The 2006 University of Missouri Intercollegiate Meat Judging Team recently completed their most successful competitive year in decades. This past spring, these students were crowned champions of the Southeastern contest, the first championship outing for a meat judging team at University of Missouri since 1939. These students followed up a successful spring by a more impressive fall campaign. These students ended the contest year on an exceptionally strong note by finishing a very strong 3rd nationally in the International contest. At that contest these students posted the highest score ever posted by a University of Missouri Meat Judging Team, resulting in the highest finish for MU at the National Championship contest since 1971. We in the department are all exceptionally proud of these students for their achievements as this marks a great accomplishment for our program and University.

Livestock Judging Team

The University of Missouri Livestock Judging program is continuing its march towards national prominence. The 2006 team wrapped up their judging experience in November. In four contests throughout the fall they managed three top ten finishes including a 10th place finish at the National Barrow Show, a 8th place finish at the American Royal, and a 3rd place finish at the Mid-South Fair in Memphis, TN. The 2006 crew represented Mizzou with a great deal of class and presented a tremendous work ethic. If you know any of these young people, please let them know how much you appreciate the effort they gave to carry the banner for the Black and Gold. They are a fabulous group and I expect big things from them. Take note of their names – you will hear them again!

The 2007 team just started their season in January at the National Western Stock Show in Denver. The trip provided many challenges, however on contest day the team stepped up. Mizzou finished 7th overall (23 universities were represented) and with many individual accolades.
Greetings from your Alma Mater, the Division of Animal Sciences at the University of Missouri-Columbia. It is hard to believe that my wife Susan and I have already been in Columbia over 6 months. As new Division Director I can certainly say that the Division of Animal Sciences at MU has historically been a great program over the past 100 years and today continues the tradition of providing outstanding programs in teaching, research and extension. As you will read in this newsletter, it was an exceptional year for achievements and honors received by many of our faculty and students. Awards to Monty Kerley (ASAS American Feed Industry Award in Ruminant Nutrition Research), David Patterson (ASAS Extension Award), Jim Williams (Excellence in Education Award), Marcia Shannon (J.W. Burch Extension Award), Randy Prather (Curator’s Professor), Michael Roberts (SSR Carl Hartman Award, Top 50 Worldwide Scientific Leader in Scientific American), Bill Lamberson (Director of Graduate Studies Award for Excellence) and Jim Spain (CAFNR Celebration of Excellence Purdy Award) only demonstrate the depth and broad range of exceptional faculty dedicated to teaching, research and extension in the Division. Emeritus Professor Joe Vandepopuliere was named a Fellow at the National Poultry Science Meeting this past summer. Our Mizzou Livestock and Meats judging teams had an exceptional year competing across the country, and we are extremely pleased about the growth and development of the young men and women who represented MU. We are very proud of the College, University and National recognition that our faculty and students have received.

