

The University

Auburn is a state-assisted, comprehensive, Research I, land-grant institution with a storied past dating from 1856. It enjoys a long tradition of academic excellence and graduate education, awarding its first undergraduate degree in 1860 and its first graduate degree in 1870. One of the largest universities in the South, Auburn has 12 colleges and schools, in addition to the Graduate School, and serves a student body of 20,000 undergraduate and 3,700 graduate students. More than 1,000 graduate faculty members have terminal degrees from about 150 universities. Over 400 buildings occupy a 1,800 acre campus of Southern charm graced with stately trees and abundant flowers. Several buildings recently have been added, and more are being built, reflecting the University's continued rapid growth.

Located in the rolling hills of East Alabama, the main campus of 1,870 acres occupies the entire southwest quadrant of the city of Auburn. The city's population is about 56,000, including resident students, in an area of 23 square miles. The neighboring city of Opelika is a manufacturing center of about 27,000 people. Auburn is 50 miles northeast of Montgomery, 110 miles southeast of Birmingham, and 115 miles southwest of Atlanta. Interstate 85 provides convenient access to Montgomery and Atlanta and Interstate 65 provides access to Birmingham. Auburn's physical location provides students with a small-town atmosphere yet close proximity to big-town events. The area has brief, mild winters and abundant sunshine.



COLLEGE OF SCIENCES
AND MATHEMATICS

GRADUATE PROGRAMS IN THE DEPARTMENT OF BIOLOGICAL SCIENCES



Visit us at:
<http://www.auburn.edu/cosam/departments/biology/index.htm>

AUBURN UNIVERSITY

Department of Biological Sciences Facilities

Main Office: 101 Rouse Life Science Building.

Graduate Program Office: 331 Funchess Hall

Faculty Offices and Laboratories:

Rouse Life Sciences Building;

Funchess Hall

Genomics and Sequencing Laboratory

Advanced Microscopy and Imaging Laboratory

Hybridoma Laboratory

Natural History Learning Center

Alabama Cooperative Fish & Wildlife Unit

Dauphin Island Sea Laboratory

Visit our department webpage for current information about our programs:

<http://www.auburn.edu/cosam/departments/biology/index.htm>

Admission Requirements

Bachelor's degree in biology or related field.

GRE scores (generally > 500 on verbal and quantitative tests)

GPA (generally 3.0 or higher)

For additional information contact the Graduate Program Officer (GPO) at our department webpage:

(http://www.auburn.edu/academic/science_math/biology/index.html)

Outstanding graduate applicants may qualify for limited funds to support a visit to the campus: inquire with the GPO for more information.

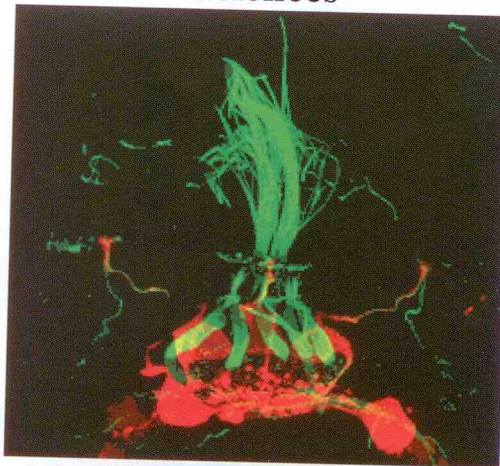
Financial Assistance

Students at Auburn University traditionally have enjoyed relatively low costs of tuition and fees.

Currently, tuition for in-state residents is \$3120 per semester and for out-of-state students is \$9360 per semester. Additionally, the cost of living in the area in and around Auburn is comparable to or lower than other major universities in the region.

Virtually all of the graduate students in the Department of Biological Sciences receive some form of financial aid during their program. Students receiving Graduate Teaching Assistantship awards are supported for four semesters (2 years) at the masters level and ten semesters (5 years) at the doctoral level. Teaching and Research assistants both receive tuition waivers. The University does not have housing for graduate students or families. Off-campus housing includes a wide selection of apartments, private dormitories, condo-miniums and mobile homes. In 2009-2010, the cost of living for a typical single student was \$10,864 per semester, including tuition.

Programs within Biological Sciences



Microbiology, Molecular Biology, Cell Biology

The Department of Biological Sciences features a growing strength in lab-oriented research centered on microbial community genomics, the molecular processes regulating cell functions, pathogenesis, host-parasite interactions, effects of environmental stressors on plant growth, wound repair, and signal transduction in developmental processes.

Students entering this program either select a major professor who sponsors their application or perform a lab rotation before selecting a lab for their thesis or dissertation research.



Conservation and Biodiversity

The Department of Biological Sciences maintains a strong tradition of field-oriented research on the world's rich biota and the conservation efforts required to preserve this diversity. The program features conservation studies ranging from single species to landscape levels, and biodiversity studies ranging from the molecular level to the community level. Students entering this program typically select a major professor who sponsors their application.



