EQUINE EDUCATIONAL EXPERIENCES

Equine science is important to a growing number of students in Animal Science at MU, with approximately 20% of our current students having a primary interest in horses. Due to these numbers, the MU Equine Program is a popular and growing component of the Division of Animal Science. Currently, five equine specific courses are taught within the Animal Science Division.

The MU Equine Teaching Facility at South Farm currently houses a quarter horse breeding program with care and management of these horses being the cornerstone of these courses. Some of these horses have been raised at our facility, but most of them were received through generous donations from program supporters. The MU Equine Program is committed to raising athletic horses with great dispositions and marketable bloodlines. Each November the MU Equine Program offers a select group of horses for sale in their Annual MU Online Horse Auction.

In the spring the equine breeding management class, as part of their coursework, is responsible for breeding and foaling of all mares at the farm. The resulting foals, as well as some donated horses, are then trained by students in an equine behavior and training class during the fall semester. Additionally, a barn management & marketing class prepares sale information for the MU Online Horse Auction and hosts the sale preview. Each horse is sold with complete health records and daily training journals. The ultimate goal of this sale is to place horses in long term homes while providing income directly to the equine program. This year, the auction will run from November 1st-12th, with the sale horse preview on November 7th from 10:00am-2:00pm.

Established in the spring of 2008, the Horse Farm Volunteer program allows for students to gain experience in horse care and general maintenance while caring for the breeding herd. Students from all backgrounds are eligible; with 87% of those volunteering have no prior equine experience. Volunteers are responsible for daily feeding, turnout, stall cleaning, and grooming of horses. In addition, volunteers are notified of all veterinary or farrier appointments in an effort to engage students in the entire management of the farm. Other volunteer learning opportunities include performing foal watch, handling weanlings and yearlings, practicing routine health care and disease prevention, and assisting with the sale horse preview.

Students participating in the Horse Farm Volunteer organization show impressive dedication. Approximately 35 students are involved each semester. To date, this group of students has donated an average of 750 hours per semester to the equine program. In the last 16 months, this totals over 3,000 hours or the equivalent to almost $22,000 in labor.

As the equine program strives to become financially independent it must rely on support from the community and alumni. Donations of any useful tack, equipment, and supplies to further our ability to teach students are greatly appreciated. The equine program is also in the process of renovating facilities to better accommodate our educational activities. If you would be interested in making a donation to the MU Equine Teaching Facility please contact the Animal Science Division.

For more information about our program please visit http://horses.missouri.edu or contact Marci Crosby (Jennings) at (573) 884-7836, jenningsmar@missouri.edu.
FROM OUR DIRECTOR

Greetings from the Division of Animal Sciences at the University of Missouri-Columbia. The past year has certainly been hard on the economy which of course affected Universities and programs all around the country. The University of Missouri system implemented a hiring freeze and reduction in expenditures last December. Although this has caused some difficulties, our teaching, research and extension programs remain strong. Implementation of Compete Missouri resulted in the Division losing Dr. Al Garverick’s faculty position after his retirement last August. Dr. Garverick was a very valuable asset to the Division and will be sincerely missed. We are very excited that Dr. Garverick will receive the 2009 American Society of Animal Science (ASAS) Fellow Award this summer in Indianapolis for his years of service in teaching and research in reproductive biology.

The Division’s faculty continue to be recognized locally and nationally for their teaching, extension and research achievements. In addition to Dr. Garverick receiving the Fellow Award at ASAS, Dr. Gary Allee will receive the ASAS Animal Industry Service Award for his novel contributions to improve efficiency of swine production, and Dr. Michael Smith will receive the ASAS Physiology and Endocrinology Award for his research in the bovine follicular development and estrous synchronization. Drs. Jerry Taylor and Bob Schnabel were part of a team of researchers who received the 2008 USDA ARS Technology Transfer Award for the development of the BovineSNP50 genotyping assay which was highlighted in our last newsletter. The BovineSNP50 gene chip is currently on display at the Smithsonian Institute in Washington DC. Dr. Bryan Wiegand, who only recently joined our faculty, received the Midwest ASAS Teaching Award. Dr. Wiegand has been a great asset to teaching our undergraduate meat science courses and coaching our Meats Judging Team. Dr. Barry Stevens was honored for his years of service to the Missouri dairy industry by receiving the Dairy Association Achievement Award. Many of our faculty received University and College awards. Dr. Mike Smith will receive the MU Faculty Alumni award this coming fall. Dr. David Ledoux received the prestigious MU International Engagement Award for his programs in international agriculture and teaching. The Division had two faculty members recognized for CAFNR research and extension awards. Dr. Peter Sutovsky received the CAFNR Research award for his research in sperm physiology and Dr. Tim Safranski received the J.W. Burch Award for his outstanding swine extension program. In addition, Dr. Safranski was honored with the Chancellor’s Excellence Award for Best New Advisor. Dr. Safranski was a vital stimulus to the success for the formation and activities of the new Swine Club in the Division. The Division’s faculty were also recognized for their excellence in teaching. Marci Jennings received the MU Student Affairs Excellence Education Award for her dedication to teaching horse production and her student volunteer program at the Horse Center. Drs. Trista Strauch and Matt Lucy received the CAFNR Golden Apple award. Dr. Strauch has develop the Captive Animal minor in CAFNR which already has attracted over 100 undergraduates and Dr. Lucy was recognized for his commitment to education and mentoring of graduate students in reproductive biology. We are certainly proud of the accomplishments and recognitions of our teaching, research and extension faculty.

