

Animal Sciences

Alumni News

Department of Animal Sciences | Spring 2008

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A Note from the Chair

Greetings from the Department of Animal Sciences! We hope to update you on a few of the exciting things happening at WSU. After just over a year on the job, I am even more excited about the future of our department and know that with our dedicated faculty and staff, talented students, and supportive alumni and friends we can accomplish great things.

We are pleased that we are beginning to fill some new positions in the department. Two faculty positions will soon be opened and position descriptions will be posted in the near future. These positions will include an extension/teaching position in dairy systems management, and a research/teaching position in reproductive biology. Each of these positions will contribute research applicable to the dairy and livestock industries. A third position will be located at the Prosser Research Station. This administrative professional position is beef focused and designed to help extend department activities in research and extension and will resume animal sciences presence at the Prosser station. Please check our department Web site for official job postings.

The 2007-08 academic year is another successful one with an impressive group of animal science majors. Our 234 undergraduate majors have a wide range of backgrounds and career aspirations. We will celebrate this spring with an outstanding group of graduating seniors.

Many of our students completing their degrees will enter graduate or veterinary school and, generally, 90% of those seeking employment after their degree have job offers in hand. Graduate training is also an important component of our teaching program and at present we have 23 students pursuing either masters of science or doctor of philosophy degrees. Check out the article in this newsletter to see a brief synopsis of the important research these students are conducting.

One of the hallmarks of the department has been and continues to be the hands-on learning opportunities in which our students participate. Highlighted in this newsletter is an update of this year's activities of the Cougar Cattle Feeders group and the Dairy Club. Other student organizations, cooperatives, and student activities will continue to be featured in the future.

I would like to invite you to join us for the 23rd annual Department of Animal Sciences Recognition Program, April 11 at the Ensminger Pavilion. The event will include a Cougar Smokies BBQ and a great group of award winners and students to recognize and honor. Plan now to join us for a fun event, a chance to renew friendships and make new ones, and celebrate the accomplishments of animal sciences Cougars. See additional details below.

The Department of Animal Sciences is committed to excellence in our teaching, research, and extension programs. In



Dr. Margaret Benson, Chair

an ever changing environment we must continue to look for ways to supplement the resources and funding we receive from state allocations. The contributions we receive from alumni and friends to help maintain highest priority programs to meet student and stakeholder needs is increasingly important. For those who have generously supported our department and programs I personally thank you for that support. I am committed to ensuring that we remain good stewards of the resources you entrust to our use through your support and look forward to the exciting results.

Lastly, I look forward to keeping in touch with you. If you know of prospective students, please pass on their names and addresses so that we can contact them. If you have questions, concerns, or alumni news to share, please stop in to visit us, send me an Email (m_benson@wsu.edu), or submit updated alumni information via our Web site. I always enjoy hearing from you.

Margaret E. Benson, Chair
Department of Animal Sciences

Animal Sciences 23rd Annual Recognition Program

Our annual Department of Animal Sciences Awards and Recognition Program is scheduled for **Friday, April 11, 2008, 4:30 p.m.**, at the **Ensminger Pavilion**. The event gives alumni the opportunity to visit with students, faculty, and friends while recognizing the outstanding achievements of students, faculty, friends, and alumni. **Dr. Richard Meyer** will be honored with the Outstanding Alumnus Award, **Dr. Gordon W. Davis** will receive the Distinguished Service Award, and **Dr. Ron Randel** will be presented with the Distinguished Graduate in Science, Education, and Technology Award. Please plan now to join us in celebrating the achievements of our alumni and students as we reflect on the past and take note of activities involving our current students and faculty.

Schedule of Events:

- 4:30-5:00 p.m. Gathering and social time at the Ensminger Pavilion
- 5:00-7:30 p.m. Complimentary informal Cougar Smokies BBQ and Awards Program

Please let us know if you are coming so we can get an attendance estimate for the BBQ. Contact Jaimie Dahl at 509-335-5523 or jaimie@wsu.edu. You may also mail the information below to Jaimie Dahl, Department of Animal Sciences, PO Box 646310, Pullman, WA 99164-6310.