Our student numbers have increased over the last two years from 317 in 2004 to 397 undergraduate majors in the Division of Animal Sciences this fall. The vast majority of our undergraduates continue to major in Pre-Veterinary Science, and as is occurring in other Animal Science Departments across the country, a significant number of students come from an urban background. Diversity in students in the Division is increasing, driving a need to increase the variety of curriculum programs available to them. This year the Division is developing several new degree tracks to meet the needs of our undergraduates and the animal industry. When completed, it is our goal to have degree tracks in Animal Production/Business, Meat Science, Biotech/Science, Pre-Vet and Companion Animal. The new tracks 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. The Division is proud of the strong internship program that has been established for our undergraduates. A total of 23 undergraduates participated in off-campus internships ranging from oceanic photography in Hawaii to learning production management on a swine farm in Illinois. The Division currently offers students with a strong equine interest an opportunity to acquire a minor in Equestrian Science through its partnership with Stephens College here in Columbia. We are currently in the process of searching to fill an equine teaching/extension position this spring as Wayne Loch is attempting to retire for a second time. A new minor in Captive Animal Management will be offered next fall through the Division’s collaboration with the MU Division of Fisheries and Wildlife and the St. Louis Zoo. The Captive Animal Management minor will be an attractive option for students interested in deer and pheasant farms, conservation facilities, hunting preserves, wildlife rescue and zoological parks. Trista Strauch has been hired to coordinate the Captive Animal Management program and teach courses for the minor. We believe that development of the different tracks will provide students coming to MU a more flexible program to achieve their career goals.
The Division continues to support a strong research and graduate program. There are approximately 46 graduate students with a 50:50 split (male and female). With budget cuts in the past, the number of teaching, research and extension faculty in the Division has decreased to 28. Dr. K.C. Olson in our commercial agriculture position took a tenured faculty position at Kansas State University this past summer. Our meats specialist, Dr. Eric Berg recently accepted a position with North Dakota State University and Dr. Ed Rucker moved to Texas A&M University to continue his research in transgenetics. We will certainly miss KC, Ed and Eric and thank them for the solid programs they developed and support they have given to the Division. Through funding of the Food for the 21 Century Program, the Division has recently hired Dr. Kevin Wells from Revivicor, Inc. to fill Ed Rucker’s position and Dr. Rocio Rivera from the University of Pennsylvania whose research program will be in embryo development. Dr. Justin Sexten, a current Extension Specialist in Mt. Vernon, IL was hired to fill K.C. Olson’s position. We will also be seeking to fill Dr. Berg’s position this spring, and with the move of the meats program from Food Science to Animal Science, we hope to establish a renewed growth in the meats undergraduate and graduate programs. Dr. Trygve Veum, our swine nutritionist for the past 39 years retired this past August and with the approaching retirements of Drs. Barry Steevens in dairy extension (28 years) and Ronald Belyea in dairy nutrition (28 years), the Division will be stretched to fill the gaps, especially in dairy production. Despite our declining faculty numbers, the Division continues to have major impacts in genomics, nutrition, reproduction, environmental physiology and livestock production. The reproductive physiology faculty have an established reputation as one of the top programs throughout the world. Our genomics program is advancing development of markers for selection in beef cattle. We continue to be one of the leaders in ruminant and non-ruminant nutrition and will play a major role in the utilization of by-products from ethanol production in Missouri. 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. With the decline in state funding there is increased pressure to maintain our extension and research programs. Faculty support their research through industry contracts and government sponsored grants. Last year, the Division generated over $5 million from grants, contracts and gifts. We hope that the legislature will support an increase in base funding for agriculture to bring MU to the average support given to other universities in the Big XII.

If you have been through Columbia recently, you may have noticed some changes to South Farm. The Board of Curators approved development of Discovery Ridge which will serve as a research park to support life sciences research. Discovery Ridge is located on the southwest corner of South Farm on Highway 63. On the north side of South Farm, next to the equine center, you will see the Thomas Jefferson Agricultural Institute. Jefferson Farm and Gardens is a new educational farm which will serve as a year-round attraction to provide visitors a look at contemporary Midwest agriculture. Although we have lost ground for research with the development of Discovery Ridge and the Jefferson Institute, the University felt the development was necessary to protect South Farm as a research, teaching and outreach site as the city of Columbia rapidly expands around the farm. The Division will benefit from funds to improve our research and teaching facilities on South Farm. 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.
Dr. Tim Safranski has been the State Swine Breeding Specialist at the University of Missouri since 1996. He received training at Oregon State University (B.S), the University of Missouri (M.S. and Ph.D.) and the USDA Meat Animal Research Center (postdoctoral research fellowship). MU responsibilities include Extension and Research in genetics and reproductive management. He also teaches the senior level Capstone class in Swine Production. Research interests include gilt development, early-weaned sow management, selection for placental efficiency and semen production/evaluation. He is frequently invited to share his expertise and has worked with producers and presented at conferences and workshops in nine countries and 14 states.

Faculty Awards

Dr. Randy Prather
Curator’s Professor, President’s award for Research and Creativity, University of Missouri. American Physiology Society, Walter Randall Award for Biomedical Ethics, Discover Magazine Top 100 science stories in 2006

Dr. Prather received his BS and MS from Kansas State University and his PhD from the University of Wisconsin-Madison. Dr. Prather’s research program has been to understand early embryo development in the pig, and then to use that information to improve the methods for making transgenic pigs.