The University of Missouri experienced a record undergraduate enrollment last fall with expectations that there will an additional increase this coming fall. The Division had 131 freshman and 33 transfer students starting at MU this past fall. Currently, the Division has a total of 450 undergraduates. The new options (Production/Business, Animal Biotechnology, Meat Science and Pre-Veterinary Science) we have initiated will allow students to focus on their field of interest by taking courses more directly related to their career and enroll in internships within the animal industry. Students had a number of new faces teaching their courses this year. Dr. Matt Waldron, who came to us from Vermont last fall, taught Dairy Science. Dr. Waldron’s research focuses on dairy nutrition and immunology. Dennis Fennewald taught two new courses in beef cattle marketing and production. Dennis, a native of Missouri, has a great deal of experience in many aspects of beef production which provides real-world examples for teaching our production students. He also initiated the Beef Club which complements the Swine Club started this past year. Dr. Gavin Conant joined the faculty this last fall. Gavin’s expertise is in bioinformatics which will greatly support our genomics program. He was involved with teaching our undergraduate genetics course. Our Mizzou Livestock Judging Team had a good year competing across the country. Chip Kemp works very hard to develop a strong team which competes very well in the various competitions around the country. Dr. Bryan Wiegand coached the Meats Judging Team last fall. Although he only had two students on the team, their results were very impressive. Hannah Evans coached the spring Meats Judging Team which was very competitive. Although the Division was under a call to reduce expenditures this spring, we were able to send our Academic Quadrathlon team to Des Moines to compete at the Midwest ASAS meeting. As you read through the newsletter, you will be able to obtain a more complete
Research in the Division continues to be one of our major strengths. Our genomics program has continued to advance development of markers for selection in beef cattle. The BovineSNP50 gene chip is now available and already making an impact on the beef and dairy industries. We continue to be one of the leaders in ruminant and nonruminant nutrition and will play a major role in the utilization of corn by-products and forage-based finishing in beef cattle production. Dr. Monty Kerley is utilizing the GrowSafe system to select for growth efficiency in beef cattle, which will have a major impact on the backgrounding and feedlot industries. Dr. Randy Prather has developed transgenic pigs to study cystic fibrosis and retinitis pigmentosa. These are major contributions to help learn how to treat and cure these diseases in humans. The Division has one of the top overall extension programs in the country. The Show-Me-Select program has received national attention, the swine industry continues to be strong and the dairy industry is growing with the movement of pasture-based dairies into the state. We are currently working with the New Zealand dairies in southwest Missouri to establish a curriculum for students and producers throughout the country. We are also building a new swine teaching facility which will allow our students to experience and run a swine facility as well as provide us with a training facility for outreach and extension programs.

The Board of Curators approved development of Discovery Park which will serve as a research park to support life sciences research. Discovery Park has the potential to expand through 300 acres down the center of South Farm on Highway 63 over the next 10 years. The possibility of losing a significant portion of South Farm places many of our research programs in jeopardy. We are currently developing a proposal to acquire land outside Columbia to ensure that our research programs can be transition to new facilities as Discovery Park expands in the future. Hopefully, state funds can be appropriated to ensure that a new center can be developed. The Division has benefited from a $2 million state appropriation to improve the facilities at the beef farm. We have initiated the building of a new beef barn and swine teaching facility. A number of new buildings and renovations are planned in the next year for the beef farm. We are continuing to upgrade the feed mill through funding through Life Sciences Trust Fund. Eight new grain bins have been built with addition of a new pellet mill to be retrofitted into the mill this summer or late fall. Hopefully, I will be able to talk about the new improvements in future newsletters.

In closing, there will continue to be a lot of changes to the Division as we meet the needs for our teaching, research and extension mission within CAFNR. We appreciate and thank you for your loyalty and support of Animal Science throughout the years, as the Division remains dedicated to supporting the initiatives of animal agriculture throughout the state.

If you are interested in contributing to the Centennial Club please contact Heidi Griswold toll free at 1-866-400-4483 or griswoldh@missouri.edu for more information. Or send your check to:

CAFNR Office of Advancement
Centennial Fund
2-4 Agriculture Building
Columbia, MO 65211

University of Missouri, Division of Animal Sciences, Columbia, MO 65211 http://animalsciences.missouri.edu/
FACULTY AWARDS

Dr. Barry Steevens
Dairy Association Achievement Award

The Dairy Association presented Dr. Barry Steevens with their Achievement Award during the luncheon at the Missouri Dairy Forum in January. The award was presented to Dr. Steevens to honor his many years of service and dedication to the growth of the dairy industry. Dr. Steevens has been the State Extension Dairy Specialist at MU for 31 years. Dr. Steevens then accepted the position as State Extension Dairy /Livestock specialist for the University of Wyoming and later assumed the role of State Extension Dairy Specialist for the University of Missouri in 1978. The dairy extension program conducted by Dr. Steevens is described as follows: Develop and conduct extension education programs in mammary physiology, mastitis, milk quality, and milking management. Serve as liaison with regulatory agencies and State Department of Health on issues of milk quality, mastitis control, and antibiotic residue avoidance programs. Work with multi-disciplinary groups including faculty in agricultural engineering, agricultural economics, and veterinary extension to develop educational programs on dairy facilities, stray electricity, waste management, financial management, and animal health of the dairy herd. Serve as faculty advisor to University of Missouri Foremost Dairy Research herd.