Name(s) _____

Total number attending _____

Hands-on Learning

Experiential learning is a major emphasis of our undergraduate curriculum, and all students majoring in animal sciences are expected to engage in experiential learning activities, which includes conducting research. The curriculum is designed to provide opportunities for students to gain hands-on research experience that complements learning activities in the classroom. Students can enroll in practicum course credits for participation in ongoing research in our laboratories and animal centers.

Among many exciting possibilities, students can get involved in the use of molecular tools to investigate animal genomes, delve into the mechanisms regulating development of spermatogonial stem cells, grow muscle cell cultures, analyze animal hormone levels, design improved animal diets, collect data on animal behavior,

investigate factors causing animal diseases, and contribute to efforts to reduce greenhouse gas emissions from cattle.

In the course entitled special problems, upper division students gain further research experience through the conduct of individual research projects under the guidance of faculty members. Faculty members also mentor individual students conducting independent research projects for their honors thesis, the McNair program, and other programs providing competitive grants and scholarships for this kind of work. For example, students can submit an Undergraduate Research and Creative Project Proposal to the College of Agricultural, Human, and Natural Resource Sciences. This is a competitive grant program that provides awards of up to \$1,000 for supplies needed to carry

out a specific research project. Many of our students are also employed by our faculty on a part time basis to assist them in data collection for ongoing extramurally funded research projects. Be sure to read about our undergraduate award winners in this issue.

By getting involved in research, undergraduate students make a direct contribution to the new discoveries being made by research teams throughout the department while



gaining valuable experience that opens doors to jobs, graduate school, and veterinary college.

In 2007, these friends and alumni made generous donations to the department through development funds, assisting with recruiting, scholarships, memorials, student activities, and research funding, and through donating cattle to the teaching program.

