GRADUATE PROGRAM
DEPARTMENT OF PHARMACOLOGY
Please send more information about the graduate program in Pharmacology

Name:_______________________________
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Zip code:________________________________________
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I am interested in the following area(s) of study:
________________________________________
________________________________________
________________________________________
Undergraduate degree from which university?
________________________________________
________________________________________
________________________________________
Date:________________________________________

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. 1357
Email: ProgramPharmTx.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
Tel. & Fax (787) 766-4441
(787) 758-2525 ext. 1300/1301
PHARMACOLOGY & TOXICOLOGY

Pharmacology is the science that studies drug actions on living systems. Toxicology is the science that studies the harmful effects of xenobiotics and their detection in biological systems. The discipline of Pharmacology/Toxicology involves studies to decipher the effects of chemical agents upon cellular and molecular mechanisms including drugs directed for prevention and treatment of major diseases and those associated with environmental toxins that critically influence biological processes. Pharmacologists also study drug design and the use of drugs to decipher molecular features of cell function.

The Department of Pharmacology and Toxicology fosters multidisciplinary training leading to the Master of Science and Doctor of Philosophy degrees. The department committed in the training of graduate students to become highly regarded scientists and scholars in the area of pharmacology.

In addition to the facilities in each research laboratory, the general facilities of the Medical Sciences Campus are available. These include: The Animal Laboratory Resources Center, Library, Computer Center, and specialized research facilities, such as the Flow Cytometry Laboratory, the Electron Microscopy Unit, the Molecular Biology Facility, the DNA Sequencer Unit, and the proteomics core.

GRADUATE PROGRAM DESCRIPTION

Candidates for the M.S. degree must successfully complete a minimum of 24 course credits and 6 credits of thesis. The required courses include Biochemistry, Physiology, Pharmacology, Biostatistics, and Seminar. The M.S. Degree can be obtained within three years. Ph.D. students are required to complete 45 course credits and 15 credits of thesis. Ph.D. students are also required to pass a comprehensive qualifying examination. The Ph.D. degree usually requires at least five years.

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 an undergraduate major in Biology, Chemistry, or 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.

Cost of Study

At present, the approximately cost of graduate credits is between $175 and $200. 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.

Faculty & Areas of Research

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
<th>Research Areas</th>
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<tbody>
<tr>
<td>Adriana Báez, Ph.D.</td>
<td><a href="mailto:adriana.baez@upr.edu">adriana.baez@upr.edu</a></td>
<td>Molecular genetics, epidemiological and clinical Characteristics of Head and Neck Cancer</td>
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<tr>
<td>Emma Fernández-Repollet, Ph.D.</td>
<td><a href="mailto:e.fernandez@upr.edu">e.fernandez@upr.edu</a></td>
<td>3-D Printing as an Educational Biomedical Tool Biomedical Workforce Development. Health Disparities Research in Hispanics</td>
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<tr>
<td>Susan Corey, Ph.D.</td>
<td><a href="mailto:susan.corey@upr.edu">susan.corey@upr.edu</a></td>
<td>Opioid use in Puerto Rico</td>
</tr>
<tr>
<td>José G. Ortiz, Ph.D. (**)</td>
<td><a href="mailto:jose.ortiz@upr.edu">jose.ortiz@upr.edu</a></td>
<td>Neuroactive properties of natural products</td>
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<tr>
<td>Diógenes Herreño Saenz, Ph.D.</td>
<td><a href="mailto:diogenes.herreno@upr.edu">diogenes.herreno@upr.edu</a></td>
<td>Chemical Carcinogenesis, Biomarkers, Toxicology and Risk Assessment</td>
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<tr>
<td>Sylvette Ayala-Peña, Ph.D. (**)</td>
<td><a href="mailto:sylvette.ayala@upr.edu">sylvette.ayala@upr.edu</a></td>
<td>Mitochondrial DNA repair and mitochondrial bioenergetics in aging and Huntington's Disease</td>
</tr>
<tr>
<td>Yamil Gerena, Ph.D.</td>
<td><a href="mailto:yamil.gerena@upr.edu">yamil.gerena@upr.edu</a></td>
<td>Mechanisms of insulin resistance and cognitive impairment in HIV</td>
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<tr>
<td>Antonio H. Baccin Martins, Ph.D. (**)</td>
<td><a href="mailto:antonio.martins@upr.edu">antonio.martins@upr.edu</a></td>
<td>Neuroprotection against stroke and Organophosphate Poisoning</td>
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** Accepting students for academic year 2019-2020