Dr. Mike Smith
Faculty Alumni Award & ASAS Physiology and Endocrinology Award

The ASAS Physiology and Endocrinology Award recognize an individual who has major contributions to advance the field of reproductive physiology and endocrinology. The long range goal of Dr. Smith’s research program is to increase reproductive efficiency in cattle. Dr. Smith’s research focuses on trying to better understand the mechanisms regulating ovarian follicular maturation, ovulation, corpus luteum function, and the establishment/maintenance of pregnancy in cattle. He also works closely with Dr. Dave Patterson (State Beef Cattle Reproduction Specialist) on the development of economical and effective methods for timed insemination in beef heifers and cows. Mizzou Alumni Association Faculty Award recognizes excellence in teaching and research at the University of Missouri. Dr. Smith is truly one of the exceptional undergraduate and graduate teachers in the Division of Animal Sciences and the College of Agriculture Food and Natural Resources. Mike Smith is a committed educator who cares deeply about his students. He is concerned about their learning and his teaching focuses on helping students not only learn new concepts, but learn how to apply these concepts to solve real world problems.

Dr. Gary Allee
ASAS Industry Award

The Animal Industry Service Award identifies individuals who distinguish themselves by having an extraordinary impact on the animal industry. Dr. Allee is an individual deserving of this prestigious recognition. It would be difficult to identify a segment of swine production nationally or internationally that Dr. Allee has not influenced. Dr. Allee has made significant contributions that have been recognized by industry allied to swine production. He has a personal and advisory relationship with most of the large swine producers in the U.S. Through his problem-solving approach to address industry problems, Dr. Allee has made a multi-million dollar impact on the swine industry. His work in swine nutrition and management is one of the most highly recognized practical research programs in the U.S. and World. The vast majority of the North American Swine industry has adopted his recommendations on nutrition and management to save millions of dollars on feed and improve growth efficiency.
Dr. David Ledoux
MU International Engagement Award

The International Engagement Award is sponsored by the International Programs at the University of Missouri. This inaugural award recognizes faculty who go above and beyond in their international activities on behalf of MU. It is because of the exposure of his international program that Dr. Ledoux has been successful in attracting international scholars to the University of Missouri. Dr. Ledoux has not only served as a research scholar in laboratories on many continents, but he has also established himself as a dedicated teacher in the international arena. Dr. Ledoux, along with two other instructors, taught a Management and Nutrition of Poultry mini-course in Costa Rica to poultry managers from Central America. Dr. Ledoux’s expertise in mycotoxins and the Poultry Industry has made him a highly sought after international lecturer and teacher. Dr. Ledoux has been invited to make a number international presentations at major symposia and workshops, which the National Symposium on Animal Biotechnology in Bangalore, India, IUPAC Symposium on Mycotoxins and Phycotoxins in Istanbul, Turkey, and European Symposium on Poultry Nutrition in Strasbourg, France, are some of just some of his most recent speaking engagements.

Dr. Alan Garverick
ASAS Fellow

The ASAS Fellow Award recognizes distinguished service to animal science and the livestock industry over a long period of time. The long term goals of Dr. Garverick’s research program have been identify the molecular, cellular, and physiological mechanisms regulating ovarian function in cattle including development, follicular dynamics and treatment of ovarian follicular cysts (cysts) and to develop improved economical methods of controlling ovulation and increasing pregnancy rates in cattle. Dr. Garverick’s dual interest in fundamental mechanisms of reproductive function and development of improved methods of reproductive management have been valuable to both reproductive physiologists and cattle producers.

Dr. Peter Sutovsky
CAFNR Celebration of Excellence Research Award

Dr. Peter Sutovsky grew up in Slovakia where he earned his MS in Animal Science. He obtained College of Agriculture, Food and Natural Resources distinguished researcher award recognizes an individual who has demonstrated excellence in research performance, national or international recognition and/or special contributions to research team efforts. Dr. Peter Sutovsky grew up in Slovakia where he earned his MS in Animal Science. He obtained his PhD degrees in Czech Republic in 1994, was a Postdoc at the University of Wisconsin-Madison (1994-1997) and Staff Scientist at the Oregon Health & Science University in Portland (1997-2001). For over a decade he has studied mammalian spermatogenesis, fertilization, and pre-implantation embryonic development, with special emphasis on the gamete and zygotic ubiquitin system. He holds two US patents and was recently recognized nationally as the inaugural recipient of the USDA-NRI Discovery Award. As a founder of a startup biotech company AndroLogika, Dr. Sutovsky has been involved with the inception of the fourth, economic mission of the University of Missouri and was recognized as one of Top 20 Life Sciences Innovators by Illinois Biotechnology Industry Organization, the organizers of International Biotechnology Fair BIO2006. On multiple occasions, his research has been the subject of media coverage in USA and around the world and featured on the cover of 33 scientific journals, books and trade publications.
Marci Jennings

MU Student Affairs Excellence in Education Award

The Excellence in Education Award recognizes MU educators who support and value co-curricular learning. The award is presented to an individual who makes significant contributions to the out-of-classroom experience. Marci Jennings has made significant contributions to the out-of-classroom learning experiences of MU students. Marci not only is an outstanding teacher in the classroom but utilizes the Horse Farm to engage student learning outside the classroom. Beside her duties as an instructor, Marci manages the horse facilities and program on South Farm. Marci organized and developed the Horse Farm Volunteer Program to allow students to gain hands-on experience handling, caring for and feeding horses at the Equine Teaching Facility. Marci is the advisor to the University of Missouri Collegiate Horsemen’s Association where she has really provided the leadership to improve the education and service activities of the club. She also supervises the MU Student Horse Boarding Barn.

