemical processes by which gases are released to the atmosphere. With this understanding, economically sound mitigation strategies can be developed to assist producers in reducing their environmental footprint.

Nationally recognized for her work, Johnson contributed as a lead investigator on this unique and prestigious graduate training program award. She is looking forward to working with the first Animal Sciences Ph.D. student participating in this unique graduate training program this fall, and is interested in hearing from others who may be interested in applying next year.

One of three IGERT grants on campus totaling nearly \$6 million, the Animal Sciences Department is excited to be a part of shaping students to think critically about the impact of agriculture on the environment and to research solutions to create sustainable food production systems.

# The Dairy Industry's Shrinking Footprint



In just one short year, Assistant Professor and Dairy Extension Specialist Dr. Jude Capper has made quite a name for herself with Washington State dairy producers and national dairy organizations. In demand as a public speaker and dairy advocate, she published three peer-reviewed articles, was featured in a radio commercial for the Dairy Products Commission, and has been included in several popular press articles. Capper evaluated the efficiency of the dairy industry using mathematical modeling and is working on parsing the impact of individual practices.

Overall, the dairy industry has gotten more 'green' in the past decades with only 114 million metric tons of carbon emissions now compared to 194 million in 1944. The model accounts for land use, fertilizers, herbicides, fossil fuel consumption, and other inputs required to make milk, balanced against gains in milk yield, quality, rate of cycling, and other measures of quality and efficiency. Changes in the past 40 years have been dramatic,

with an increase in milk yield of about 300 pounds per cow per year since 1965.

Capper's work helps support the development of 'best practices' for the industry. She feels strongly that the only way to meet the growing world food demand is through intensive, efficient production. Certainly there are larger contributors to the national carbon footprint as agriculture accounts for only 5.8% of emissions nationally—3.4% from animal agriculture and 2% from dairy production—but the recent publicity of food production's environmental impact has created a perception of wastefulness. Improvements continue to be made as the industry vertically integrates further.

Looking forward to another productive year of teaching, advising, and research, Capper is now considering the effects of breeds and cow sizes on production efficiency. Her models will soon be used to address concerns of environmental impact for other livestock industries as well.



Opposite: Dr. Jude Capper  
Left: Generator of an anaerobic digester  
Below: Dr. Joe Harrison

# Digesting Wastes into Profits

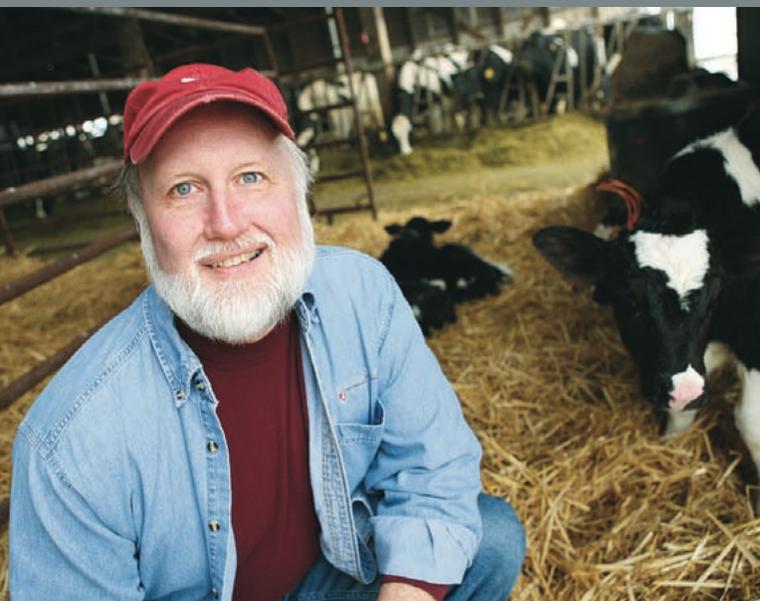
*Reducing agriculture's carbon footprint*

Decreasing the footprint of agriculture isn't just about increasing efficiency of milk production. Dr. Joe Harrison, Professor of Animal Science based at the Puyallup Research and Extension Center, has been working with anaerobic digesters. Anaerobic digesters can decrease greenhouse gas emissions from dairy farms, but Harrison is looking to see how they can do more. Many farms have more phosphorus in their manure than is needed for on-farm crop production. Struvite, a phosphorous-magnesium-nitrogen complex, is found as a granule in digester waste and in dairy lagoons. Struvite has potential as a user-friendly fertilizer that can be extracted from liquid dairy manure and sold off-farm for crop production.