John & Catherine Algeo Craig & Patricia Anderson	Judy Dunn Easterday Ranches, Incorporated	John I. Haas, Incorporated Johnson Research, LLC	N.A. Intercollegiate Dairy Challenge	Dorothy Anne Smith Sarah Smith
Richard & Helen Appel Steven & Dianne Appel	Cody Easterday El Oro Cattle Feeders	Edward & Nancy Johnson Kelly Johnson	Joseph & Holly Neibergs Ronald & Kay Nelson	Dan & Barbara Sneva Deborah & Daniel Snyder
ARCS Foundation Tommy & Paula Baldree	Leonard & Diane Eldridge Emily Kate Foundation	Kristen Johnson Kemin Americas	Joseph Niemann Kyle Okumura	Lori Sorrell Chester & Ibbie Steen
Merle & Janice Baldwin Donald & Lorraine Ball	George Erb Line & Ellene Estergreen	Daniel Kennedy Ronald & Lynda Kincaid	Charles & Gwen Oldenburg	Steffen Farms Donald & Elma Steffen
Donald & Lorraine Ball Bar R Cattle Company	Edward & Carole Favilla Melinda & Jay Fernyhough	Dorothy Knapp Igor Kosin & Roberta Smith-Kosin	Annette Olson Oppenheimer Funds	Wayne & Brenda Steffen Fredrick & Alice Stormshak
Andrea Barten Reed & Beverly Benedict	Kenneth & Sherrill Feser Brad & Jody Forgey	Susan Lacy Del & Mary Lentz	Legacy Program Katrine Parmley-Gates	Robert Daniel Stout Arthur & Jean Sunderland
Margaret Benson Timothy Blair & Janet Schmidt	Edward & Susan Garred Jack & Lindia Getz	Richard & Julita Lewis Christopher Logue & Bernadine Wiesen	Paul & Nuket Patterson Bruce & Patricia Petty	Paul & Christine Swinehart
Joseph & Rose Blake Blue Rock Cattle Company	Nathan & Virginia Gilliam	Carol Lorenzen Keith & Nancy Macy	Edwin & Joan Phillips Gerald & Jane Pittenger	Heidi Thomsen Mikal & Lynn Thomsen
C. Duane & Jennifer Booker	Jason & Erin Gipe David Gross	Richard & Janet Maricle Jessica Matejik	Michael & Carol Pratt R&R Saddle & Stitch	Michael & Patricia Thonney
Rick & Donna Boyer Pat Boyes	Kenneth & Molly Gross Michelle Gross	Richard & Janet Maricle Bridget Mathison	Jerry & Heidi Reeves Don & Mary Jo Reiter	Mike Thoren Tillamook County Holstein Cattle Club
Allen & Lois Bremner Allan & Laurie Jo Britten	David Hallenius & Deborah Peppones	Bruce Mathison Mada Maybee	Philip & Carol Renz Philip Renz	Tillamook County Holstein Cattle Club
David & Suzanne Brown Jordan Cambra	Robert & Mildred Ham Schilson	Mada Maybee Douglas & Sandy McFarland	Randy & Debbie Repp Shawn & Bill Reser	Holstein Cattle Club Brian Ray Treasure
Clark Cowlitz Farm Bureau	Aisha & Kelly Hanson Mark & Kristina Harting	Connie McKay Derek & Ronda McLean	J. Arthur & Margaret Ries Janet Roberts Mooers	John & Judy Unruh Edward & Sally Veenhuizen
Michael Clark Michael Crooks	Edward Heinemann Joe & Virginia Hillers	Derek & Ronda McLean Harold & Robyn Meenach	Walter & Alice Rohde Calvin & Katherine Roy	Jean Wade Jennie & Conley Walker
Chad Dahmen David & Joan Dahmen	A. Scott & Patricia Hodgson	Harold & Robyn Meenach Merial Limited	James & Nancy Ruark Sackmann Cattle Company	Washington DHIA Richard & Deanna Weber
Dairy Farmers of Canada David & Jennifer Dean	Marvin Hoekema Jennifer Homan	Richard & Rosie Meyer MGS Ag, Inc.	Henry & Dorothy Salvadalena	White Rose Ranch Brian & Jennifer Wilson
Donald & Teresa Deetz David Dickson	Paul & Tamra Humes Infertility & Reproduction Association	William & Lottie Moldovan	Del & Julie Sandberg Michael & Sharon Schmidt	Todd & Susan Winters Matthew & Barbara Zawlocki
Michael & Sabreen Dodson	Sharon Ann Jadin Vince & Lafern Janson	William & Darci Monson Richard & Natalyn Moore	Stanley & Jill Schwartz Elizabeth & K. R. Senderak	L H & Mary Zimmerer
Lubitza Dotzler Margaret Dotzler	Zhihua Jiang	Stephen & Brenda Moreland	Russell & Hiroshi Shoji Weymeth & Jean Simpson	
Bonnie Drake		Frederick & Tanya Muller Virgil & Susan Myers		

Cougar Cattle Feeders

Cougar Cattle Feeders, a student organization established in 1999, feeds cattle donated to the Cougar Pride program. This year we have fifteen members—six returning and nine new. We have eleven animal science majors, as well as students from agri-business, agricultural technology, and agricultural education.

Club members are responsible for day-to-day operations such as feeding, cleaning pens, and marketing cattle, which are donated by various producers throughout Washington, Oregon, and Idaho. Producers who custom feed cattle are required to donate one animal from a pen of five or six. This year, there are 99 head of cattle—48 are custom fed and 51 are donated to Cougar Pride. Our feeds people, with the help of **Dr. Josh Szaz**, formulated a diet that includes potato by-product generously donated by the Lamb-Weston Company

in Connell, Washington. As a result of this generous donation, the cost of feed per pound of gain is \$0.61 with an average daily gain of 3.55 lbs. and feed conversion ratio of 6 lbs. of feed per 1 lb. of gain. Cougar Cattle Feeders is offering halves for sale at approximately \$2 per lb. of carcass weight. The cattle will be processed by WSU Meats. Call the department if you are interested.

Cougar Cattle Feeders will host a field day during Mom's Weekend for all of our producers and anyone else who is interested. Come and listen to Dr. Steve Parish from the WSU College of Veterinary Medicine speak, and have a wonderful lunch on Saturday, **April 12**.

For more information, contact Charles Gaskins, advisor, at 509-335-6416 or gaskins@wsu.edu.