Dr. Bryan Wiegand

Midwest ASAS Teaching Award

Midwest ASAS/ADSA Outstanding Young Teacher Award is presented to an individual who has performed in an outstanding manner as a teacher of Animal/Dairy Science. The award is given to an individual who has the ability to motivate and stimulate students and to make an impression upon students by their mastery of subject, technique, vision and attitude. Dr. Wiegand excels in the classroom and provides students at MU with a solid knowledge of meat science and muscle biology. Before becoming a faculty member at the University of Missouri in 2007, Dr. Wiegand was a teaching/research faculty member in the Department of Agriculture at Illinois State University for seven years. Dr. Wiegand serves as supervisor for the Meat Science Laboratory and Abattoir. Dr. Wiegand has taught 14 different courses and his research is focused on meat science/muscle biology.

Drs. Matt Lucy and Trista Strauch

The CAFNR Golden Apple Award

The CAFNR Golden Apple Award is designed to recognize faculty in the College who excel and go above and beyond in teaching and/or advising.

Dr. Strauch is truly one of the exceptional teachers and advisers in the College of Agriculture, Food and Natural Resources. The Divisions of Animal Sciences and Fisheries and Wildlife developed a Captive Animal Management minor in 2006. Dr. Strauch was hired to develop and teach the core curriculum and serve as the coordinator for the minor. Dr. Strauch developed the new course “Introduction to Captive Animal Management” which had a first-time enrollment of 57 students. The course was designed to not only introduce students to the major components of captive wild animal management, but also to introduce the students to leading professionals in the field. The Captive Animal Management minor has expanded beyond any of our expectations. Currently there are 137 students interested in the minor with 99 that are on track to complete the minor.

Dr. Matthew C. Lucy grew up in a small town in New York State. He became interested in dairy Dr. Lucy is one of the exceptional graduate teachers in the Division of Animal Sciences and the College of Agriculture, Food and Natural Resources. Dr. Lucy’s graduate courses allow his students not only to learn from his lectures and gain firsthand knowledge of endocrinology and reproductive biology, but develop critical skills in formulating the proper question to be asked which leads to becoming lifetime learners. Dr. Lucy promotes challenging students individually to become motivated to learn and achieve a high level of understanding so they will be successful in whatever the field of science or animal production they choose.
Drs. Jerry Taylor and Bob Schnabel

USDA ARS Technology Transfer Award

ARS Technology Transfer Award annually recognizes individuals or groups who have done outstanding work in transferring technology to the marketplace. Drs. Taylor and Schnabel were part of the iBMC Consortium, for discovering and commercializing their "BovineSNP50" genotyping assay for improving the genetics of dairy and beef cattle. Drs. Taylor and Schnabel exemplary work in development and commercialization of a DNA assay for cattle provides researchers with an important genetic analysis resource, thereby building upon USDA's tradition of service to agriculture and to humankind.

Dr. Jerry Taylor studied the genetic basis of variation in the fertility of dairy bulls and dairy cattle as a postdoctoral research fellow at Cornell University. At James Cook University he began to work on the tropical adaptation of beef cattle and the design of breeding programs to optimize profitability. At Texas A&M University he first worked on dairy cattle before becoming the leader of the Animal Genetics section and focused on the genetics of beef quality. He designed the “Angleton” project to map genes associated with beef quality traits and secured the long-term commitment of resources and funding from the National Cattlemen’s Beef Association, Texas Agricultural Experiment Station and USDA NRICGP for the project. In 1996 and 1997 he was the recipient of the Texas A&M University Vice Chancellor’s Awards for Teaching and Team Research. In 1999, he raised funds to commercialize the results of the Angleton project, and formed GenomicFX in Austin, TX. Next, he worked as Director of Genomics for Research Triangle International where he oversaw development of the company’s Bioinformatics and Genomics programs and assisted obtain several large NIH grants and contracts. At the University of Missouri he has developed an internationally recognized cattle genomics program and has secured grants to develop the world’s first bovine whole genome oligonucleotide microarray and Illumina Infinium SNP assays. He has also collected DNA samples and phenotypes on over 10,000 beef animals.

Dr. Robert D. Schnabel grew up in Canton Ohio and first became interested in genetics when his family started a bison ranch in 1992. He served as ranch manager until 1997 when he left for Texas A&M to pursue a Ph.D. but continued to manage the ranch’s breeding program until 2002. Under the supervision of Jim Derr, Jerry Taylor and Jim Womack he was the first to map genes associated with weight traits in bison. While at the Bovine Functional Genomics Lab of the USDA, he became proficient at mapping genes using the extremely large outbred pedigrees of U.S. Holsteins. This led him to take his current position at UMC where he has an active research program in both dairy and beef cattle.

Dr. Tim Safranski

CAFNR J.W. Burch Extension Award & Chancellor’s Excellence Award Best New Advisor

Dr. Safranski has created a statewide swine extension program that exemplifies the qualities that James W. Burch established for helping individual producers solve their production problems and increase the overall efficacy and profitability of the animal industry in Missouri. For an industry which ranges from family owned and managed farms to large corporate swine operations, Dr. Safranski has shown exceptional leadership to develop programs that reach all spectrums and levels of the swine industry. Dr. Safranski serves as the statewide resource person for 26 Regional Livestock Specialists as well as swine producers, veterinarians and other industry support personnel in the areas of genetics and reproductive management. He coordinates educational programs for Regional Specialists, producers and industry support personnel. Dr. Safranski has established a very good extension program to assist swine producers to better manage their farms and increase overall profitability. His workshops and programs in reproductive management and pork production have helped swine producers across the state. Dr. Safranski received the Chancellor’s Excellence Award for Best New Advisor for his service to development and activities of the new Swine Club in the Division.
NEW FACULTY