Anaerobic digesters have been used nationally for decades, but have only become popular in the Pacific Northwest in the past ten years. Anaerobic digesters take waste in many forms and convert it to electricity. In a simplified model, manure from cattle is digested by bacteria, producing methane gas that can be burned to generate energy. Given the prevalence of hydroelectric energy in the Pacific Northwest, the market for selling energy from digesters was limited until recently. However, the outputs are more than just energy, including liquid fertilizer and fiber usable as compost. Having additional revenue streams, beyond electricity, can make the anaerobic digesters profitable.

Anaerobic digesters aren't for everyone. They require a substantial capital investment and demand considerable attention from management. The initial start-up cost is the biggest hurdle at \$500–\$800 per cow. Dairies of 500–800 cows are in the best position to gain from installing an anaerobic digester. If extra capacity is available in the digester, producers can earn money taking waste products that would normally go into landfills.

Agricultural efficiency isn't just about input and output, but also about making use of all your outputs. Joe Harrison and Washington State University are working to enhance environmentally sound and economical solutions to 'waste.'



# MEATS 300

## Learning the Process from Farm to Plate

Started in 2006, 'Meats 300' Programs (Lamb, Beef, and soon to be Pork) have been phenomenal successes. Run on a semi-annual basis, producers from across the state arrive at WSU to learn the art of producing and marketing their product to select markets. Enhancing participants' understanding of how to manage and market their livestock to meet different target markets, the '300' courses cover topics from genetics to post-harvest treatments.

Dr. Jan Busboom, Professor of Meat Science, and his team of county and campus Extension experts initiated the three-day courses to correct misinformation in the marketplace and increase understanding of the production process. By explaining what a processor is looking for in a carcass, producers can streamline their practices to meet those targets. It's about "understanding where the value comes from, how to produce the ideal product for customers and market it appropriately," said Busboom.

Supported by Washington Cattleman's Association, Washington Cattle Feeders Association, and Washington State Beef Commission for Beef 300 and Washington State Sheep Producers for Lamb 300, the courses have achieved their goals. It's too soon to evaluate follow-up changes made in on-farm practices, but participants notice a change in their own knowledge by the end of the workshop.

Ninety percent of attendees said they would take home and apply at least one change from the course. The reviews have been equally compelling, with most saying it was the best workshop they have attended. A producer from Spokane who participated in Lamb 300 encourages 'anyone selling a lamb, even one,' to take the course. You can do just that with an upcoming Lamb 300 course this summer and Beef 300 this winter. Details will be available through Jan Busboom at: (509) 335-2880 or busboom@wsu.edu.



*It's about "understanding where the value comes from, how to produce the ideal product for customers and market it appropriately."*

*—Jan Busboom  
(pictured in right of photo)*

# Muscling in on Fat

Projects in Associate Professor B. Dan Rodgers' lab investigate skeletal and cardiac muscle development and works to generate tools for repairing both using genetically modified mice and isolated cells to define novel actions for a potent negative regulator of muscle growth, myostatin. Indeed, blocking its actions or removing the gene itself produces extreme gains in muscle and improves cardiac performance, akin to elite athletes. Such 'double muscling' occurs in some domestic animals including Whippet dogs and Belgian Blue cattle. Rodgers aims to develop gene therapies, using genetically modified and safe viruses, which block myostatin's actions and could therefore be used to treat heart failure, muscular dystrophy or muscle injuries in humans and companion animals. The lab's work

also suggests that these therapies could be used to fight obesity and type 2 diabetes as body fat is reduced when myostatin's actions are perturbed (see photo below). These studies are supported by the National Science Foundation, the National Institute of Health, and the USDA. Rodgers is raising private support to establish the Washington Center for Muscle Biology, an interdisciplinary center uniting faculty from WSU and UW.

