The main campus at Auburn University has more than 25,000 students enrolled in 13 schools and colleges, making it one of the larger universities in the South. The city of Auburn, Ala., is a friendly university town located on the beautiful plains of eastern Alabama, 50 miles northeast of Montgomery, Alabama’s capital, and 115 miles southwest of Atlanta, Ga. The Gulf coasts of Alabama and Florida are about four hours away by car. Auburn enjoys a warm, sunny climate with mild winters. It has excellent health and recreational facilities.
The objective of the graduate program in the Department of Drug Discovery and Development (DDD) is to prepare students as independent scientists with a strong basic science background and the ability to translate basic scientific discoveries into therapeutics. Students ideally suited for graduate study in this department have an undergraduate degree in chemistry, biology, biochemistry, chemical engineering, microbiology, physiology, pharmacy or any discipline in the biological sciences.

The department offers MS and PhD degrees in Pharmaceutical Sciences with specialization in Medicinal Chemistry, Pharmacology or Pharmaceutics.

The department is fully equipped with state-of-the-art infrastructure including cell-culture and molecular biology facilities, cell and whole animal imaging, NMR, GC/MS, UHPLC-MS/MS triple quadruple and HPLC-MS/MS, atomic absorption, high-resolution microscopes, and electrophysiology from single receptors to whole animal recordings.

WHY DRUG DISCOVERY AND DEVELOPMENT?

DDD graduate students are prepared to enter careers in various settings, including academia, pharmaceutical industry, and government agencies.

TO APPLY


FINANCIAL SUPPORT AND RESOURCES

Teaching and/or research assistantships are awarded to qualified graduate students on a competitive basis. Graduate students who receive an assistantship also qualify for tuition fellowships. Student support for travel to attend and present their research at national scientific meetings and symposiums is available.

RESEARCH OPPORTUNITIES

DDD research is focused in three main areas: Medicinal Chemistry, Pharmacology, and Pharmaceutics. Research activities carried out by the departmental faculty represent the breadth and depth of scholarship in drug discovery and delivery. Topics include:

- Cardiovascular Disease
- Neurosciences/Alzheimer’s and Parkinson’s Disease
- Diabetes
- Infectious Diseases
- Cancer
- Drug Metabolism, Pharmacokinetics, and Pharmacodynamics
- Nano-Drug Delivery and Nanomedicine
- Forensic Chemistry
- Drug Design and Synthesis
- Natural Products
- Cardiovascular Disease
- Neurosciences/Alzheimer’s and Parkinson’s Disease
- Diabetes
- Infectious Diseases
- Cancer
- Drug Metabolism, Pharmacokinetics, and Pharmacodynamics
- Nano-Drug Delivery and Nanomedicine
- Forensic Chemistry
- Drug Design and Synthesis
- Natural Products

OUR GRADUATES

DDD graduate students are prepared to enter careers in various settings, including academia, pharmaceutical industry, and government agencies.

FACULTY

Pharmacology:
- Raj Amin, Assistant Professor
- Murali Dhanasekaran, Associate Professor
- Nancy Merner, Research Assistant Professor
- Peter Parini, Assistant Professor
- Jawahar Vora, Associate Professor
- David Riese, Professor
- Visheer Suppiramaniam, Associate Professor

Pharmaceutics:
- Robert Arnold, Associate Professor
- Daniel Parsons, Professor
- Jay Ramapuram, Associate Professor
- William Ravis, Professor

Medicinal Chemistry:
- Angela Calderon, Associate Professor
- Randall Clark, Professor
- Jack DeRuiter, Professor
- Forrest Smith, Associate Professor
- Jennifer Johnston, Administrative Associate