2007-2008 Cougar Cattle Feeders



WSU Cooperative University Dairy Students members **Laine Perry** and **Wade McMahan** at the WSU Knott Dairy Center.

To read more about our student clubs and cooperatives, visit us at www.ansci.wsu.edu. Click on the "Clubs & Co-Ops" link.

Dairy Club News

At the Dairy Club Banquet last fall, the club honored award winning students, an alumnus, and a club booster for their outstanding contributions to the dairy industry, WSU, and the animal sciences department. **Scott Walter** received the Henry Dykstra Outstanding Dairy Alumni Award and **Kevin Fennell** was awarded the Mel H. Ehlers Distinguished WSU Dairy Booster Award.

The club also hosted the Nepalese Student Association in the Dairy Ag Olympics at the WSU Dairy. This event is designed to introduce WSU students to all facets of dairy production through a fun-filled contest. Participants competed in hand milking, hay toss, calf feeding contests, and more. This spring, the club will host the WSU Honors Residence Halls for another similar event.

The Dairy Club attended the Dairy Federation Annual meeting in October 2007, and participated in discussions regarding WSU dairy expansion plans. In December,

the club hosted the Texas A&M University Dairy Club and led them on a five day tour of western Washington, visiting dairies and allied industries.

The club is currently preparing for the Cougar Youth Dairy Weekend on **April 18, 2008**. The weekend will be packed with stimulating and rewarding activities targeted toward educating youths (ages 8 to 10) who have an interest in dairy. Instruction will focus on dairy showmanship, and workshops will include fitting, showing, and handling of dairy heifers. Participants will have the opportunity to gain experience in the showmanship contest and dairy cattle judging workshop.

For more information, contact Larry Fox, advisor, at 509-335-0950 or fox@wsu.edu.

Animal Sciences: Alumni Happenings

In Memoriam. **John A. Grimm** ('49 B.S.), after a nine-year struggle with Lewy Body Disease, passed away on July 9, 2006. John was born in Arlington, Washington, and served in the U.S. Army during World War II. After the war, he attended Washington State University and was the only one of his five siblings to graduate from college. John married Betty Anderson in 1945 and they celebrated 61 years of marriage. He worked in the dairy and food industry throughout Washington, California, and Oregon.

Todd Winters, Ph.D. ('83 B.S.) was recently promoted to professor and chair of the Department of Animal Science, Food, and Nutrition at Southern Illinois University Carbondale. Winter's research interests focus on the endocrine factors that affect reproduction and development. He uses molecular and cellular approaches to study reproduction and other biological systems in humans and animals.

Ragen Trudelle-Schwarz McGowan ('07 Ph.D.) is completing a post doctoral position with the Swedish University of Agricultural Sciences in Uppsala, Sweden. She is working on a project that explores the means of assessing emotions in dogs. Ragen says, "It is quite exciting. My

husband, Adam, moved along with me and we are enjoying living in Sweden."

Emily Purbaugh ('07 B.S.) works for the Point Defiance Zoo and Aquarium in Tacoma, Washington, as a part-time veterinary assistant (to the head veterinarian) and zoo keeper in the Asian Forest Sanctuary. Emily recently had the opportunity to help hand-raise four 8-week-old Siberian Tigers. Over the next year, she plans to continue working at the zoo and learning about many different kinds of animals.

Galen Williams ('06 M.S.) and Sarah Detrick were married on September 15, 2007, at the Black Butte Ranch in Oregon. Congratulations!

Qianjun Xiao ('06 Ph.D.) and her husband welcomed a baby girl, Joy Wu, last year.

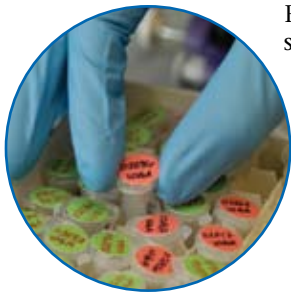


Animal sciences alumna Emily Purbaugh with a Siberian tiger.

LET US HERE FROM YOU...

We and your fellow alumni want to know what is happening in your life. Please let us here from you by phone at 509-335-5523 (Jaimie) or at www.ansci.wsu.edu. Click on the "Alumni & Friends" link and fill out the online form. If you know of someone deserving recognition, please include his or her name on the form.