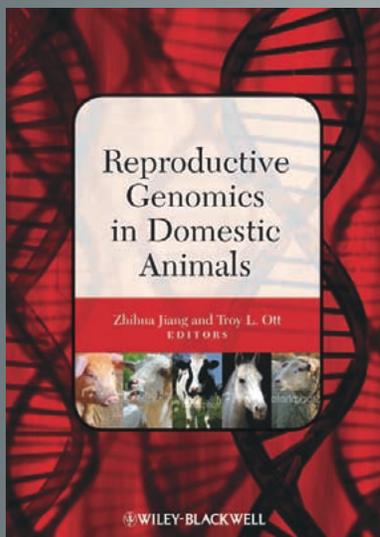
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*If you are interested in Rogers' research, in helping him establish the center, or in fighting muscle-related diseases, contact him directly ([danrogers@wsu.edu](mailto:danrogers@wsu.edu)) or through department chair, Margaret Benson.*

*Images of a mouse with a functional myostatin gene ( $mstn^{+/+}$ ) and a myostatin knockout mouse ( $mstn^{-/-}$ ). Both 14 months old, roughly equivalent to 60–65 human years, and fed normal diets their entire lives. The reduced total fat in mutant  $mstn^{-/-}$  mice indicates blocking myostatin's actions may both help repair damaged muscle and help treat obesity and Type 2 diabetes.*



IN PRESS...



This Spring, "Reproductive Genomics in Domestic Animals" will be published by Wiley Blackwell. Edited by Department of Animal Science's Dr. Zhihua Jiang, the book features six chapters from WSU Animal Science faculty and graduate students.

Included in the publication are:

Dr. Holly Neiberger, Ricardo Zanella, Jennifer J. Michal, Kyle Caires, Dr. Derek McLean, Dr. John McNamara, and visiting scientist Valeria Conforti.

# Graduate Research Paves the Way

Training future scientists in the fields associated with Animal Science is a priority of the Department of Animal Sciences. Here is a brief synopsis of the work in which our current students are engaged.

**Johnathan Broady**, Ph.D., advised by Dr. Derek McLean, explores male reproductive biology. Broady evaluates the effects of Vitamin A in germ cell differentiation and looks at a membrane progesterone receptor and its role in sperm maturation and motility.

**Molly Bellefeuille**, M.S. with Dr. Derek McLean is a third-year vet student who hopes to complete her degree in the next year.

**Birpal Buttar**, Ph.D., works with Dr. Jan Busboom investigating beef measles (beef cysticercosis) caused by *Taenia saginata*. In the Pacific Northwest, beef measles causes nearly \$1.2 million in losses annually. Buttar has found that a similar parasite can be controlled by heat treatment and ensilation. These methods may be useful in resolving this expensive problem for the beef industry.

**Kyle Caires**, Ph.D., mentored by Dr. Derek McLean, studies the factors regulating sperm production and testis development in bulls, boars, and mice. Caires is investigating the mechanisms regulating the biological activity of spermatogonial stem cells and the supporting somatic cells in the testis. This will facilitate a better understanding of spermatogenesis and provide novel strategies for addressing fertility in agricultural and biomedical applications.

**Winnie Chan**, Ph.D., and Dr. Ruth Newberry are examining the vocalizations of pigs related to play in an effort to evaluate welfare and enrichment.

**Tammy Donaldson**, Ph.D., mentored by Dr. Ruth Newberry, is finishing her validation of a behavioral assessment on human-directed aggression in dogs. The assessment is designed to evaluate dogs entering the Rescue Waggin' adoption program.

**Andrina Huisman**, M.S., with Dr. Ron Kincaid, incorporated bluegrass straw into the lactation diets of Holstein dairy cows and evaluated the effect on feed intake, milk production, phosphorus and nitrogen input and output, and feed costs. Andrina received her M.S. in December.