Dr. Gavin Conant

Dr. Gavin Conant grew up in Albuquerque, New Mexico, receiving his B.S. and Ph.D. from the University of New Mexico. Gavin was a Post-doctoral fellow in the Department of Computer Science at the University of Leipzig, Germany in 2004 and the Department of Genetics, Trinity College Dublin, Ireland from 2005 to 2008. The strong background and expertise in bioinformatics that Dr. Conant brings will greatly strengthen our genomics research and teaching program. His primary research interest is in understanding the origins of novel features in evolution; in particular how new genetic features appear and are altered by natural selection. Dr. Conant’s research is focused on comparing the genomes of a number of animals, trying to understand, for instance, how differences in animals’ diets may be associated with missing or extra copies of genes involved in nutrient digestion. The goals of his research are very broad: understanding novelty is an old and central issue in evolutionary theory, but it is also a question of practical importance. Humans are dependent on a wide variety of organisms, and our ability to use these organisms efficiently depends on understanding how their genes can or cannot be altered for our needs. Dr. Conant will teach an advanced undergraduate genetics course entitled “Genomics of Plants and Animals.

Dennis Fennewald

Dennis Fennewald joined the University of Missouri in November 2007. Dennis was raised on a diversified livestock farm in Osage County and graduated from the University of Missouri in 1992. While at Mizzou, he participated on the poultry, meats and livestock judging teams. He was president of Block and Bridle and was selected as the B & B outstanding senior.

Dennis has acquired significant experience in the sheep, beef (seedstock and commercial) and dairy industries. He has traveled to several countries selling beef semen and has designed and managed several management-intensive grazing systems.

Dennis completed his master’s degree at Montana State University-Bozeman and has returned to Mizzou to teach Beef Production and a new course in Seedstock and Commercial Beef Marketing.

RETIRING FACULTY

Dr. Allen Garverick

Dr. Garverick was born and raised on a dairy and grain farm in Galion, Ohio. He received his MS and PhD degrees from Purdue University joining the University of Missouri in 1971 in the Department of Dairy Husbandry. Garverick’s research interests are in the area of regulation of ovarian follicular development, including development and turnover of ovarian follicular cysts, and in development of breeding programs to maximize reproductive efficiency of lactating dairy cows. He has taken research leaves at Cambridge University in 1980-81 with Dr. Christopher Polge, at the Roslin Institute in Scotland in 1994-95 with Dr. R. Webb and at the AgResearch Wallaceville Research Station in 2004 with Drs. Jennifer Juengel and Ken McNatty. Dr. Garverick served as Co-Director of the F21C Reproductive Biology Cluster from 1996-2004. He has been the recipient of the following awards: Outstanding Young Men in American Colleges and Universities, 1965; Outstanding Young Men of America, 1980; Outstanding Young Scientist Award, Research, Midwestern Section, American Society of Animal Science, 1982; Senior Research Award, Gamma Sigma Delta, UMC, 1989; Upjohn Physiology Award, American Dairy Science Association, 1993; Outstanding Senior Research Award, CAFNR, University of Missouri, Columbia, 1998. Dr. Garverick retired from the Division in August of 2008. Al has been a vital faculty member of the Division of Animal Sciences for 37 years. We will miss his many contributions to the Division.
Mizzou’s Animal Sciences Graduate Student Association had a great spring semester, and this summer looks like it will be a good one as well! Along with the Division of Animal Sciences, ASGSA sponsored the Graduate Student Forum and Spring Picnic at the end of May. The Forum is an annual event that allows graduate students within the department a chance to present their research to faculty, staff, and other students. The Master’s and PhD oral presentations were outstanding, as were the poster presentations. Dr. Jim Lauderdale was the invited keynote speaker; it was a real honor to have him here. The Forum concluded with the annual Spring Picnic, and all who attended had a wonderful time. In addition to the Forum, many students are traveling this summer to present their research at national and international meetings, including ASAS/ADSA (Montreal, Quebec), SSR (Pittsburg, PA), and the International Conference on Pig Reproduction (Banff, Alberta). The ASGSA Catering Committee purchased a new grill last fall, and it has been put to good use this spring. We have had many successful catering events, and the profit from these events will help send some of our members to the various scientific meetings this summer. Our Philanthropy Committee had a very successful fundraiser for Heifer International at the end of the spring semester. In other news, ASGSA again has a summer softball team, and this year’s team seems to be having much more success on the field than last year’s! With that being said, we wish the best of luck to all grad students presenting this summer, to the softball team, and to all those students graduating in August who will be moving on from the University of Missouri.

Grad Student Forum Presentation Winners

--Master’s Oral: Daniel Pompeu (Dr. Wiegand)
--PhD Oral: Xavier Revelo (Dr. Waldron)
--Poster: Brad Scharf (Dr. Spiers)

Outstanding grad student (MS): Amanda Williams
Outstanding grad student (PhD): Jackie Atkins
Recognition of outstanding service to the dept of An Sci: Dr. Mark Ellersieck
Livestock Judging Team
By Chip Kemp, Advisor/Coach

The 2009 Livestock Judging Team represented Mizzou in five nationally recognized contests during the Spring Semester. The Tigers started off the season at one of the more impressive weekends a livestock evaluator could ever have. The Exposure Livestock Judging contest, in conjunction with the Exposure Sale in Stillwater, OK, and the Express Ranches Christmas Extravaganza in Yukon, OK immediately test a judge’s young cattle eye. At the end of the weekend we had top ten individuals at both events and the team finished 4th overall at the Express contest.

Following a rigorous two weeks of holiday workout the team headed to Denver for the National Western. This is an eye-opening and inspiring contest. The team learned a great deal, ended up in the top 10 in every category in the contest and fell 9th overall. Also, in the unique Carload contest – a large scale, all beef event – we had the second place individual.

