



DEPARTMENT OF

# ANIMAL SCIENCES



## Research Overview

Animal Sciences focuses on research and technology transfer for efficient and sustainable production of high quality animal products optimizing animal well-being, enhancement of the human diet, and advancement of sound environmental practices.

Our faculty has expertise in the disciplines of growth and development, nutrition, breeding and genetics, physiology, management, and animal well-being and behavior.



## Research Areas

### ANIMAL PRODUCTION & MANAGEMENT SYSTEMS

- Nutrient Utilization
- Environmental Stewardship
- Efficiency Production
- Food Animal Product Development
- Animal Behavior and Welfare
- Improvement in Reproduction
- Genomic Selection
- Physiology
- Facility Design

### MOLECULAR ANIMAL PHYSIOLOGY & METABOLISM

- Nutrient Utilization & Partitioning
- Digestive Physiology & Absorption
- Obesity/Diabetes
- Tissue Growth Regulation
- Physiology of Reproduction & Lactation
- Meat Science and Muscle Biology

### FOOD QUALITY & FOOD SAFETY

- Pre-harvest Intervention Strategies
- Microbiome Systems
- Stress and Immunology
- Enhanced Nutrient Profiling

### GENE REGULATION, STEM CELL & DEVELOPMENTAL BIOLOGY

- Quantitative Genetics
- Genomics
- Transgenic Biology
- Comparative Animal Health & Disease



*Pictured at left from top: Beef cattle at ASREC, Dr. Luiz Brito, Dr. Kola Ajuwon, Dr. Marisa Erasmus and Dr. Paul Ebner.*

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