Dr. Peter Sutovsky

Peter Sutovsky earned his MS in Animal Science from Slovak Agricultural University, Nitra, Slovakia, and PhD in Physiology of Reproduction from the Czech Academy of Sciences. He is an Assistant Professor of Animal Sciences and Clinical Obstetrics & Gynecology at the University of Missouri-Columbia. 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. Frequent invited speaker in USA and around the world, Dr. Sutovsky holds two US patents and was recently recognized as the inaugural recipient of the USDA-NRI Discovery Award.

Dr. Marcia Shannon
J. W. Burch Extension Award

Marcia Carlson Shannon is an Associate Professor of Animal Science at the University of Missouri in Columbia, MO. Marcia has been with the University of Missouri since 1998 and works as the State Extension Swine Nutrition Specialist. Marcia Shannon was promoted with tenure at the University of Missouri in 2004. Her academic appointment is 77% extension and 23% research.

Dr. Jim Williams
Excellence in Education Award

Jim Williams received his BS, MS, and PhD from West Virginia University and post-doctoral experience from Oklahoma state. He has been in a research and teaching position for 26 years at MU.

Dr. Tim Safranski
National Pork Board Extension Award—Midwest Section Meetings, Des Moines

Tim Safranski has been the State Swine Breeding Specialist at the University of Missouri since 1996. He received training at Oregon State University (B.S), the University of Missouri (M.S. and Ph.D.) and the USDA Meat Animal Research Center (postdoctoral research fellowship). MU responsibilities include Extension and Research in genetics and reproductive management. He also teaches the senior level Capstone class in Swine Production. Research interests include gilt development, early-weaned sow management, selection for placental efficiency and semen production/evaluation. He is frequently invited to share his expertise and has worked with producers and presented at conferences and workshops in nine countries and 14 states.
Dr. Michael Roberts
2006 Carl G. Hartman Award, Top 50 Worldwide Scientific Leaders in Scientific American, MU Faculty Alumni Award

R. Michael Roberts’ career in scientific research and education began in England over 40 years ago as a botanist, but his interests gradually changed to biomedical and animal research during the 1970s while he was a member of the Department of Biochemistry and Molecular Biology at the University of Florida. Dr. Roberts joined the University of Missouri-Columbia in 1985, focusing on reproductive biology of livestock, and specifically in gene expression in trophoblast. A major discovery was the identification of interferon-tau and its role in signaling to the mother during early pregnancy. He is currently investigating (1) the effect of environmental conditions, particularly nutrition, on biasing the gender of offspring in farm species and other mammals; (2) the program whereby human embryonic stem cells can be induced to differentiate into trophoblast cells (3) an emerging signal transduction pathway involving stress-interacting protein kinase (Sin1), which interacts with the carboxyl end of the type 1 interferon receptor, IFNAR2, and interfaces downstream with the mTOR2 complex, Akt, and the RNA-binding protein, PCBP2/hnRNP-E2.

Dr. David Patterson
ASAS Extension Award

Dr. Patterson is a member of the faculty in the Division of Animal Sciences at the University of Missouri-Columbia. Dr. Patterson led the development of Missouri’s Show-Me-Select Replacement Heifer Program, which is the first comprehensive, state-wide, on farm beef heifer development and marketing program in the U.S. Participation in this program from 1997-2006 involved 612 farms, 184 veterinarians, 27 regional extension livestock specialists, and 73,022 heifers. The marketing component of the program facilitated the sale of 17,598 heifers in 73 sales across Missouri from 1997 through the fall sales in 2006. These sales generated interest from 5,965 prospective buyers from 15 states. Impact on Missouri’s economy from the first 10 years of this program exceeds $30,000,000. Dr. Patterson’s research efforts have gained wide industry acceptance, and resulted in new strategies to synchronize estrous cycles of postpartum beef cows and replacement beef heifers.

Dr. Monty Kerley
ASAS American Feed Industry Award in Ruminant Nutrition Research

Monty S. Kerley received a B.S. from Southern Illinois University-Carbondale and M.S. and Ph.D. degrees from the University of Illinois-Urbana. In 1987 he accepted a position as Assistant Professor at the University of Missouri-Columbia in 1987. He was promoted to the rank of Associate in 1993 and to the rank of Professor in 1998. He has trained over 25 graduate students, published over 70 referred articles, and maintained an active funding record. He presently teaches an undergraduate course and graduate course in nutrition and directs a graduate ruminant nutrition seminar. His recent research has focused on improving growth efficiency of cattle via diet alterations and studying the impact of mitochondrial respiration on residual feed intake. He has also conducted research evaluating various by-product feeds, with his most recent emphasis being on by-products generated from bioenergy production.