The crew redoubled their efforts as they prepared for the Dixie National in Jackson, MS. The exciting portion of this contest is the introduction of numerous Brahman influenced cattle. Your Tigers stepped up and had a tremendous day with numerous individual and team accolades. The final tally had Mizzou with a second place finish overall.

A new contest on the calendar for the Black and Gold was a trip to the San Antonio Stock Show. This show is known world wide and the judging contest lives up to the status of the show. Your team had a very balanced effort on the day. They marked alike and had a very tight group of scores and allowed themselves a top five finish on the day.

The team wrapped up the judging semester with the trip to Houston. This is always a favorite trip for the students. This is a tremendous opportunity to view agriculture from a different perspective. The Houston Stock Show and Rodeo is the largest stock show in the country and is well worth the experience. The team fell short of our goals, but their overall ability still allowed them to garner a 9th place finish overall.

The team members have put in numerous hours representing Mizzou and they certainly appreciate your support as we work towards our fall contests.

Mindy Briscoe, Lindsey Hicks, Rebecca Lewis, Curtis Bowling, Lance Martin, Neal Martin, Chris Perry, Chip Kemp - Coach

Mizzou Swine Club
By Dr. Tim Safranski, Advisor

The swine industry is one of the most dynamic in animal agriculture. That creates tremendous opportunities for college graduates. The industry is very interested in MU’s Animal Science graduates, and a group of students was very interested in learning about the industry. In the fall semester of 2008 this ambitious group of students initiated the Mizzou Swine Club. The purpose of the club is to “provide students with a better perspective of the swine industry and expose them to career opportunities. Discuss topics relevant to swine production and research. Present networking forums with key industry players while allowing employers to gain access to potential student leaders interested in a career in the swine industry.” To accomplish these goals the club met twice monthly, with guest speakers at one meeting per month, and took numerous day trips as well as a three day trip to Minnesota over the semester break. Tours included research farms, conventional and ‘natural’ commercial farms, a feed mill, a cull buying station, the Minnesota state capitol, packing pants and the National Pork Board office in Des Moines, IA. With support from the Missouri Pork Association the club served BBQ pork sandwiches as fundraisers. They also did a research trial of disposable boots under commercial conditions. At the end of the fall semester they helped process and coordinated donation of over 1,400 pounds of pork to the Central Missouri Food bank. The club included students from freshman through graduate students and is advised by Dr. Tim Safranski.
Mizzou Beef Club Update

By Ashley Brauch, Co-founder

The Mizzou Beef Club was formed in the Spring Semester of 2009 so that both undergraduate and graduate students with an interest in beef production would have the opportunity to meet and interact with professionals within the beef industry. Kristen Wright, an undergraduate in the department, is now our fearless leader. We had many excellent guest speakers this spring, including Drs. Monty Kerley, Bryon Wiegand, and Jerry Taylor, as well as Jeff Windett, Executive Vice President of the Missouri Cattlemen’s Association. So far the club is off to a strong start, with about twenty active members. The Beef Club had two very successful fundraisers this spring. The first was a cheeseburger lunch, cooked and served in ASRC by our members. We also had a quarter beef donated to the club, so we opted to have a Meat Shoot as our second fundraiser. Participants could win assorted steaks, roasts, or ground beef. The proceeds from both of these events will be used to help fund a Beef Industry Tour, during which we plan to travel through Missouri, Nebraska, Kansas, and Oklahoma, to tour packing plants, feedyards, seedstock operations, just to name a few. Look for us in the Beef House at the Missouri State Fair this summer! We plan to help serve lunch there one day during the fair.

Meats Judging Team

By Hannah Evans

The 2009 Mizzou Meat Judging Team is made up of Megan Westerhold from Nevada, Wesley Moore from Belle, Nick Mertz from Belle, Brad Deeken from Linn, Ashley Livingston from Harrisonville, Jonathan Haas from Rocheport, and George Blackburn from Rocheport. These students have been practicing together since November 2008 and compete in categories that include pork, lamb, and beef judging, written reasons, as well as meat cut specifications. In the spring of 2009, they judged two contests: the Houston meat judging contest in conjunction with the Houston livestock show and rodeo, as well as the Southeastern meat judging contest at Ohio State University and the University of Kentucky.

Notable accomplishments at these contests included:

Team Awards
-2nd and 3rd place teams in Beef Grading at the Southeastern

Individual Awards
Wesley Moore
-5th total placings at Houston
-5th pork judging at Southeastern
-3rd total placings at Southeastern
-2nd Beef Grading at Southeastern
-2nd Overall Individual at Southeastern
Megan Westerhold
-3rd Beef Grading at Southeastern
-8th Overall Individual at Southeastern
Jonathan Haas
-4th Beef Grading at Southeastern

In the fall, the team will be attending five contests. These will include the Eastern Meat Judging contest in Pennsylvania, the Iowa State Invitational, the American Royal in Nebraska, the High Plains in Texas, and the International Meat Judging contest in South Dakota/Nebraska. Wish them luck!
Christopher Perry grew up on a diversified farm in Bethel, Missouri. During his undergraduate program in the Division of Animal Sciences, Chris has been a member of the University of Missouri Livestock Judging Team where he was 2nd High Individual for the Denver Stock Show Carload Judging Contest, winner of the FFA National Swine Entrepreneurship Proficiency Contest, 1st High Individual for the National FFA Agricultural Mechanics CDE and the Missouri FFA Star Farmer. He has also been actively involved with Block and Bridle, University of Missouri CAFNR Ambassadors, President of the Division of Animal Sciences Reps and the National Junior Swine Association. Chris will enter into the 2013 University College of Veterinary Medicine Class this coming fall.

