



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

GENE REGULATION, STEM CELL & DEVELOPMENTAL BIOLOGY

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

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



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

PAUL EBNER
INTERIM DEPARTMENT HEAD

pebner@purdue.edu | 765.494.4806

270 S. Russell Street, West Lafayette, IN 47907
Purdue University College of Agriculture

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

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

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

Cabot, Ryan A
rcabot@purdue.edu
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@usda.gov
Animal Behavior and Well-Being

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

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

Erasmus, Marisa A
merasmus@purdue.edu
Animal Behavior and Welfare

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

Ju, Tingting
ju48@purdue.edu
Microbiome and Antimicrobial
Resistance

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

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

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

Markworth, James
jmarkwor@purdue.edu.
Muscle Biology

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

Neave, Heather
hneave@purdue.edu
Animal Behavior and Welfare

Pempek, Jessica
jessica.pempek@usda.gov
Animal Behavior and Well-Being

Pasternak, Alex
jpastern@purdue.edu
Reproductive Biology

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

Richert, Brian T
brichert@purdue.edu
Swine Nutrition and Management

Rojas, Hinayah
hrojasde@purdue.edu
Genomics and Animal Breeding

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

Schoonmaker, Jon P
jschoonm@purdue.edu
Beef Cattle Nutrition

Wurtz, Kaitlin
kaitlin.wurtz@usda.gov
Animal Behavior and Well-Being