Dr. Jim Spain
CAFNR Celebration of Excellence Purdy Award

Dr. Jim Spain received his BS in Animal Science from North Carolina State and both his M.S. and Ph.D. from Virginia Tech. He is currently an Associate Professor of Animal Sciences and Serves as the Assistant Dean of Academic Programs for the College of Agriculture, Food and Natural Resources. Dr. Spain has been with the University since 1990.
Professor Trygve L. Veum retires after 40 years of service

Dr. Trygve Veum received his B.S. in Meat & Animal Science from the University of Wisconsin-Madison and both his M.S. and Ph.D. in Animal Nutrition from Cornell University at Ithaca, NY. He has been with the University of Missouri—Division of Animal Sciences since 1967 starting out as an Assistant Professor and progressing to full Professor by 1980. Over the course of his 40 year career he has been the lead investigator on many grants and coauthored more than 100 refereed journal papers and 200 abstracts. He has also written 9 book chapters and numerous articles on swine nutrient for extension, swine days, departmental reports and the popular press. He has advised 8 PhD and 25 MS students and served on the committees of 81 other graduate students and had 3 postdoctoral fellows. In addition to his research and advisement endeavors he taught Swine Production and Applied Nutrition for more than 30 years.

Dr. Justin Sexten hired

Dr. Sexten has been hired as our new Extension Assistant Professor/Commercial Ag Beef Specialist and will begin his duties sometime this July. Dr. Sexten obtained his B.S. from the University of Kentucky, and both his M.S. and Ph.D. from University of Illinois. He is currently an Extension Specialist at the Mount Vernon Extension Center, Mt. Vernon, Illinois

Mitch Beaman wins Chancellor’s Staff Recognition

Mitch Beaman, a Research Technician for the Animal Sciences Research Center is the recipient of the 2007 Chancellor’s Staff Recognition Award in the Technical/Paraprofessional category. Mitch has worked for the Division of Animal Sciences for 6 years and for the University for 8 years. Mitch’s primary responsibility is to operate and maintain the equipment used to run the Brody Environmental Center which is used to study the effects of climate on large animal reproduction, growth, and lactation. Mitch is also knowledgeable in electrical, refrigeration and many other aspects of the Animal Sciences Center. We are very fortunate to have Mitch on our team.

Livestock Judging Team Update—continued from page 1

The individual recognitions were too numerous to mention in this short newsletter, but suffice it to say, they received a great deal of attention. They will participate in three more contests throughout the spring, the Sioux Empire Farm Show (Sioux Falls, SD), the Iowa Beef Expo (Des Moines, IA), and the most impressive contest of the spring – the Houston Stock Show and Rodeo. We hope for many great results to report. I will introduce you more to this team in the future, but for now here is a rundown of our roster:

Brooke Wilbers  Eugene, MO
Jake Alden       Hamilton, MO
Travis Arp       Arlington, WI
Jason Ewing      Rogersville, MO
Michael Gerdeman Warrenton, MO
Adam Kautsch    Russellville, MO
Nick Minton      Fults, IL
Brent Versemann Perryville, MO
Trent Weatherly  Aurora, MO
**Student Awards**

**Joseph Golden**
—wins 2006 Omega Protein Innovative Research Award

Joseph W. Golden was named by the American Society of Animal Science (ASAS) as the 2006 winner of the Omega Protein Innovative Research Award. The honor was presented to Golden on Monday, July 10, 2006, in Minneapolis, Minnesota, at the ASAS Awards Program. The award was designed to stimulate and reward original and innovative research using marine fish products in nutritional programs for swine, poultry, beef, dairy, horses, aquaculture, and companion or exotic animals. Joseph W. Golden obtained his BS in animal science in 2002 from the University of Missouri. Golden completed his MS degree in ruminant nutrition and is currently pursuing his PhD studying diet formulation models and the energetic cost of fiber inclusion in feedlot diets under the direction of Monty Kerley.