**Ting Jiang**, Ph.D., works with Dr. Jan Busboom and Dr. Mark Nelson on beef palatability determining chemical compounds that may cause off-flavors in grass-fed beef.

**Heidi Keen**, Ph.D., will test a new environmental enrichment evaluation with Dr. Ruth Newberry.

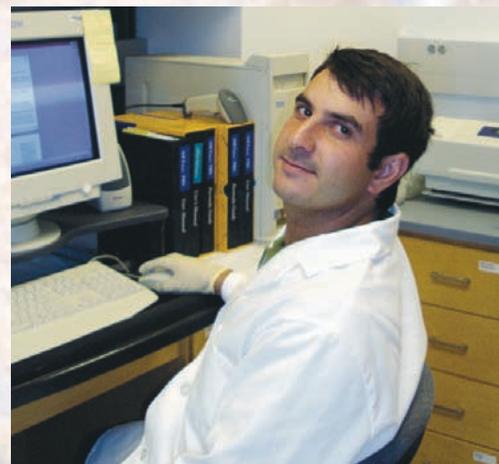
**Amanda Krull**, Ph.D., works with Dr. Jim Pru exploring mechanisms of tissue regeneration using the uterus as a model. The uterus expresses tremendous regenerative capacity after estrus and parturi-



*Tammy Donaldson*



*Andrina Huisman*



*Ricardo Zanella*

tion. She hopes to understand the mechanisms of normal steroid hormone signaling within the uterus and the implications of altered hormone signaling for reproductive diseases of females, including cancer and endometriosis.

**Vanessa Michelizzi**, M.S., with Dr. Zihua Jiang, is transferring genetic markers from cattle to water buffalo. More people in the world depend on water buffalo than any other bovid, and understanding the genome will increase the water buffalo's efficiency and value.

**Angela Oki**, Ph.D., works with Dr. Derek McLean merging educational technology with reproductive physiology to increase the understanding of important biological concepts for multiple audiences. Currently, Oki is conducting a patient education experiment to determine effective presentation modes using parturition as the cognitive model.

**Tracy Quirk**, M.S., with Dr. Larry Fox has studied the effectiveness of an iodine post-milking teat dip on the colonization of the teat by coagulase-negative staphylococci (CNS) and intra-mammary infections. The teat dip reduced colonization by CNS, and results are inconclusive on intra-mammary infections thus far.

**Shawnese Rocco**, M.S., and Dr. John McNamara are investigating the genes involved in lipolysis and lipogenesis in dairy cattle. By isolating these genes, producers can select for cattle that will maintain a positive energy balance during the transition from pregnancy to lactation.

**Kaitlin Wilson**, M.S., has just joined Dr. Holly Neibergs' lab. She will study the genetic relationship of aggressive behavior in pigs.

**Ricardo Zanella**, Ph.D., has focused on the identification of genetic regions associated with resistance or tolerance to infectious disease in cattle, specifically Johne's disease, Bovine Viral Diarrhea, and Bovine Respiratory Disease. Under the tutelage of Dr. Holly Neibergs, he is sequencing candidate genes associated with Johne's disease and identifying genes linked with BRD and BVD.

## Recent Graduates

**Kristen Brennan**, Ph.D. (Johnson) is working at Alltech in Lexington, Kentucky as a post-doc in Nutritional Genomics.

**Stacey Cobb**, M.S. (Johnson) is living in College Station, Texas while her husband pursues his Master's degree at Texas A&M University.

**Liang-Yu Chen**, Ph.D. (McLean) has a post-doc position with the National Institute of Environmental Health and Sciences in North Carolina.

**Nicole Dossey**, M.S. (Newberry) is working as a veterinary technician in Moscow, Idaho.

**Katherine MacKinnon**, M.S. (Newberry) joined the Cincinnati Zoo & Botanical Garden's Center for Conservation and Research of Endangered Wildlife (CREW) in 2008 as an Endocrine Research Associate. Her primary focus has been the Polar Bear Conservation Project, assessing reproductive activity and diagnosing pregnancy through fecal hormone monitoring.

