GRADUATE PROGRAM
DEPARTMENT OF PHARMACOLOGY

Please send more information about the graduate program in Pharmacology

Name:_____

Address:_____

_____

City, State:_____

Zip code:_____

Phone:_____

I am interested in the following area(s) of study:

_____

_____

_____

Undergraduate degree from which university?

_____

_____

Date:_____

UPR-RCM PHARMACOLOGY & TOXICOLOGY

GRADUATE STUDIES

For further information about the research programs, call the Department of Pharmacology at

(787) 766-4441

or the Graduate Coordinator

(787)758-2525 ext. 1300

Email: ProgramPharmTox.RCM@upr.edu

Or visit our webpage at

http://md.rcm.upr.edu/pharmacology

UPR School of Medicine

Medical Sciences Campus PO

Box 365067

San Juan PR 00936-5067

UPR-RCM PHARMACOLOGY & TOXICOLOGY

UPR
SCHOOL OF MEDICINE

PHARMACOLOGY TOXICOLOGY

PHARMACOLOGY & TOXICOLOGY

PHARMACOLOGISTS are scientists with the knowledge to investigate disease mechanisms and to discover and develop drugs that may be useful in treating disease. The Department of Pharmacology and Toxicology fosters multidisciplinary training leading to the Master of Science (MS) and Doctor of Philosophy (PhD) degrees.

Students develop a broad foundation in cell biology, molecular biology, physiology, statistics, basic principles of pharmacology, cell signaling and the cellular and systemic actions of drugs, as well as statistics and research ethics. They develop skills in analysis and criticism of the scientific literature, oral presentation, write a scientific research proposal and publish in the scientific literature.

PhD students will defend their dissertations in the fifth year. Students in the MS program develop mastery of the techniques of pharmacology research, including the completion of a short research project, and defend their theses in their third year. MS and PhD students complete the same core courses.

Both MS and PhD graduates will be prepared to work in teaching, research, private industry, non-profits and public service. Our mission is to train graduate students to become highly regarded scientists and scholars in the area of Pharmacology.

GRADUATE PROGRAM DESCRIPTION

Ph.D. students must pass 45 course credits and pass a comprehensive qualifying examination and complete dissertation research. Duration: Five (5) years. M.S. students: 24 course credits and thesis research. Duration: Three (3) years. Required courses for both degrees include Biochemistry, Physiology, Pharmacology, Biostatistics, and Seminar.

Faculty Areas of Expertise

Molecular genetics, epidemiological and clinical Characteristics of Head and Neck Cancer

3-D Printing as an Educational Biomedical Tool

Neuropharmacology of opioids

Pharmacogenomics *

Neuroactive properties of natural products **

Chemical Carcinogenesis, Biomarkers, Toxicology and Risk Assessment

Mitochondrial DNA repair and mitochondrial bioenergetics in aging and Huntington's Disease**

Mechanisms of insulin resistance and cognitive impairment in HIV**

Neuroprotection and Blood-Brain Barrier manipulation**

Cardiac electrophysiology, Calcium handling and Arrhythmias

** Accepting students for academic year 2022-2023
* External collaboration

Admissions Requirements:

1. Applicants must fulfill all admission requirements of the Graduate Division of the Medical Sciences Campus.
2. Applicants should have completed a B.S. or B.A. degree with and undergraduate major in Biology, Chemistry of Pharmacy. Applicants with other majors may also be considered.
3. Applicants must have a general grade point average of not less than 3.00 on a 4.00 scale.
4. Required undergraduate courses include calculus, general chemistry, organic chemistry, general physics and general biology.
5. The deadline to apply for admission is December 1

Cost of Study

Several forms of economic assistance are available, such as university fellowships for research or teaching, and a variety of fellowships from federal and private research agencies.