Undergraduates Receive College Research Awards



Four animal sciences students received the College of Agricultural, Human, and Natural Resource Sciences' (CAHNRS) Undergraduate Research and Creative Project Awards.

This year's winners are **Takumu Niino**

(B. Dan Rodgers, advisor) for "Functional Divergence or Myostatin Paralogs in Salmonids"; **Candi Wilson** (Charles Gaskins, advisor) for "Association of DNA Markers with Carcass and Meat Quality Traits in Beef Cattle"; **Geoffrey Campbell** (Larry Fox, advisor) for "The

Ratio of Fat in Protein in Milk During the First 60 Days Post-Partum as an Indicator of Susceptibility of Cattle to Clinical Mastitis"; and **Wade McMahan** (Larry Fox, advisor) for "Antibiotic Resistance Levels of Mastitis Pathogens Under Conventional or Organic Management Styles."

Recipients received up to \$1,000 in funding for the development of their projects. The award offers students the opportunity to gain hands-on experience with scientific discovery while working with an expert in the field. Students will present their research project posters at the CAHNRS Awards Banquet on **April 12, 2008**.

Faculty Profile: Holly Neibergs

The main focus of our research is to identify the genetic differences in animals that are resistant and susceptible to diseases. By identifying the responsible genetic regions, resistant animals may be selected as a means of decreasing disease prevalence.

Paratuberculosis, commonly referred to as Johne's disease, reduces livestock production, profitability, and sustainability of U.S. beef and dairy herds. In spite of efforts to decrease the prevalence of Paratuberculosis, U.S. dairy herds with infected animals have increased from 22% in 1997 to 67% in 2007. New approaches to prevent and control this disease are needed. One approach is to reduce the number of animals with disease by identifying Paratuberculosis-resistance loci. A second approach is to decrease the severity of the disease by identifying loci for genetic tolerance to Paratuberculosis. The gains that can be made by genetic selection are determined by the heritability of genetic resistance and the genetic tolerance to Paratuberculosis.

Although the heritability of resistance to this disease is known, the heritability of genetic tolerance is not. While one study has reported a putative unconfirmed locus as linked to genetic resistance to Paratuberculosis, loci associated with tolerance have not been identified. Lack of such knowledge represents an important problem because, until it becomes known, genetic selection to reduce the prevalence and severity of Paratuberculosis will be difficult.

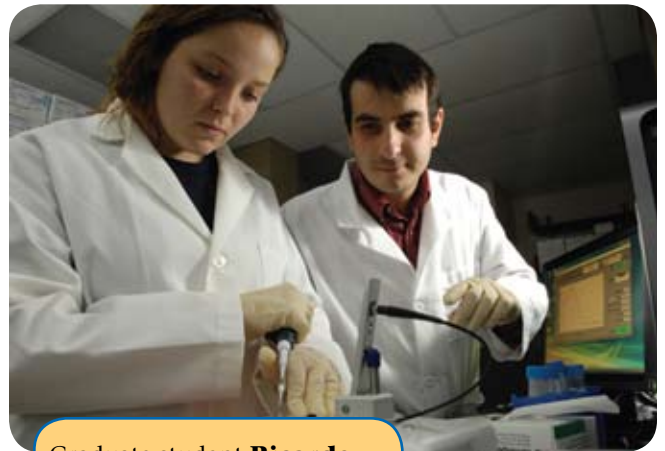
The long-term goal is to reduce the prevalence and severity of Paratuberculosis through genetic selection. Currently we are investigating the heritability of genetic tolerance,



Dr. Holly Neibergs

identifying loci associated with Paratuberculosis resistance and with Paratuberculosis tolerance.

This fall I taught AS 428/528, which focuses on different approaches in studying genetic traits in animals. This class explores the differences in experimental designs for genetic studies and their advantages and disadvantages. Understanding these differences is critical for students participating in genetic research. As part of this course, students choose a research focus and then design and discuss their experimental approaches to identifying their trait of interest. This provides students with the opportunity to apply the skills and knowledge they gain throughout the course.