Outstanding Senior Award

Chris is pictured above with his fiancé Jessica Bartz, and his parents Paula and Jim Perry

Top Ten Seniors

Theresa Bohnert – Independence
Tera Loyd – Defiance
Adam Kautsch – Russellville
Christopher Perry – Bethel
Kevin Sargent – Perryville
Claudia Chavez – St. Louis
Gentrie Shafer – Green City
Amanda Miller – Blue Springs
Hannah Evans – Plano, TX
Llana Barasch – St Louis

Savage Award Scholarship

The J.E. Savage Memorial fund was established by family and friends to benefit students in CAFNR. Dr. Savage worked in the poultry industry for several years after earning his master’s degree in 1948, but returned to the University of Missouri in 1954 as an instructor of poultry husbandry. He received his Ph.D. in agricultural chemistry from MU in 1955. Dr. Savage served as the Department of Poultry Husbandry chairman from 1966 to 1983 when the department merged into the Department of Animal Sciences. He taught courses in nutrition, was a graduate mentor to students in poultry nutrition and conducted research in avian nutrition. His research was internationally recognized and evaluated the interrelationship of amino acids, lipids and trace minerals and unidentified factors in growth and reproduction. Dr. Savage’s wife, JoAnne and son Steve Savage (shown at left with Dr. Gary Allee) presented the first J.E. Savage Memorial scholarships to Hannah Evans (Plano, TX) and Elizabeth (Liz) McGill (California, MO). Hannah is completing her B.S. degree from Animal Sciences this spring and will continue into a graduate program in meat science with Dr. Bryon Wiegand at MU while coaching the MU Meats Judging Team. Liz is completing her M.S. degree in poultry nutrition and will continue her education with a PhD in monogastric nutrition at MU under the direction of Dr. Jeff Firman. Dr. Savage touched the lives of numerous students during his tenure at the University of Missouri and this scholarship is a fitting tribute of his dedication to their education both inside and outside the classroom.
Academic Quadrathlon

By Dr. Tim Safranski

Our annual Academic Quadrathlon was held again this February. The AQ can be thought of as a four part team comprehensive final exam of our undergraduate curriculum. There were five teams at our local contest who competed on the written exam, the oral presentation, the hands-on lab practicum and the quiz bowl. The written exam was truly comprehensive of our curriculum and to complete it in the time allotted team members had to work independently. This year’s team had an hour to prepare a ten minute talk on the topic “Our society is well fed and has a high rate of obesity. Given this and the economic situation we are in, the USDA and colleges of agriculture no longer deserve funding to research improve efficiency of food production.” Following their talk they answered questions for another ten minutes.

The 12 lab practicum stations focused on disciplines or species. Each team was scored, for example, on how well they could snare a pig, identify from pictures whether animals had horns or antlers, identify the parts of a reproductive tract, name and identify the bones in the foot of a horse….. The quiz bowl is like a double elimination team jeopardy. MU gets to send one team to represent us at the Midwest meeting of the American Society of Animal Science in Des Moines, and this year we sent Ilana Barasch, Amanda Baumgartner, Nikki Hoffman and Doug Suntrup. They repeated the events, this time against 16 schools from across the region. When the contest was over they stayed around for two more days to take in the scientific sessions. They represented MU well and learned a lot along the way.

2009 MPA/MU Youth Pork Institute

Each year Missouri high school students interested in a career in the swine industry are invited to participate in a three day event filled with lectures, tours and camaraderie. Not only do they get to hear about topics such as carcass and meat quality evaluation and artificial insemination, they also get to take tours that include the MU campus and farms and the Triumph Pork Processing plant in St. Joe. On the third day the students take a test to see who will win the $500 MPA scholarships.

MPA/MU Youth Pork Institute partcipants:
back row (l to r) Acacia Hays, Lucas Wells, Brandon Hinck, Ethan Zoellner, Savanna Biford, Hannah Sandidge, Wendy Howell - MPA intern, front row (l to r) Levi Keller, Cody Brinker, Stephanie Deeken, Elaine Martin, Kelly Jahn, Blaine Allen Folson, Stephanie Morgan, Josh Gross

MPA/MU Youth Pork Institute Scholarship Winners: Kelly Jahn and Cody Brinker pictured with Roy Robinson from the CAFNR Deans Office. Roy is responsible for study abroad opportunities.
ANIMAL SCIENCE MAKES HEADLINES

The following press release was picked up by several journals and newspapers including Media Newswire, St. Louis Post-Dispatch, Sciences Now, Bloomberg, Science Magazine, U.S. News & World Report, and Truth about Trade & Technology.

April 23, 2009 Contact: Kelsey Jackson
Information Specialist
(573) 882-8353
JacksonKN@missouri.edu

Completed Bovine Genome Sequence Opens Door to Better Cattle Production

MU researcher is part of team that untangles genetic history of cattle

COLUMBIA, Mo. – A University of Missouri researcher worked with international teams to sequence the bovine genome and study the diversity among breeds. The research from the completed genome will provide new information about mammalian evolution, cattle genetics and could result in improved cattle production. The results appear this week in two articles in the journal Science.

“The United States derives an enormous amount of protein for humans from animal production, particularly beef cattle,” said Jerry Taylor, professor and Wurdack Endowed Chair of Animal Genomics in the MU College of Agriculture, Food and Natural Resources. “Yet, we have had a difficult time improving feed efficiency and meat quality. If we can understand the relationship between genes and the end product, then we can use that information in our beef improvement programs.”