**Emily Terry**, M.S. (Kincaid) has gone on to the University of Illinois in Chicago to continue her work on selenoproteins for her Ph.D.

**Tito Wibowo**, Ph.D. (Jiang) has been hired as a Geneticist and Executive Staff for JAPDA COMFEED in Indonesia.



*Katherine MacKinnon*



*"I think every graduate student, staff, and faculty member I interacted with at Washington State University taught me something really valuable that has already helped me in my current job."*

—Elizabeth Domby



## 2009 Graduates

### Liz Domby pursues M.S. at Colorado State University

Elizabeth Domby was an undergraduate researcher with Dr. Holly Neibergs. She worked on a research project looking at genetic correlations between cows with Bovine Viral Diarrhea Virus (BVDV) and persistently infected cattle. The experience allowed Domby to try her hand at research, learn the time commitment for producing quality results, and practice presentation skills. She also credits her experience with Cougar Cattle Feeders in improving her understanding of feedlots and nutrition, and enhancing her ability to work as part of a team. Domby ended up choosing ruminant nutrition for her Master's degree, and she carries the knowledge and skills learned at WSU to help her on the journey.

Now at Colorado State University, Domby has visited packing plants in Colorado, Nebraska, and Kansas, collected data on pigs for Seaboard Foods, and has worked cattle in the Rockies.

She enjoys seeing the differences in agriculture in different regions of the country.

Currently, Domby is feeding cattle for her project looking at the relationship of sulfur and ionophores. In the lab, she is focusing on brisket disease. This summer and fall, Domby will be interning at the Southeast Colorado Research Center in Lamar, CO and helping conduct research for CSU, pharmaceutical companies, and JBS Five Rivers Cattle Feeding, LLC. Scheduled to complete her M.S. in Spring of 2011, she plans to continue on to pursue her Ph.D., and ultimately become a feedlot nutritionist.

Domby credits every graduate student, staff, and faculty member she interacted with at Washington State University with teaching her valuable skills and knowledge that have already helped in her current job. For that, she says, *"Thank you and GO COUGS!"*

## 2009 Graduates

Chris Schachtschneider is management trainee for Washington Beef

Chris Schachtschneider worked as an undergraduate with Dr. John McNamara studying the effect of genetics on feed efficiency, production output, and body condition in dairy cows. They also explored the effect of feed availability versus moderate restriction on the same parameters. Using a mathematical modeling program for predicting changes in production under various conditions, they confirmed their findings on feed availability. At the time Schachtschneider left, they were adding reproduction to the equation to estimate the time frame for cycling in the cows.

Currently in the Management Trainee program at Washington Beef, Schachtschneider is receiving a full understanding of beef processing as he works through the entire facility. He credits his success to the experience he gained in his three years with



“When the best leader’s work is done the people say, ‘We did it ourselves.’”

—Lao Tzu

McNamara. McNamara’s concern for overall growth and understanding, both personally and academically, fostered a positive attitude and motivation in Schachtschneider. As his experience and confidence built, he was given more responsibility. Ultimately he was able to lead the final feed trial his senior year. His success in the Management Trainee program is due to the experience of leadership, responsibility, and organization he received at WSU.

Schachtschneider attributes McNamara’s mentoring to the wisdom of Lao Tzu: “When the best leader’s work is done the people say, ‘We did it ourselves.’” With the help of the Animal Sciences Department and Dr. McNamara, Schachtschneider is on his way to doing it himself.



## Swine Center Hires New Manager



In January the Swine Center welcomed a new manager (and Cougar alum), Dean Peters. A WSU graduate for both his bachelor's in Animal Science and master's in Swine Nutrition, he brings nearly 30 years of experience in swine herd management and research in both university and production settings. With this experience, Peters works to create learning opportunities in every student interaction, and encourages critical thinking about current practices and possible improvements to guide change rather than force it.