Graduate student **Ricardo Zanella** and undergraduate **Carma Salzer** conduct research in Dr. Holly Neibergs' genetics laboratory.

Department Highlights and Congratulations

Dr. Zhihua Jiang was promoted to associate professor with tenure. Dr. Jiang works in the area of comparative genome biology.

Dr. Kristen Johnson, Professor, received an Outstanding Alumnus Award from the University of Connecticut College of Agriculture and Natural Resources in Storrs, Connecticut.

Professor and animal scientist **Dr. John McNamara** received the Corbin Companion Animal Biology Award at the 2007 annual meeting of the American Society of Animal Sciences in San Antonio, Texas, on July 9, 2007. The award recognizes research and teaching in companion animal biology.

Dr. Matt Settles, a post doctoral associate with Dr. Holly Neibergs, received a USDA travel fellowship. Matt will be presenting their work at the 3rd International Symposium on Animal Functional Genomics in Edinburgh, Scotland, in April 2008.

Graduate Student Award

Graduate student **Kyle Caires** placed second in the Agriculture and Natural Sciences division at this year's Dr. William R. Wiley Exposition. The Wiley Expo provides WSU students the opportunity to present their original scholarly work to peers, faculty, and the general public. Kyle is a doctoral student working with **Dr. Derek McLean** in reproductive biology.

Graduate Student Research

The Department of Animal Sciences is proud of its graduate students and their contributions to teaching and research. The following students intend to graduate this spring, summer, or fall.

Molly Bellefeuille, M.S. (summer '08) examines the proliferation, growth, and development of Sertoli cells and their effect on spermatogenesis. To accomplish these objectives, ectopic testis tissue xenografting is used to look at the growth within 4-6-8-12-20 week old pig testis tissue. Real time PCR, immunohistochemistry, and hormonal assays are being done to evaluate the Sertoli cells within the graft. Advisor Derek McLean.

Kristen Brennan, Ph.D. (spring '08) explores how weight cycling in beef cattle impacts energy metabolism and antioxidant function. Her work indicates that several important genes responsible for managing oxidative stress are expressed to a greater extent during weight loss in cattle. Advisor Kris Johnson.

Liang-Yu Chen, Ph.D. (spring '08) is focused on understanding steroid hormone regulation in the spermatogonial stem cell (SSC) niche. Data indicate that testosterone can enhance important secretions in the niche to induce SSC proliferation. Increasing sperm production will not only increase fertilization success rates but may also increase conceptus number. Advisor Derek McLean.

Nicole Dossey, M.S. (fall '08) is assessing whether provision of materials that promote playful behaviors results in reduced anxiety- and fear-related behavior in chickens. Specifically, she has been investigating the effects of materials that promote "worm running" behavior and movements in three-dimensional space on tonic immobility, behavior in an open field test, responses to novel objects, and responses when handled. This research could point to methods of environmental enrichment that improve growth and reduce the risk of injury when handled, thereby

contributing to animal well-being and productivity. Advisor Ruth Newberry.

Ting Jiang, M.S. (summer '08) The is studying the quality of grass-fed beef, more specifically, the relationship between fatty acid composition and beef palatability as well as the influence of aging (method and period) on beef palatability. It will contribute to the development of regional grass-fed beef production and the potential for beef to be a functional food. Advisor Mark Nelson.

Katherine MacKinnon, M.S. (spring '08) The single greatest challenge when pairing clouded leopards (*Neofelis nebulosa*) for breeding in captivity is aggression, which often results in injury or mortality of the female. The primary goal MacKinnon's study is to identify behavioral and hormonal indicators of risk of injury to the female that can be perceived early in the process of introducing potential mates, thereby helping animal managers to decide whether to proceed with a specific pairing attempt or terminate it early to protect the female. Preliminary analysis has revealed two potential predictors of aggression: increased crying by females when introduced to their potential mate, and higher male fecal cortisol levels. Advisor Ruth Newberry.

