



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 Health and Well-Being
- 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
- Microbime Systems
- Stress and Immunology
- Enhanced Nutrient Profiling

GENE REGULATION, STEM CELL & DEVELOPMENTAL BIOLOGY

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



JOHN BLANTON
DEPARTMENT HEAD

blantonj@purdue.edu | 765.494.4806
270 S. Russell Street, West Lafayette, IN 47907
Purdue University College of Agriculture

*Pictured at left from top:
Dr. Shihuan Kuang, Dr. Luiz Brito, Dr. Kola Ajuwon, Dr. Marisa Erasmus and Dr. Kara Stewart*

Faculty by Research Area

Adeola, Olayiwola
ladeola@purdue.edu
Nutrition (non-ruminant)

Ajuwon, Kolapo
kajuwon@purdue.edu
Adipose Biology/
Nutritional Physiology

Allrich, Rodney D
rallrich@purdue.edu
Reproduction Physiology

Blanton, John
blantonj@purdue.edu
Groth/Development/Muscle
Biology

Boerman, Jacquelyn
jboerma@purdue.edu
Dairy Nutrition and Management

Brito, Luiz F
britol@purdue.edu
Quantitative Genetics and
Genomics

Cabot, Birgit K
cabot@purdue.edu
Reproductive Biology/Early
Embryo Development

Cabot, Ryan A
rcabot@purdue.edu
Graduate Coordinator
Molecular Biology and
Reproductive Physiology

Casey, Theresa M
theresa-casey@purdue.edu
Mammary development and
neoplasia, regulation of lactation

Cheng, Heng-wei
Heng-Wei.Cheng@ars.usda.gov
Animal Behavior and Well-Being

Croney, Candace C
ccroney@purdue.edu
Animal Behavior and Well-Being

Donkin, Shawn S
sdonkin@purdue.edu
Ruminant Nutrition and
Physiology

Ebner, Paul D
pebner@purdue.edu
Microbiology, Microbiology, Pre-
harvest Food Safety

Erasmus, Marisa A
merasmus@purdue.edu
Animal Behavior and Well-being

Fernandez, Marcos
mfernandez@purdue.edu
Small Ruminant Nutrition and
Management

Forsyth, Dale M
dforsyth@purdue.edu
Nutrition
(non-ruminant)

Fraley, Greg
gfraley@purdue.edu
Poultry Neuroendocrinology and
welfare

Johnson, Jay S
jay.johnson2@usda.gov
Stress and Nutritional Physiology

Johnson, Timothy
john2185@purdue.edu
Food Animal Microbiome,
Microbial Ecology

Jorgensen, Matthew
Matthew.Jorgensen@usda.gov
Animal Well-being

Karcher, Darrin M
dkarcher@purdue.edu
Poultry management

Karcher, Elizabeth L
ekarcher@purdue.edu
Undergraduate Coordinator,
Immunobiology and Nutrition
Science (dairy)

Kim, Yuan "Brad"
bradkim@purdue.edu
Muscle Biology and Meat Science

Kuang, Shihuan
skuang@purdue.edu
Developmental Biology

Lay, Donald C Jr
Don.Lay@usda.gov
Animal Behavior and Well-Being

Lemenager, Ronald P
rpl@purdue.edu
Ruminant Nutrition and
Management, Beef

Machaty, Zoltan
zmachaty@purdue.edu
Reproductive Physiology and
Developmental Biology

Markworth, James
jmarkwor@purdue.edu
Muscle Biology

Mathew, Alan G
agmathew@purdue.edu
Intestinal Microbiology, Pre-
Harvest Food Safety

Minton, Nicholas
nminton@purdue.edu
Beef Cattle Systems and Beef
Evaluation

Neary, Mike
mneary@purdue.edu
Ruminant Nutrition, sheep

Pasternak, Alex
jpastern@purdue.edu
Reproductive Biology

Plaut, Karen I
kplaut@purdue.edu
Endocrinology, Cell and
Molecular Biology

Radcliffe, J. Scott
jradclif@purdue.edu
Swine Nutrition and Management

Richert, Brian T
brichert@purdue.edu
Nutrition and Management
(swine)

Schinckel, Allan P
aschinck@purdue.edu
Breeding and Genetics (swine)

Schoonmaker, Jon P
jschoonm@purdue.edu
Beef cattle nutrition

Stewart, Kara R
krstewart@purdue.edu
Reproductive Physiology

Zuelly, Stacy M.S.
szuelly@purdue.edu
Meat Science