**Tim Hackmann places First in undergraduate presentation**

Tim Hackmann placed first in the undergraduate presentation competition for his original research in the area of forage degradation kinetics. Tim graduated from MU with Honors in December, 2006 with a BS in Biological Sciences and has started his Masters work with Dr. Spain's winter semester 2007.

**Linares wins Best Poster Presentation**

Leonardo Linares was born in the city of Pratapolis, state of Minas Gerais, Brazil. He obtained his BS degree from Sao Paulo State University – UNESP – Botucatu in 1993, and his MS degree from the University of Missouri in 2003. On completion of the MS degree, Leonardo returned to Brazil and worked as a Poultry Nutritionist for the second largest poultry and swine production company in Brazil – Perdigao Agroindustrial S/A. In 2006, Leonardo returned to the University of Missouri to pursue a PhD degree in Animal Sciences. Leonardo’s poster presentation entitled ‘Efficacy of the adsorbent SOLIS-Base in ameliorating the toxic effects of aflatoxin in broiler chicks” was judged the best poster presentation in the Nutrition section at the International Poultry Scientific Forum held in Atlanta, Georgia, from January 22-23, 2007.

**Lisa Steins Named CAFNR Outstanding December Graduate**

Lisa Steins was named CAFNR Outstanding Senior for the 2006 Fall Semester. Lisa was nominated by Dr. Marcia Carlson and had to submit an application to The CAFNR Student Council. Selection criteria was based on leadership skills, GPA, work experience, internships, student essay and statement of nomination. Lisa received her BS in Animal Science and a Minor in Ag. Economics.

**Elisangela Guaiume wins Best Oral Presentation**

Elisangela Guaiume is a PhD Candidate in Animal Science. She obtained her BS degree in Animal Sciences from Sao Paulo State University – UNESP – Botucatu Campus – Brazil, in 2001. Elisangela first came to MU in 2001 to do an internship with Dr. David Ledoux who later became her Master’s advisor. She obtained her MS degree in 2005. That same year, she was accepted by Dr. Jeffre Firman as a PhD student and started working with low crude protein diets for commercial broiler. Her objective is to decrease crude protein levels in the diets of commercial broilers, which besides decreasing nitrogen excretion in the litter, would significantly decrease feed costs while maintaining performance parameters as that of the current Industry-type diet. So far, her hypothesis has been proved true. In January 2007, Elisangela presented the data at the International Poultry Scientific Forum in Atlanta, Georgia and her work entitled “Reducing crude protein while maintaining performance and improving economics in Ross 708 broilers” won best oral presentation.

**Allison Meyer Places 2nd**

Allison Meyer placed 2nd in the Master’s student competition at the Midwest Section Meetings in Des Moines. Allison grew up in Greensburg, IN where she was active in her family’s purebred Shorthorn operation. She graduated in 2005 from Michigan State University with a B.S. in Animal Science. During her undergraduate studies, she was on the MSU Livestock Judging team and American Junior Shorthorn Association Board of Directors. Allison will complete her M.S. under Dr. Monty Kerley this summer and plans to pursue a Ph.D. studying cow/calf nutrition, then a career in academia.
The MU Block and Bridle club has been hard at work this semester! The new officer team was elected in December and in January they began compiling ideas to get more members involved this year. At the officer retreat in February, the team set goals for our chapter, a budget, and started a rough sketch of a point system to start in the fall to potentially get more freshmen involved in their early stages of college life. Twenty members attended the National Block and Bridle Convention that was held in January in Kissimmee, Florida. The members had a wonderful time, but were not ready to come back home to the 15 degree weather. Block and Bridle held their annual Ham Show this year in conjunction with the Ag Day BBQ. The day was long and stressful, but in the end all the hams were sold!

As always, the members are keeping themselves busy with all the events that are scheduled for this spring. In March, Block and Bridle will be helping out with the Grading and Judging Clinic, hosting a BBQ with Purdue University’s Block and Bridle Club and at the end of the month is our Steer and Heifer Show. The Tri-Chairs for this annual event have been working hard to get everything organized and ready for the two day event which will be held March 24-25. On April 14, the members will be traveling to St. Charles, Missouri for our Milk a Cow Booth and on April 20th the members will be interacting with FFA students from across the state at the State FFA Convention. May 4th is Animal Science Banquet where Block and Bridle members will meet with faculty, alumni, and friends.