Ecology, Evolution, and Behavior

The Department of Biological Sciences contains faculty with research interests in

ecological and evolutionary processes. Expertise in these areas includes emphases on the physiological, behavioral, and life history characteristics allowing populations and communities to adapt to their environment, and the systematic relationships of living organisms (microbial, plant, and animal populations) that summarize organismal history. Students entering this program typically select a major professor who sponsors their application.



Marine Biology

The Department of Biological Sciences contains a growing core of faculty with expertise in marine systems. This group spans research interests from molecular to community ecology and includes international research efforts throughout the world's oceans. Current research projects examine microbial community ecology of lobate ctenophores, ecology and evolution of sea anemones and stony corals, induction of carbonic anhydrase in euryhaline crustaceans, functional morphology of salps, behavioral ecology and conservation biology of reef corals, and phylogenetic diversification of marine invertebrates. Students entering this program typically select a major professor who sponsors their application.

Auburn University is an Equal Opportunity Educational Institution/Employer (www.auburn.edu)

Faculty Research Interests

- Jonathan Armbruster** – Assoc. Prof.; Ichthyology, systematics, functional anatomy.
- James Barbaree** – Prof.; Bacterial pathogens, microbiology of epidemics, microchip detection of pathogens.
- Troy L. Best** – Prof.; Mammalogy, ecology of endangered species, biogeography of North American deserts.
- Robert Boyd** – Prof.; Plant conservation biology, plant-animal interactions, ecology of heavy metal hyperaccumulation
- James T. Bradley** – Prof.; Cell biology, insect oogenesis and embryogenesis, and bioethics
- Nanette E. Chadwick** – Assoc. Prof.; Marine community ecology, behavior and physiology of coral reef invertebrates and fishes.
- Paul Cobine** – Assist. Prof.; Mitochondrial physiology and metal homeostasis
- F. Stephen Dobson** – Prof.; Mammalogy, behavioral, evolutionary, and population ecology.
- Roland Dute** – Prof.; Plant cell ultrastructure; wood anatomy, ultrastructure of dicotyledons.
- Jack W. Feminella** – Prof.; Stream ecology, effects of disturbance on benthic communities.
- Kevin Fielman** – Assist. Prof.; Physiological genomics of environmental stress and adaptation.
- Debbie R. Folkerts** – Assist. Prof.; Insect-pitcher plant interactions, arachnology.
- Leslie Goertzen** – Assist. Prof.; Plant phylogeny, speciation genetics, evolution of *Vitis*.
- Craig Guyer** – Prof.; Herpetology; tropical ecology, biogeography.
- Ken Halanych** – Prof.; Evolution and systematics of marine invertebrates.
- Raymond P. Henry** – Prof.; Comparative physiology, function of carbonic anhydrase
- Geoffrey E. Hill** – Prof.; Ornithology; sexual selection, animal communication, avian conservation.
- Wendy Hood** – Assist. Research Prof.; Nutritional & physiological ecology, bone & mineral metabolism, mammalian reproductive energetics.
- Stephen C. Kempf** – Assoc. Prof.; Invertebrate larval neurodevelopment, zooxanthella symbiosis.
- Mark R. Liles** – Assist. Prof.; Environmental microbiology; microbial community genomics; antimicrobial discovery.
- Robert S. Lishak** – Assoc. Prof.; Acoustic communication of animals.
- Bob Locy** – Prof.; Plant biochemistry; environmental signal transduction.
- Mary T. Mendonça** – Prof.; Physiological ecology of reproduction.
- Michael E. Miller** – Adjunct Assist. Prof.; Director of AU Research Instrumentation Facility, Microscopy, Genetics
- Anthony G. Moss** – Assoc. Prof.; Cell biology and microbiology of jellyfish, salp and ctenophore biology.
- Aaron Rashotte** – Assist. Prof.; Plant development, genetics, and molecular biology.
- Sharon Roberts** – Assoc. Prof.; Host-pathogen interactions.
- Scott R. Santos** – Assist. Prof.; Microbial evolution, molecular ecology, biology of symbioses.
- Laura Silo-Suh** – Assist. Prof.; Molecular mechanisms of host-microbe interactions.
- Narendra Singh** – Prof.; Molecular biology of stress tolerance in plants.
- Sang-Jin Suh** – Assoc. Prof.; Bacterial stress response and pathogenesis.
- Christine A. Sundermann** – Prof.; Development and biology of parasitic protists.
- Lawrence C. Wit** – Prof.; Physiological ecology, energetics of foraging
- Marie W. Wooten** – Prof.; Cellular and molecular developmental neurobiology.
- Michael C. Wooten** – Prof.; Molecular ecology; biological statistics, conservation genetics.
- Joanna Wysocka-Diller** – Assoc. Prof.; Molecular genetics of plant growth and development.