Taylor took a lead role in developing the bovine “HapMap.” The HapMap is a map of genetic diversity among different breeds of cattle that will provide researchers with a scientific history of how domesticated cattle and other ruminants diverged from a common ancestor. Using the bovine HapMap, researchers described genetic variation among different branches of the bovine family tree, starting with the major division between the humpless taurine cattle most commonly found in Europe, Africa, and East and West Asia, and the indicine cattle found in India, South and West Asia, and East Africa.

“The emergence of modern civilization resulted in adaptation, assimilation and interbreeding of cattle,” Taylor said. “This resulted in breeds differing in milk yield, meat quality and resistance to disease and pests. The bovine HapMap data show that cattle have undergone a rapid recent decrease in effective population size from a very large ancestral population, possibly due to bottlenecks associated with domestication, selection and breed formation. The recent decline in diversity is sufficiently rapid that loss of diversity should be of concern to animal breeders.”

More than 300 scientists from 25 countries worked six years to complete the sequence. The bovine genome consists of 22,000 genes and is more similar to that of humans than that of mice and rats. Researchers are particularly interested in genes that are involved in immunity, lactation, metabolism and digestion.

Additional articles can be found at the following sites:
http://www.sciencemag.org/cgi/content/full/324/5926/528
http://www.sciencemag.org/cgi/content/full/324/5926/522#RAFN1
UPCOMING EVENTS

Missouri Dairy Grazing Conference

July 8 – 10, Southwest Missouri Center, Mt. Vernon

Open to all dairy producers and industry professionals interested in learning more about dairy grazing. Learn the latest in dairy grazing systems, tour some of the nation's best grazing dairies, network with national dairy graziers and hear national and international speakers. See the conference website for details.

http://agebb.missouri.edu/dairy/grazing/conference/index.htm

Beef Research and Teaching Farm Field Day

Sept. 17, 8:30 a.m., Beef Research and Teaching Farm, South Farm

The Beef Research and Teaching Farm and National Cattlemen’s Beef Association will provide presentations and demonstrations about beef production.
Contact Phillip Brooks, brookspb@missouri.edu, 882-2829.

MU Online Horse Auction

November 1-12 with viewing on November 7th from 10 am to 2 pm
Contact Marci Crosby (Jennings) at (573) 884-7836, jenningsmar@missouri.edu.

Out with the old...

If you’re like me the picture to the left brings back memories of squeaky and uncomfortable seats where several of my animal sciences classes were held. Well those seats were removed just days after classes ended this past May and by the beginning of classes in August there will be brand new seats and flooring for our incoming freshman and returning students.

Over the past few years the Division of Animal Sciences has seen continued growth in student numbers and we were committed to find a way to fund a project to increase the capacity of our auditorium and in the process provide a serious makeover. With help from Heiddi Davis, Director of Campus Space Planning and Management, Dr. Bryon Garton, Associate Dean of Academic Programs for the College of Agriculture, Food and Natural Resources, Dr. Bill Lamberson, Building Director of the Animal Sciences Research Center, and Dr. Jim Spain, ViceProvost for Undergraduate Studies, we were able to fund a $190,000 makeover with a three-way partnership among the Provost’s Office, the CAFNR Dean’s Office and the ASRC. Not only will the student capacity increase from 200 to 280 students by utilizing a desk and tablet arm configuration, the flooring options will help the sound quality of the room and provide a carpeted area for the professors. Students and professors will also enjoy new technology in the auditorium including more strategically placed projectors and screens, document cameras, and equipment for providing classroom instruction at remote locations.

Look for a picture of the new space in the next issue!

University of Missouri, Division of Animal Sciences, Columbia, MO 65211  http://animalsciences.missouri.edu/
Beef Research and Teaching Farm Field Day
University of Missouri

Where: Univ. of Missouri South Farm
The Beef Research and Teaching Farm is located south of Columbia, MO off US-63 on Old Millers Rd. adjacent to the KOMU TV station and tower.

Date: September 17, 2009
Time: 8:00 AM—4:30 PM

The goal of the field day is to showcase the beef research and extension programs conducted at the farm. Our goal is to provide timely and valuable information on beef cattle nutrition, reproduction, management and genetics to area beef producers. Additional research conducted at the farm and important to the beef enterprise including forage management, use of by-product feeds, animal identification, ultrasound and weighing technologies, among other topics will be showcased.

Highlights
- NCBA Handling Demonstration
- Pasture Walk
- Free Luncheon
- One-on-One Farm Tours
- Latest Science on: Management Genetics

Sponsors (to date):
Priefert
Sherring Plough - Intervet

Schedule at a Glance:

8:00 AM  Registration begins (open throughout day)
          Coffee and donuts
          Visit with sponsors
9:00 AM  Welcome -
9:30 AM  "Selection for Improved Feed Efficiency."
          Dr. Robert Weaber, University of Missouri
10:00 AM "Judicious Use of Antimicrobials (Antibiotics) in Cattle"
           Craig Payne, University of Missouri
10:30 AM "Emerging Social Ethics and Agriculture"
           Terry Engle, Colorado State University
11:30 AM Free Luncheon
          Door Prize Drawing
          Visit with Sponsors
1:00 PM  NCBA Stockmanship and Stewardship Seminar and Demonstration, Curt Pate and Ron Gill
3:00 PM  Pasture Walk
4:30 PM  Conclusion

For more information contact:
Phillip Brooks, Farm Mgr: 573-823-7930
Bob Weaber, Ext. Specialist: 573-882-5479
Justin Sexten, Ext. Specialist: 573-882-8154

Free Meal RSVP:
Angie Gallatin, Farm Sec.: 573-882-2829

Visit http://animalsciences.missouri.edu/research/brtf/