Peters enjoys the impact the Animal Sciences Department has both at the university and in the community. Advising the Student Swine Cooperative, where all aspects of herd management culminate on production with tangible results for students, has been particularly enjoyable. He also enjoys the community involvement with 4-H and Future Farmers of America, and recognizes the importance of fostering community relationships and exposing youth to the agricultural industry.

Peters is excited to be a part of the Animal Sciences Department. He hopes to continue the department legacy of creating hands-on learning for students, and shares the pride he sees in the Animal Sciences program.



## Dr. Charley Gaskins Announces Retirement

It's official. After 34 years in the Department of Animal Sciences, Dr. Charley Gaskins is retiring. It's been a long road, but he remembers it all fondly.

In 1976 Gaskins arrived at WSU from Texas Tech University in Lubbock, Texas. Hired with a joint appointment in Animal Sciences and Statistical Services, he mentored graduate students in genetics and the modeling of beef cattle production systems. Working with students and encouraging their development as professionals has always been rewarding for him.

Gaskins has never missed an opportunity to be involved in student organizations. He has served as advisor for Block and Bridle and Collegiate Horseman's Association, but his long-time commitment has been to Cougar Cattle Feeders.

Gaskins has been the advisor for CCF since its inception in 1999, and has enjoyed creating applied learning for students.

As the resident statistician, Gaskins has worked with nearly every faculty member. He enjoys the camaraderie of the department, and the opportunities for collaboration.

Anyone who knows Charley knows he is a Boy Scout full-time (Eagle Scout to be precise) and a Professor of Animal Sciences part-time. He credits growing up in New Mexico with fostering his love of the outdoors, and thanks the Boy Scouts for allowing him to keep up his obsession, long after his son finished his Eagle Scout. Within a year of moving to Pullman, Gaskins was vol-unteering with the local troop, before his son was even born. He keeps right on

going with them now, managing Camp Grizzly near Harvard, Idaho for the group.

Gaskins is looking forward to being able to spend more time outdoors, backpacking, fishing, and camping. He and his wife, Jan, have bought a travel trailer so they can explore farther from home.

Gaskins will still be busy. He plans to continue to manage Camp Grizzly for the Boy Scouts, and perhaps be able to spend more time there doing what he loves. He will also

continue as the Executive Director for the American Wagyu Association, serving as spokesman and organizer for the group.

The Gaskins have endowed a scholarship fund in the Department of Animal Sciences open to any student interested in the Beef Cattle Industry or pursuing large animal medicine. The scholarship will be only a part of the legacy Gaskins leaves. He hopes he has been successful in encouraging students to think critically rather than simply memorize facts.



## New Manager of EALB

John Lagerquist, a Cougar alum, stepped into the Experimental Animal Laboratory Building Manager position in December of 2009. A B.S. in Wildlife Biology and 20 years working in veterinary medicine micropathology, provides a variety of experience for the position. He has worked with many animals including coyotes, big horn sheep, and mountain goats, as well as smaller livestock and laboratory animals.

Lagerquist oversees the students who care for the animals involved in diverse research projects. Managing animal use, providing for well-being, and ensuring compliance with university and federal protocols are critical functions of his position. Lagerquist enjoys seeing students succeed, and providing experiences that will help them in future careers.

Lagerquist is appreciative of the people that he works with, and he looks forward to meeting and working with more of the faculty and staff.



## Teach a man to fish . . .

YOU can contribute to the Jan and Charles Gaskins Scholarship Fund to provide scholarships to students interested in the Beef Cattle Industry. Tax-free donations can be mailed to:

Jan and Charles Gaskins Scholarship Fund  
Department of Animal Sciences  
PO Box 646310  
Pullman, WA 99164-6310

## Cooperative University Dairy Students

CUDS is currently managing a herd of 70 animals with 33 in lactation, and averaging 63,000 lbs of milk per month. CUDS is also participating in a study for a new milk replacer and grain in commercial trials. Members will be attending a heifer sale in Monroe, WA at the end of March.

