Welcome from the Department Head

L. Wayne Greene, Ph.D., PAS
Professor and Head

The Department of Animal Sciences at Auburn University is proud to present our first edition of ‘The Upchurch Update’. We hope this communication will provide up-to-date information to you about the Department of Animal Sciences faculty and student activities, and departmental programs. At present we enroll 485 undergraduate students and 16 graduate students. The undergraduate students study in one of four curriculum options - Pre-vet/Pre-Professional, Production/Management, Equine Science and Muscle Foods. Graduate students study specific areas of science focused on animals. These include but are not limited to Growth Biology, Animal Nutrition, Animal Care and Well-Being, Muscle Foods, Animal Breeding, and Animal Health. Outside of the classroom faculty members are actively involved in various research and Extension programming in support of the animal industry we serve. I hope you find this and subsequent issues of ‘The Upchurch Update’ informative.

We are proud to announce a new addition to our faculty, Dr. Luxin Wang. She specializes in food microbiology and safety.

For more information:
www.ag.auburn.edu/ansc/directory/faculty/Wang/
Werner Bergen, nutritional biochemist and professor in the Auburn University Department of Animal Sciences, has been named a fellow of the American Society for Nutrition, the preeminent worldwide scientific organization for nutritional sciences.

To read the full article, please click link below:

www.ag.auburn.edu/ansc/news/Bergennamedfellow.php

Animal Sciences faculty honored at the College of Agriculture/AAES awards ceremony include (left to right) Dr. Darrell Rankins, Dr. Christy Bratcher, Dr. Betsy Wagner, and Dr. Jacek Wower.

Please click link below to read full article.

I am a growth biologist who joined the Animal Science faculty in the fall of 2008. As part of the Animal Sciences faculty, I teach growth physiology and conduct research using cattle and pigs to better understand the control of feeding behavior and body composition in growing animals. Ultimately this work should benefit Alabama cattlemen by enhancing the sustainability of forage-based production systems as well as benefit the health and well-being of Alabama residents as a whole by revealing new strategies to prevent diabetes and obesity.

A significant part of this latter effort involves the wooly pig, a unique, thick, curly-haired, extremely fat breed of pig. These animals were imported from Austria and introduced into our Swine Research and Education Center on campus to serve as a biomedical model for obesity-induced diabetes. Obesity is linked to diabetes and diabetic heart disease, but it’s not clear how increased body fat stores induce these health conditions. Our initial experiments indicate that as the wooly pigs get fatter, they do indeed mimic the obesity-related metabolic problems that we see in people. We are currently doing work to better understand how this happens and ultimately hope to find ways to prevent the development of diabetes.

Our department has some of the best students in the University. Mentoring undergraduate research is also a priority for my teaching and research programs and multiple students have taken part in every aspect of these research efforts. Several former and current students such as Jessica Chapman, Steven Geyer, Neena Singhal and Erin Cambier have been awarded prestigious undergraduate research fellowships to support their efforts in the lab. Additionally, multiple students have earned research credit through their participation in various projects in the lab or barn. Currently, Stephanie Perkins and Cassandra Key are doing substantial work relating to the regulation of feed intake and marbling in cattle and another outstanding undergraduate, Christine Garrett, has contributed greatly to the wooly pig work. Outstanding students such as these are just another example of why the Animal Sciences Department at Auburn University will continue to lead in the Southeast. War Eagle!

To read more about Dr. Brandebourg’s research, click the link below:  
[http://ocm.auburn.edu/featured_story/wooly_pigs.html](http://ocm.auburn.edu/featured_story/wooly_pigs.html)
Leanne Dillard, Doctoral Candidate for the Department of Animal Sciences, was featured in the Fall edition of the Graduate School magazine. Her article, *The Big Picture* can be accessed at the following link:

[www.ag.auburn.edu/ansc/documents/GradSchoolmagazine.pdf](http://www.ag.auburn.edu/ansc/documents/GradSchoolmagazine.pdf)

The academic quadrathalon team won second place in competition across the southern region.

The big winners at the Southern Association of Agricultural Scientists meeting in Birmingham:

Brandon Smith (mentored by Russ Muntifering) placed first in the Undergraduate Student Competition with his paper titled, “Annual ryegrass production and quality as influenced by planting date and irrigation during early seeding development” and Cassandra Key (mentored by Terry Brandebourg) placed third in the Undergraduate Student Competition with her paper titled, “Regulation of marbling in heifers in response to age and pasture versus grain finishing”.

Team (l to r): Casey Randle, Reba Hicks, Courteney McNamee, Brandon Smith
2012

CAMP WAR EAGLE!

[Images of a group of students]
JORDAN WICKS
2012 Graduate
M.S., Meat Science and Food Safety

While at Auburn, Jordan conducted a project to determine if feeding plum juice concentrate to growing/finishing pigs could reduce the shedding of E. coli, Salmonella and total anaerobic bacteria in the feces of pigs. She also evaluated resulting pork meat quality in the pigs. She is currently the plant manager of a new pork harvest and fabrication facility in Eva, AL. The facility is a joint venture between multiple stakeholders, including Jim and Nick’s BBQ, White Oak Pastures and SRA Foods. They hope to be processing by July 2012.

TABITHA WELCH
2012 Graduate
M.S., Meat Science and Food Safety

While at Auburn, Tabitha conducted a project to determine the growth and carcass performance characteristics of miniature cattle compared to standard cattle of the same age raised either on a forage diet or a grain concentrate diet. She also conducted a consumer panel to determine consumer acceptance of miniature cattle steaks and forage finished beef steaks. She was offered multiple interviews in various industries. She interviewed for a 4H extension specialist position, a few research and development positions at various meat companies and a pork production manager. She has decided to accept the 4-H Youth Extension Coordinator position in Nebraska.
Club News

Look for more Club News in the fall newsletter!

Student Clubs and Organizations

http://www.ag.auburn.edu/an-sc/students/current/clubs.php

- **Block & Bridle Club**
- **Horsemans's Club**
- **Meat Science Association Club**
- **Pre-Vet Club**
The Auburn University Equestrian Team had another successful season during the 2011-12 year. The Tigers were consistently ranked in the top five in the country in the National Collegiate Equestrian Association Coaches’ Poll, including spending more than four months from the poll’s initial release in October through the beginning of March at the No. 1 spot.

The AUET picked up quality wins over ranked opponents throughout the season, including six-straight victories to open the year.

Despite falling to South Carolina in the opening round of the Southern Equestrian Championships, the Tigers’ Hunt Seat and Western teams each earned first-round byes at the 2012 National Collegiate Equestrian Championships as a reflection of their outstanding competition throughout the season. The Hunt Seat team earned a No. 1 seed and the Western team was seeded fourth. Hunt Seat went on to finish fourth overall, while Western finished fifth at the Championships.

Auburn riders received recognition during the season for their accomplishments athletically and academically, as the Tigers had six NCEA All-American honors and nine NCEA Academic All-Americans.

Looking ahead to the 2012-13 season, the Southeastern Conference announced at its annual Spring Meetings in Destin, Fla., that equestrian will now be a championship sport in the SEC. With the addition of Texas A&M to the SEC beginning in July, the SEC now has four schools with varsity equestrian programs, and the teams will look forward to competing against each other in an official SEC Championship format next spring.
Selected Publications

[http://www.animal-science.org/content/90/2/635.short](http://www.animal-science.org/content/90/2/635.short)


