

SOUTHEASTERN

LOUISIANA UNIVERSITY

Department of Biological Sciences

College of Science and Technology

### **PROGRAMS**

Majors in the Biological Sciences can concentrate their studies on organismal and integrative biology, microbiology/molecular biology, and ecology/environmental/ evolutionary biology. Through pre-professional programs, biology majors can also pursue careers in medicine, dentistry, physical therapy, optometry or pharmacy. Degrees in science education and horticulture are available. The department also offers a Master of Science degree that has both a thesis and non-thesis

FACULTY

and international science journals, recipients of nation-

al research awards, recipients of teaching awards, and

a recipient of a career research grant from the National

Science Foundation. Faculty have averaged more than

average of more than \$3 million in research grants and

45 publications annually in national and international

science journals and have been awarded an annual

contracts from a variety of federal and state funding

agencies, including the National Science Foundation

Students have the opportunity to work with faculty

on research projects that include avian ecology, cell

and the Environmental Protection Agency.

The department is housed in two buildings, including a new \$12 million addition with state-of-art teaching and research laboratories, an animal care facility that meets National Institutes of Health codes for housing animals, and a 2,100-square-foot roof-top greenhouse.

biology, endocrinology, herpetology, ichthyology, micro-The Department of Biological Sciences has been cited biology, microbial ecology, molecular evolution, molecuby an external review team as among the top such lar genetics, molecular immunology, neurophysiology, departments in Louisiana. Among its nationally recogparasitology, phylogenetics, physiological ecology, and nized faculty are National Institutes of Health Research wetland ecology. Fellows, a Fulbright Research Fellow, editors of national

#### FACILITIES AND RESOURCES

Students in the biological sciences have access to:

- more than \$4 million in teaching and research
- comprehensive Electron Microscopy Center molecular biology laboratories
- mesocosm wetlands facility
- fully automated classrooms
- funding to support undergraduate research
- teaching/research greenhouse
- · million-dollar endowed chair devoted to environmental studies

The Turtle Cove Environmental Research Station, located on Pass Manchac, (www.selu.edu/Turtle Cove) offers facilities for wetlands research and classes related to the environment. Turtle Cove has received nearly \$3 million in federal funds to enhance the university's environmental research programs.

### CAREERS

The study of biological sciences opens career doors from A to Z. Here are just a few examples: anatomist, bacteriologist, biology teacher or professor, botanist, cell biologist, dental hygienist, dentist, ecologist, electron microscopist, environmental health specialist, fish and game manager, food technologist, geneticist, herpetologist, horticulturist, immunologist, laboratory technician, marine biologist, medical doctor, microbiologist, ornithologist, parasitologist, pharmacologist, physical therapist, plant or animal breeder, plant pathologist, veterinarian, wetland ecologist, zoologist.

## STUDENTS

Students can participate in organizations such as Delta Omega Alpha Pre-Professional Society; Beta Beta Beta, a national biological sciences honor society for undergraduates; and the Graduate Student Organization.



CREST Scholar Aine Johnson and biologist Gary Childers collect samples in the Maurepas Swamp.



# GRADUATE FACULTY RESEARCH INTERESTS

Dr. Janice Bossart Insect Evolutionary Ecology Dr. Gary Childers Environmental Microbiology Dr. Brian Crother Phylogenetic Systematics and Herpetology

Dr. William Font Ecological Parasitology Dr. Cliff Fontenot Herpetology

Dr. Gary Howard Environmental Microbiology Plant Evolutionary Biology Dr. Rick Miller

Dr. Nick Norton Cell Biology Dr. John O'Reilly Neurophysiology Ichthyology Dr. Kyle Piller

Dr. David Sever Herpetology and Reproductive Anatomy

Dr. Gary Shaffer Wetlands Science and Statistical Ecology

Dr. Penny Shockett Molecular and Developmental Immunology

Dr. Volker Stiller Plant Ecophysiology Dr. Roldan Valverde Vertebrate Physiology

Dr. Erin Watson Forensic Entomology Dr. Mary White

Molecular Systematics and **Evolution of Development** 



Graduate students Lauren Smith & Diana Solis (Costa Rica) perform steroid and protein assays on freshwater sea turtle plasma in a Southeastern biology lab. Their work focuses on gaining greater understanding of the reproductive endocrinology of turtles.

### BIOLOGY GRADUATE STUDENTS

As an international graduate student, Diana Solis feels very grateful to be studying in the United States:

"It's a completely different kind of education compared to that in my country," she says. "Southeastern's campus is beautiful and the Biology Department is well equipped to conduct cutting-edge research. At Southeastern, the professors treat graduate students as colleagues, while encouraging us to find our niche as scientists. The graduate classes are small, so you get a personalized education full of discussions and one-on-one interactions with professors and other graduate students."



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