



Meat Science & Technology Center

Department of Animal Science

animalscience.tamu.edu

DEPARTMENT OF ANIMAL SCIENCE MISSION

The mission of the Department of Animal Science is to improve lives through discovery, integration, dissemination and application of science-based knowledge of animals and animal products.

AREAS OF EXCELLENCE TO SUPPORT THE DEPARTMENT OF ANIMAL SCIENCE MISSION

To more effectively fulfill the mission of the Department of Animal Science, Areas of Excellence have been identified and developed. The goal for the Areas of Excellence are to provide focused areas of scholarship within the Department of Animal Science for which we may be or become a national and international leader. The Areas of Excellence align with the missions of both the Department and College, as well as the strategic pillars of the University: (1) Transformational Education for all students, (2) Discovery and Innovation for the world, (3) Impact on the state, the nation and the world.

DEPARTMENT OF ANIMAL SCIENCE AREAS OF EXCELLENCE

- Cattle Adapted to Tropical & Subtropical
- Pregnancy & Developmental Programming
- *Safety, Quality, & Nutrition of Food Products*
- Student & Stakeholder Engagement in Animal Science
- Quantifiable Animal Performance



TEXAS A&M UNIVERSITY
Animal Science



SAFETY, QUALITY, & NUTRITION OF FOOD PRODUCTS

Our goal is to be the world leader in the Safety, Quality, and Nutrition of Food Products. Our vision is to provide leadership in research, support, and training in food safety, quality and nutrition as well as the relationship between these areas. This will help us enhance the quality of life for a global population through excellence in developing and disseminating information and technologies to students, industry professionals, and the public.

As the largest and most diverse academic department of its kind, the Department of Animal Science at Texas A&M University takes pride in providing superior facilities, animals, and resources to retain and attract the best and brightest faculty and students from around the globe.

As part of the Department of Animal Science's overall mission, we aspire to be the international leader in specific areas of excellence — particularly meat science. Food product safety, quality, and nutrition are intrinsically linked and address a foundational need in society. Consumer attitudes toward consumption of food products (fresh or processed) are critical to marketing success and may be formed based on product safety, quality and nutritional value. Losing market shares would impact producers, processors, retailers, and the consumer. According to a 2016 study commissioned by the North American Meat Institute, companies in Texas that are directly involved in producing meat, poultry, and related products employ 146,464 people (1.87 million nationally) and an additional 354,960 jobs (3.54 million nationally) in related industries. Additionally, the manufacture and sale of meat, poultry, and related products generated an estimated \$87.39 billion in economic activity in Texas (\$1.02 trillion nationally).

Research findings and outreach activities in this area are tremendous. Examples include but are not limited to: USDA's Nutrient Database updates, National Beef Quality Audit, establishment of a searchable validation database for food safety, determination of antimicrobial efficacy, and contributions to the Research Guidelines for Cookery, Sensory Evaluation, and Instrumental Tenderness Measurements of Meat. Efforts have also reduced food wastage due to spoilage, disease-related losses in animal production, and the burden on the human healthcare system caused by chronic and acute conditions.

To enhance our scope in safety, quality and nutrition of food products and develop this area of excellence, we must significantly improve

our infrastructure for meat science research and education. Development of a new state-of-the-art meat science and technology center is crucial. We intend to build the more comprehensive facility of its kind in the U.S., devoted to the development of science and the application of that science to the solution of problems in animal and meat science. You can read more about what the facility will entail on the following page.

The continued success and contributions of the Department of Animal Science at Texas A&M are vital to the sustainability of Texas, U.S., and international meat production.



DEVELOPMENT PLAN TIMELINE

PHASE ONE: Immediate Initiative

Develop an infrastructure to provide outstanding learning opportunities, plus recruit and retain exceptional faculty to advance research capabilities.

- Graduate Student Fellowships: \$ 750,000 (\$250,000 per fellowship)
- Faculty Fellow in Meat Science: \$250,000
- Endowed Professorship in Meat and Consumer Safety: \$1 Million

PHASE TWO: Three Year Plan

Invest in the department through faculty positions, key programs and facilities to grow the educational mission to youth and stakeholders of animal science and relocate laboratory spaces in a state of the art meat science technology center.

- Undergraduate Research Scholarships: \$250,000 (\$2,500 per scholarship)
- Endowed Chair in Pre-Harvest Management and Environment: \$2 Million
- Endowed Chair in Meat Processing: \$2 Million + \$750,000 start-up
- Endowed Chair in Sensory Technology and Retail Science: \$2 Million + \$750,000 start-up
- Building Infrastructure - Establish framework and maintain a new Meat Science and Technology Center for the future of the animal protein industry: \$20 million
- Retail Space - Maintain the presence of retail space on the TAMU campus to ensure that students, staff, and visitors have the opportunity to have access to high quality products produced by the Meat Science and Technology Center: \$5 Million

DEVELOPMENT PLAN TIMELINE CONTINUED

PHASE THREE: Five Year Plan

Construct new state-of-the-art laboratories that have not been renovated since 1978 to accommodate cutting edge research, teaching and educational programs for our faculty, students, and stakeholders.

- Capital Improvements - Create state-of-the-art space and equipment for development of techniques, fabrication, and storage of products: \$10 Million
- Meat Processing and Research Facility - Construct modern facilities to accommodate students, faculty, and partners to develop new techniques and products at every stage of the animal protein supply chain: \$15 Million
- Classrooms, Labs, Training Rooms, Offices - Development of contemporary training facilities for students and stakeholders. Office space for scientists and industry partners to enhance collaborations and development of new products and technologies: \$15 Million





Consumer attitudes toward consumption of food products are critical to marketing success.

Losing market shares would impact producers, processors, retailers, and the consumer.

The manufacturing and sale of meat and related products generates an estimated \$87.39 billion in economic activity in Texas annually.

TOGETHER, WE CAN MAKE TEXAS A&M NUMBER ONE IN MEAT SCIENCE RESEARCH WORLDWIDE.

With your help, we can achieve our goal of making Texas A&M University the recognized world leader in meat science teaching, research, and outreach. Please join us in being a part of the Texas A&M Meat Science and Technology Center.

For more information, please contact:

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by **EXAMPLE**



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