**President: Andy Gray**  
**Advisor: Jude Capper**



## Dressage Club

**Robin White (President)** and Misa Runnells both won individual titles last season, and the team placed 8th at National Championships. Their success continues into 2010 with the team (Robin White, Lilly Levitt, Jessica Crannell, Erin Dorsey) and two individuals (Megan Brown and Erin Dorsey) leading the region. The group assists with hosting Region O Dressage shows throughout the fall and spring. In April, they compete at the National Championships in North Carolina. The Dressage Club has joined with Block and Bridle to enhance activities and impact on campus.

## Collegiate Horseman's Association

CHA has been busy with horse clinics, farm tours, guest lecturers, and volunteering. The group has a longstanding commitment to helping Orphan Acres Horse Rescue care for their abused and abandoned animals. The club also raises money for Orphan Acres and other activities through Krispy Kreme Donut Sales on Halloween and Dead Week, and Horse on the Mall events this year for Valentine's Weekend and Mom's Weekend.

**Advisor: Derek McLean**



## Cougar Cattle Feeders

Continuing the tradition of excellence and industry involvement, CCF is currently feeding 125 cattle from 31 producers state wide. 45 head are being custom fed for the Washington State Cattle Feeders. CCF is thankful for the generous support of professional organizations including: Washington Cattlemen's Association, Washington Cattle Feeders, and the Washington State Beef Commission. This year the students also have a new class that brings in industry experts weekly. You can attend the CCF Open House on Mom's Weekend, April 10.

**President: Travis Bates**  
**Advisors: Charles Gaskins,**  
**Mark Nelson**



## Dairy Challenge Team

This is a team of students that compete in ability to evaluate dairy management. The teams will travel to Twin Falls, ID for the Western Regional Dairy Challenge Competition and four students will be selected to compete in Visalia, CA at the National Dairy Challenge.

**Coaches: John Swain,**  
**Larry Fox**

## Dairy Club

The Dairy Club has been very active participating in judging contests at Spokane Interstate Fair, the Washington State Dairy Federation Meeting, and the Dairy Olympics. They will continue their year with the Hoard's Dairyman Judging Contest, Cougar Youth Weekend, and the ADSA National Meeting.

**President Kimmi Devaney** has been selected the Student Affiliate Division National President, American Dairy Science Association for 2009–10.

**Advisor: Larry Fox**

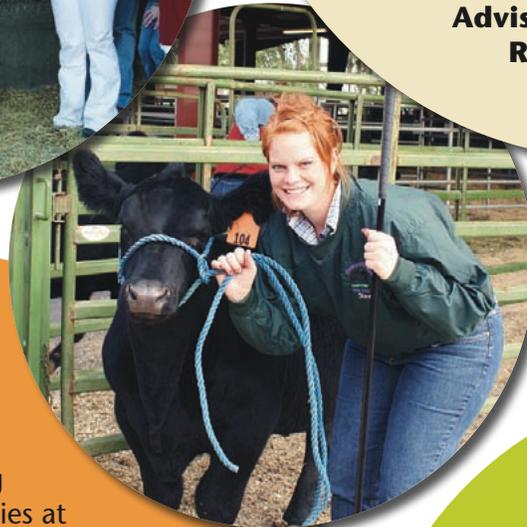


## Animal Science Graduate Student Association

ASGSA helped kick off the new school year and football season serving the Friends of Animal Science First Tailgate. In December the group raised 35 pounds of food for the Pullman Food Bank in a Faculty vs. Student food drive. They will continue their generous track record with a team at Relay for Life in April, and end the year helping with the Animal Science Awards Banquet.

**President: Tracy Quirk**

**Advisors: Kris Johnson,  
Ruth Newberry**



## Block and Bridle

B&B has been busy raising funds by selling Cougar Smokies at a home football game and Easter hams. They attended the Evergreen Exclusive Angus Sale with WSU's cattle and brought in a guest speaker on the issue of horse slaughter. This Spring, they will host a steer clipping clinic for local 4-H beef project members. Future trips will take the group to a beef feedlot and a backgrounding lot in the Columbia Basin, as well as a local sheep operation. With the addition of the Dressage Club, they look forward to a strong and active future.

