Animal Behavior

Bloomington

Director
Associate Professor Emilia Martins*

Departmental E-mail
cisab@indiana.edu

Departmental URL
www.indiana.edu/~animal

Graduate Faculty
(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors
Jeffrey R. Alberts* (Psychology), Colin Allen (History of Philosophy and Science), Edmund D. Brodie III* (Biology), Ellen D. Ketterson* (Biology), Curtis M. Lively* (Biology), Val Nolan Jr.* (Emeritus, Biology), Milos Novotny* (Chemistry), George V. Rebec* (Program in Neural Science, Psychology), Dale R. Sengelaub* (Program in Neural Science, Psychology), Joseph E. Steinmetz* (Program in Neural Science, Psychology), Roderick A. Suthers* (Medical Sciences, Neural Science), William D. Timberlake* (Psychology), Michael J. Wade* (Biology)

Associate Professors
Preston E. Garraghty (Neural Science, Psychology), Kevin D. Hunt* (Anthropology), Emilia P. Martins* (Biology)

Assistant Professors
Gregory D. Demas* (Biology), Laura Hurley (Biology), Troy G. Smith* (Biology)

Academic Advisor
Associate Professor Emilia P. Martins*, Jordan 136, (812) 856-5840

Adjunct Professors
Peter Cherbas* (Biology), Robert de Ruyter van Steveninck* (Physics), Robert DeVoö* (Emeritus, Optometry), Julia R. Heiman (The Kinsey Institute for Research in Sex, Gender, and Reproduction), Elisabeth Lloyd* (History and Philosophy of Science), Craig E. Nelson* (Biology), Rudolph Raff* (Biology), J. C. Randolph* (School of Public and Environmental Affairs), Kathy D. Schick* (Anthropology), Nicholas Toth* (Anthropology), Meredith J. West* (Psychology)
Adjunct Associate Professors
Henry D. Prange* (Medical Sciences), Laura L. Scheiber* (Anthropology),
S. Holly Stocking* (School of Journalism)

Adjunct Assistant Professor
Armin P. Moczek (Biology), Christine C. Quirk (School of Medicine),
Whitney M. (Reilly) Schlegel* (Medical Sciences), Sima Setayeshgar
(Physics)

Adjunct Associate Scientist
Stephanie Sanders* (The Kinsey Institute for Research in Sex, Gender,
and Reproduction)

Adjunct Senior Scientist
Andrew P. King (Psychology)

Admission Requirements
Students must be admitted to a Ph.D. program in the Department of
Biology, the Department of Psychology, or the Program in Neural Science
or other related departments or programs (e.g., Program in Medical
Sciences, Anthropology). They must also apply to the Program in Animal
Behavior.

Students should select an advisory committee made up of at least three
members of the graduate faculty. For students whose home department
or program is biology, at least one member of the advisory committee
from the Department of Psychology or the Program in Neural Science is
expected. For students whose home department or program is the
Department of Psychology or the Program in Neural Science, at least one
member of the advisory committee from biology is expected. At least two
of the student's committee members must be members of the Program in
Animal Behavior.

Ph.D. Minor in Animal Behavior

Course Requirements
At least FOUR courses taken from at least two different
departments/graduate programs, as specified below:

(1) ONE ABEH A501 Seminar in the Integrative Study of Animal Behavior

(2) ONE course from the following list, emphasizing mechanisms of
behavior:

NEUS N500 Neural Science I
NEUS N501 Neural Science II
NEUS N550 Sem. Sensorimotor Neuroplasticity
MED P548 Neuroethology
BIOL L560 Physiological Ecology

(3) ONE course from the following list, emphasizing evolutionary
perspectives:

BIOL L567 Evolution
Area Certificate in Animal Behavior

Course Requirements
The requirements for the Area Certificate in Animal Behavior include all of the requirements of the minor, PLUS the following:

(1) One additional ABEH A501 Seminar in the Integrative Study of Animal Behavior

(2) ABEH A502 Professional Ethics for the Bio-Behavioral Sciences or PSY P595 First-Year Research Seminar

(3) One Additional course from 1-4 above.

Examination
As required by home department or program.

Statistics Requirement
As required by home department or program.

Thesis
Required.

Courses

A500 Introduction to Animal Behavior Research (1 cr.) Introduces students to research opportunities in Animal behavior. Local researchers will present their recent research efforts, emphasizing the integrative aspects of their work and its application to functional and mechanistic explanations of behavior.
A501 Seminar in the Integrative Study of Animal Behavior (2-3 cr.)
Investigation of functional behavior of animals (e.g., migration, parental behavior, mate choice) using an interdisciplinary approach that attempts to integrate the perspectives of developmental psychology, ecology and evolutionary biology, neural science, and the science of learning and memory. Topic will vary. May be repeated for credit.

A502 Research and Professional Ethics in Bio-Behavioral Sciences (1 cr.)
Readings and discussion dealing with general ethical issues in science, with a particular focus on animal behavior. Topics include treatment and protection of animals; the acquisition, analysis, and use of data; student-mentor and student-teacher relations; credit, authorship, and peer review.

Cross-Listed Courses

Biology
L560 Physiological Ecology (3 cr.)
L567 Evolution (3 cr.)
L573 Quantitative Genetics & Microevolution (3 cr.)
L581 Behavioral Ecology (3 cr.)
Z540 Genetics of Population (3 cr.)

Medical Sciences
M555 Medical Neuroscience (5 cr.)
P548 Neuroethology (2 cr.)

Neural Science
N500 Neural Science I (4 cr.)
N501 Neural Science II (3 cr.)
N550 Sem. Sensorimotor Neuroplasticity (3 cr.)

Psychology
P504 Learning and Motivation (3 cr.)
P526 Neurobiology of Learning and Memory (3 cr.)
P527 Developmental Psychobiology (3 cr.)
P667 Neuropsychopharmacology (3 cr.)
P717 Evolutionary Bases of Learning (3 cr.)

Anthropology
B568 Evolution of Primate Social Behavior (3 cr.)
B600 Evolutionary Theory of Anthropology (3 cr.)