

## ANIMAL BIOSCIENCES

### OVERVIEW

The research program focuses on farm animal agriculture involving a combination of courses and graduate research. Areas of research interest include nutrition, metabolism, lactation, reproduction, genetics, and animal health.

An interdisciplinary program leading to the M.S. and Ph.D. degrees in Animal Biosciences is offered under the direction of a committee composed of program graduate faculty members. The goal of this interdisciplinary program is to provide advanced education and research training in mammalian physiology and endocrinology, mammary gland biology, basic and applied nutrition, animal genetics and genomics, or animal health. All graduate students will complete a common core of courses as well as specific courses to support their research programs. The program provides the flexibility necessary for students to gain competence in the area of their choice.

### DEGREES

Animal Biosciences AMP

Animal Biosciences M.S.

Animal Biosciences Ph.D.

### FACULTY

**Barlow, John;** Associate Professor, Department of Animal and Veterinary Sciences; DVM, University of Illinois Urbana-Champaign; PHD, University of Vermont

**Dann, Heather;** Adjunct Assistant Professor, Department of Animal and Veterinary Sciences; PHD, University of Illinois Urbana-Champaign

**Etter, Andrea J.;** Assistant Professor, Department of Nutrition and Food Sciences; PHD, Purdue University

**Freeman, Kaley;** Assistant Professor, Department of Surgery; MD, PHD, University of Colorado Boulder

**Grant, Richard;** Adjunct Professor, Department of Animal and Veterinary Sciences; PHD, Purdue University

**Greenwood, Sabrina Louise;** Associate Professor, Department of Animal and Veterinary Sciences; PHD, University of Guelph

**Guo, Ming Ruo;** Professor, Department of Nutrition and Food Science; PHD, University College Cork

**Jetton, Thomas Lawrence;** Professor, Department of Medicine-Endocrinology; PHD, Vanderbilt University

**Kraft, Jana;** Associate Professor, Department of Animal and Veterinary Sciences; PHD, Friedrich-Schiller-University of Jena

**McKay, Stephanie Dawn;** Associate Professor, Department of Animal and Veterinary Sciences; PHD, University of Alberta

**Morrison, Sarah Y.;** Adjunct Assistant Professor, Department of Animal and Veterinary Science; PHD, University of Illinois, Urbana-Champaign

**Smith, Julia M.;** Research Associate Professor, Department of Animal and Veterinary Sciences; DVM, Cornell University

**Skinner, R. Chris;** Assistant Professor, Department of Nutrition and Food Science; PHD, West Virginia University

**Townson, David H.;** Professor, Department of Animal and Veterinary Sciences, PHD, Ohio State University

**Van Amburgh, Michael;** Adjunct Professor, Department of Animal Science and Veterinary Science; PHD, Cornell University

**Zhao, Feng-Qi;** Professor, Department of Animal and Veterinary Sciences; PHD, University of Alberta

### Courses

#### **ABIO 5990. Special Topics. 1-18 Credits.**

See Schedule of Courses for specific titles.

#### **ABIO 6010. ABIO Graduate Journal Club. 1 Credit.**

Critical review of current scientific literature in terms of scientific method and merit.

#### **ABIO 6020. ABIO Graduate Seminar. 1 Credit.**

Topics of current faculty and Graduate student interest presented in a seminar-discussion format.

#### **ABIO 6030. Research Proposal Writing. 2 Credits.**

Discussion and practice of the grant/proposal writing process by developing and writing a research proposal in response to a specific request for proposals. Students practice grant writing and review, share their work, and review the work of others. Recommended enrollment prior to/during the semester of student's first committee meeting.

#### **ABIO 6090. One Health: Zoonoses. 3 Credits.**

Zoonoses and vector-borne disease account for the majority of emerging and re-emerging diseases. Covers the drivers that influence infection in animals and humans, tools used for disease monitoring and prevention, and policies and programs aimed at prevention. Cross-listed with: PH 6220.

#### **ABIO 6391. Master's Thesis Research. 1-18 Credits.**

Research for the Master's thesis.

#### **ABIO 6920. Independent Literature Rsch. 1-6 Credits.**

Reading and literature research culminating in a paper on a topic of current interest in Animal Biosciences.

#### **ABIO 6990. Special Topics. 1-18 Credits.**

See Schedule of Courses for specific titles.

#### **ABIO 6991. Internship. 1-18 Credits.**

On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

#### **ABIO 6993. Independent Study. 1-18 Credits.**

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

**ABIO 6994. Teaching Assistantship. 1-3 Credits.**

Student service as a teaching assistant, usually in an introductory level course in the discipline, for which credit is awarded. Offered at department discretion.

**ABIO 6995. Graduate Independent Research. 1-18 Credits.**

Graduate student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

**ABIO 7491. Doctoral Dissertation Research. 1-18 Credits.**

Research for the Doctoral Dissertation.

**ABIO 7990. Special Topics. 1-18 Credits.**

See Schedule of Courses for specific titles.

**ABIO 7991. Internship. 1-18 Credits.**

On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

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