**President: Kirstin Slater**  
**Advisors: Holly Neibergs,  
Margaret Benson**

## Organization of Future Veterinarians

OFV has been expanding their members' knowledge of a variety of species. Touring the Wolf Center in Lewiston, ID, the Bear Facility at WSU, and the Oregon Zoo in Portland. The club also volunteers at the Feral Cat Clinic in Moscow, ID. Members will attend the APVMA Pre-Veterinary symposium at Purdue University in Indiana. OFV would like to recognize **Ashley Falter**, Most Involved Member of 2009.

*Friends of Animal Sciences  
Tailgate Party, 2009*



## Friends of Animal Sciences Know How to Party

Started in 2006 and officially recognized by WSU in 2008, The Friends of Animal Sciences organization serves as a cohesive alumni unit to promote communication between WSU Animal Sciences and its alumni and friends. Members of FAS have volunteered to travel to WSU and be on-hand during a variety of departmental meetings, have devised a web site—linked to the web of the Department of Animal Sciences (<http://friendsofansci.org/>), and have solicited input and published six issues of the FAS newsletter. The second focus of FAS was to obtain donations for use in providing scholarships to deserving Animal Sciences students, filling a Chair's Excellence Fund, and providing funds for viable projects underway or needed in the department. More than \$10,000 has been donated by FAS to date.

In 2009, FAS provided two scholarships to Department of Animal Sciences students: Dor Dor Vuang and Erika Studeman. In the fall, FAS sponsored the first (annual) FAS Tailgate BBQ at Ensminger Pavilion with nearly 300 people attending. An afternoon of entertainment and fundraising included a performance by the Tyler Vance Trio, a speech from WSU President Elson Floyd, and a silent auction. Alumni, faculty, staff, and students supported the event with donations for the auction, event organization, and decorating. Corporate sponsors included AB Foods, Cyrus O'Leary, Clark Cowlitz Farms, Dairygold, and NW Farm Credit, all of whom donated food or funding.

*Pictures of the event can be seen at: <http://www.ansci.wsu.edu/home.aspx> [play the short video] and at <http://friendsofansci.org/>*

Make plans now to join us for the  
**2010 FAS TAILGATE BBQ**  
the afternoon of September 25, 2010.  
*Go Cougs!*

# Department of Animal Sciences 24<sup>th</sup> Annual Recognition Program

April 9, 2010, Ensminger Pavilion

Gathering begins at 4:30, Program begins at 5 p.m.

Join us for an afternoon and evening celebrating student, faculty, and staff accomplishments and recognizing the outstanding achievements of our three honored award winners.

This year **Dr. Deb Hamernik**, Associate Dean of the Agricultural Research Division (ARD), Associate Director of the Nebraska Agricultural Experiment Station, and Professor of Animal Science at the University of Nebraska, will be recognized as the Outstanding Alumnus.

**Dianne Appel** will receive the Distinguished Service Award. Dianne and her husband, Steve, are dry land wheat and barley farmers near Dusty, WA, and they now have a small Suffolk and Icelandic sheep flock.

The Distinguished Graduate: Science, Education, and Technology Award will be presented to **Dr. James Kinder**, who is currently at Ohio State University where he chairs the Department of Animal Sciences and more recently has added Interim Chair of Human Nutrition to his list of responsibilities.

*Mark your calendar now to join us, our honored award winners, and our friends, families, and alums as we celebrate another year of accomplishments. A complimentary informal BBQ is part of the festivities. Please let us know if you are planning to attend to help assist us in preparing for the meal. Contact Dian at (509) 335-5523, or e-mail: [adkins@wsu.edu](mailto:adkins@wsu.edu).*

*We hope to see you on April 9<sup>th</sup>!*



## What's **YOUR** Legacy?

Each year many of our alumni and friends of the Department of Animal Sciences help us achieve our goals and accomplish our missions in teaching, research, and outreach.

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*If you would like to help us continue these efforts by making a donation, please contact Margaret Benson, Chair, for more information ([m\\_benson@wsu.edu](mailto:m_benson@wsu.edu) or (509) 335-5523).*



Photo by  
Jennifer Michal