

School of Animal Sciences Profile



Report to Stakeholders

October 2010

About the LSU AgCenter

The LSU AgCenter is dedicated to providing innovative research, information and education to improve people's lives. Working in a unique statewide network of parish extension offices, research stations and academic departments, the LSU AgCenter helps Louisiana citizens make the best use of natural resources, protect the environment, enhance agricultural enterprises and develop human and community resources.



Academic/Research/Extension Highlights

— Development of practical embryo transfer and nuclear transfer procedures for livestock species at our Reproductive Biology Center. Applied research to improve reproductive efficiency in livestock. Application of molecular biology and genomics for genetic improvement of beef cattle.

— Identification of limiting amino acids in poultry and swine nutrition, effects of energy metabolism on reproductive performance in breeding mares and growth in dairy calves.



— Statewide Master Horseman educational programs to train horse owners in proper animal feeding, health care and riding techniques. Also to train participants to become volunteer trainers to expand outreach of the program.

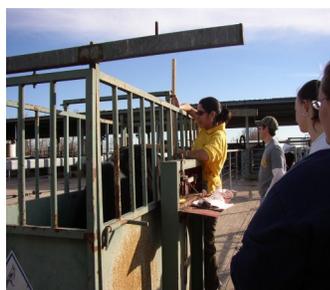
— Statewide Master Cattlemen educational programs to provide training for cattle producers on

environmental stewardship and economic success.

— 4-H and FFA youth livestock programs to teach animal care, critical thinking skills, communication skills, ethical behavior, environmental stewardship and work ethics to young people. Participation in agricultural awareness programs such as AgMagic and Ag in the Classroom.



— The School of Animal Sciences faculty interact with scientists within the LSU Vet School, Pennington Biomedical Research Institute and the AgCenter research stations across the state, which provides a vast array of research opportunities for undergraduate and graduate students.



School of Animal Sciences Office

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Academic Focus:
B.S., M.S. and Ph.D. degree programs in various animal science concentrations such as animal science, dairy production, dairy foods technology, poultry science and pre-veterinary medicine.

Research Focus:
Basic and applied research in various animal science disciplines, such as animal nutrition and metabolism, embryology and reproductive management, animal products such as meats and dairy foods, equine physiology and metabolism, animal genomics and molecular biology.

Extension Focus:
Educational programs for beef cattle, dairy cattle, poultry, swine, small ruminant and equine industries as well as 4-H and FFA youth livestock

Significance of Programs

- Research findings from the School of Animal Sciences have been incorporated into standard swine and poultry diets around the world.
- Ongoing research to improve reproduction in several species by improving efficacy of embryo technologies.
- More than 500 volunteers trained to become instructors in the Master Horsemen program in the past 5 years.
- 5,000 youth participating in local, regional and statewide livestock shows every year
- Commercial poultry producers trained in nutrient/waste management to improve water quality in rivers and lakes
- More than 100 cattlemen trained in the Master Cattlemen program

School of Animal Sciences Facts

- B.S. degree in Animal Sciences is the largest in the College of Ag with over 400 students
- Only comprehensive animal science program in Louisiana with research, teaching and extension responsibilities in the animal sciences.
- 24 faculty with expertise in all major areas of animal science, including beef cattle, dairy cattle, horses, poultry, small ruminants, swine and companion animals.
- Graduate degree programs in both M.S. and Ph.D. degrees. Currently 26 graduate students in the school.
- Collaboration with several universities are developing new products for the goat industry.

LSU AgCenter Departments and Schools

Maximizing the potential for the state's agricultural industries and improving the quality of life for all Louisiana citizens are the major initiatives of the LSU AgCenter.

To achieve its mission of serving the people of Louisiana and providing them with the latest research-based information on a vast variety of topics, the LSU AgCenter operates 11 academic departments/schools in Baton Rouge in conjunction with the LSU College of Agriculture. In addition, four other specialized departments also contribute to the mission. These 15 units are an integral part of the LSU AgCenter's research and outreach activities.

Faculty members in the LSU AgCenter's on-campus units are involved in a variety of efforts, including research, classroom teaching and extension education. They cover topics ranging from agricultural economics to human ecology and from entomology to experimental statistics.

The LSU AgCenter has the most successful record of commercialization of intellectual property in the LSU System. Since 2000, nine new companies have been started based on licensed technology from LSU AgCenter. The income is distributed among the LSU System, the inventors and more research.



For the latest research-based information on just about anything, visit our website: LSUAgCenter.com

Future Plans

Construct a new animal sciences research laboratory building to support research programs in the animal sciences.

Develop new genomic techniques for identifying individual genes in beef cattle, which affect important production and animal health traits.

Research to discover novel new ways of incorporating enhanced levels of essential nutrients such as folic acid into dairy foods and to improve the shelf life of dairy products

Develop an area of concentration in equine science for the B.S. degree program.