Stacey Prickett, M.S. (summer '08) Livestock producers are currently unable to reduce methane emissions in grazing cattle. The objective of Prickett's study is to examine the effect of malate, an organic acid found in plants, on methane emissions from beef cattle. If malate reduces methane, then selection of high malate pasture plants to decrease methane emissions might be possible. Advisor Kris Johnson.

Emily Terry, M.S. (spring '08) Selenoproteins act as antioxidants and can reduce selenium status during swine gestation, which affects skeletal and cardiac muscle integrity in the fetus. Terry is examining the expression patterns of several selenium dependent genes during fetal development in skeletal muscle of swine. Two of the

genes were unaffected by gestational age and maternal selenium intake, however one particular gene was increased at term, indicating a role as an antioxidant in neonatal skeletal muscle. Advisor Ron Kincaid.

Tito Wibowo, Ph.D. (fall '08) Bovine chromosome 14 harbors more than 30 fat-related quantitative trait loci (QTL) reported in dairy and beef cattle. The objective of Wibowo's research is to narrow down these QTL regions to genes, thus identifying quantitative trait nucleotides. Chromosome-wide screening was performed by targeting a series of candidate genes to identify promising markers that can help livestock producers market high quality and healthy animal products. Advisor Zhihua Jiang.

Ricardo Zanella, M.S. Johne's disease (bovine Paratuberculosis) is a fatal bacterial disease of the gut that is present in an estimated 67% of U.S. dairy and 10% of beef herds. Zanella's research is focused on finding genetic differences that explain why some cattle are more susceptible to Johne's disease than others. Once the genetic factors responsible for susceptibility to Johne's disease are determined, selection of resistant cattle will aid in decreasing the incidence of this disease. Advisor Holly Neibergs.



Graduate students **Tito Wibowo** and **Tyler Daniels** conduct research in Dr. Zhihua Jiang's animal genomics laboratory. Wibowo was awarded a 2007 Teaching Assistance Excellence Award by the WSU Graduate and Professional Student Association.

Graduating Seniors

We salute those who graduated in August and December 2007 and who will graduate in May 2008. We recognize the role that parents and family members play in students earning their degrees.

August 2007: Candice DeTray, Christina Guppy, Allison Lian, and Colleen Roberts.

December 2006: Kacie Anderson, Aaron Bern, Keith Brown, Kathryn Dern, Audrey Hutchins, Aaron Johnson, Tory Lee, Amanda Martin, and Cullen Thompson.

May 2007: Cassandra Abbott, DeAnna Barone, Ashley Bergh, Jordan Cambra, Michelle Connor, Ashley Culp, Catlin Dix, Whitney Evans, Kate Gunderson, Janelle Hafert, Chika Ikeda, Marissa Lenting, Wade McMahan, Vanessa Michelizzi, Jordan Munding, Takumu Niino, Lisa Onstott, Naysa Poshusta, Jacqueline Preston, Mindy Nordheim Puller, Christina Read, Shawnese Rocco, Oscar Sanchez, Stephen Stockdale, Illene Stolz, Jeramie Voss, Kathleen Walter, Kelsey Williams, and Candi Wilson.



Spring 2008 Dates to Remember

March 29	WSU Student Swine Co-Op Banquet	1:00 p.m.	WSU Swine Center
April 6*	Block and Bridle Club		
	Little International Livestock Show	12:00 p.m.	WSU Beef Center
April 11	Friends of Animal Sciences (FAS)		
	Board of Directors Meeting	1:00 p.m.	Lewis Alumni Centre
	Business Meeting	2:00 p.m.	
April 11	Animal Sciences 23rd Annual		
	Recognition Program & BBQ	4:30 p.m.	Ensminger Pavilion
April 12	Cougar Cattle Feeders Field Day		
		10:00 a.m.	WSU Cattle Feeding Lab
April 12	WSU Show Pig Sale	11:00 a.m.	Grant County Fairgrounds
April 18–20	11th Annual Cougar Youth Weekend		WSU Knott Dairy
May 3*	Spring Commencement	8:00 a.m.	Beasley Performing Arts Coliseum
May 10	WSU Show Pig Sale	10:00 a.m.	WSU Cattle Feeding Lab

* Dates and times listed on the printed newsletter are incorrect. These are the correct dates and times.