Faculty & Areas of Research

Nivia L. Pérez-Acevedo, Professor
nivia.perez@upr.edu
MSC x1512 / Office /Lab A-556
Behavioral neuroendocrinology: Sex differences in anxiety and emotional memory.

Demetrio Sierra, Assistant Professor
demetrio.sierra@upr.edu
MSC x1572 / Office A-501A, Lab A-515
The effects of traumatic brain injury on the formation and expression of memories.

María A. Sosa, Professor
maria.sosa@upr.edu
INB x276 / Office 320-321 • MSC x1514 / Office A-561, Lab A-570
Neural basis of aggressive behavior and establishment of dominance hierarchies in a crustacean model system. Use of crustacean model systems to assess impact of environmental changes on behavior and neural function.

Adjunct Professors

Jaime Inserni, Adjunct Professor (Neurosurgery—UPR-MSC)
Miguel Mayol, Resident Researcher
jaime.inserni@upr.edu; miguel.mayol@upr.edu
Development of cadaver neurosurgery laboratory for research and educational purposes.

Bruno Marie, Adjunct Professor (Institute of Neurobiology)
brunomariemail@gmail.com
Molecular mechanisms of neuronal synaptic growth and plasticity in Drosophila melanogaster.

Gregory J. Quirk, Adjunct Professor (Psychiatry—UPR-MSC)
gregoryjquirk@gmail.com
Interactions at the prefrontal amygdale associated with fear conditioning.

Cristina M. Velázquez, Adjunct Professor (Inst. of Neurobiology)
cristina.velazquez1@upr.edu
CNS plasticity in response to substance abuse and use of opioids.

Andrew M. Seeds, Adjunct Professor (Inst. of Neurobiology)
andrew.seeds@upr.edu
Mechanisms underlying how the nervous system produces movement sequences.

Amaya Miguelajauregui, Adjunct Professor (Inst. of Neurobiology)
amaya.miq@upr.edu
Mechanisms underlying brain development and autism.

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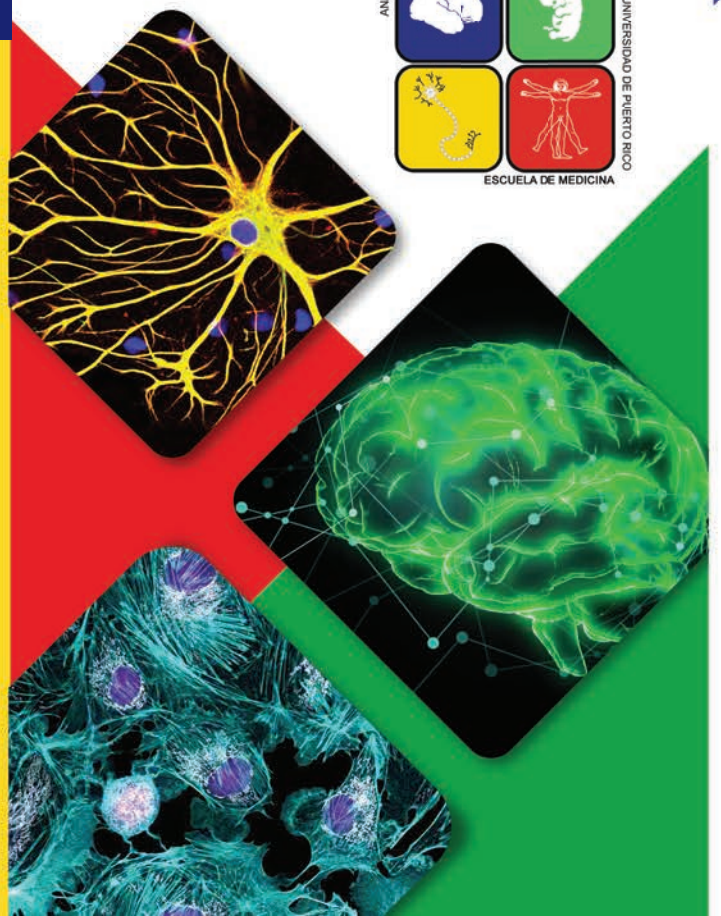
http://www.md.rcm.upr.edu/anatomy



UPR
School of Medicine

DEPARTMENT OF **ANATOMY AND NEUROBIOLOGY**

Purpose of the Graduate Program in Anatomy

The graduate program in Anatomy was created to train students for careers in research and teaching in Anatomy and Neurobiology disciplines. It comprises Master of Sciences (MS) and Doctor of Philosophy (PhD) Degree programs. Through these, students become prepared for a variety of careers in academia, basic science/clinical research, the biomedical/ biotechnology industry, science education and community outreach, government agencies, and various other health-related fields.

Selection and Admission of Graduate Students

Prospective graduate students may obtain an application for admission from the Division of Biomedical Sciences **(www.md.rcm.upr.edu/biomed/).**

Admission requirements are:

1. A Bachelor's degree or its equivalent (as determined by the Registrar's Office) with a grade point average (GPA) of at least 3.0 overall and 3.0 in the sciences and mathematics. (Minimum required courses include General and Organic Chemistry, General Physics, Mathematics through Calculus, and 12 credits of Biology).
2. A working knowledge of Spanish and English.
3. Submission of the Graduate Record Examination (GRE) scores. The subject test in Science although not required is highly recommended.
4. An essay of approximately 1 single-spaced page setting forth the applicant's reasons for being interested in obtaining a graduate degree and following a career in Anatomy/Neurobiology.
5. Copies of official transcripts and three letters of recommendation.
6. An interview with the Department's faculty.
7. Research experience is highly recommended.
8. Filled out application form.

APPLICATION DEADLINE FOR ADMISSION IN AUGUST IS:
DECEMBER 1ST

The anatomy of our graduate program...

Year 1:

Gross Anatomy, Embryology, Histology, Neuroscience, Research Laboratory Rotations, Journal Club.

Year 2:

Physiology, Biochemistry, Practice in Teaching, Biostatistics, Journal Club, Electives (Neurophysiology, Practice in Dissection, Electron Microscopy, etc.) Special Problems in Research.

Years 3 to 5:

Practice in Teaching, Journal Club, Electives (Special Topics, Special Problems in Research, etc.), Presentation of Proposal, Qualifying Exams (or Masters Thesis), Masters/Doctoral Research, Presentation and Defense of Masters/Doctoral Thesis.

MS (33 credits) / PhD (64 credits)
~3 year ~5-6 years

www.md.rcm.upr.edu/anatomyneurobiology/

Faculty & Areas of Research

Jennifer L. Barreto, Professor
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MSC x2300 / Office A-563B, Lab A-555
CNS molecular/cellular changes linked to reproductive health after exposure to androgens during puberty.

Martine L. Behra, Associate Professor
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MSC x2120 / Office / Lab A-518
Hair cell development and regeneration in the lateral line of zebrafish.

Rosa E. Blanco, Professor
rosa.blanco@upr.edu
INB 787-724-1962/Office 220, Labs 208-210, 213, 216, 112A
MSC x2269 /Office A-566
Visual system nerve regeneration and neuronal plasticity.

Jacqueline Flores-Otero, Assistant Professor
jacqueline.flores@upr.edu
INB x262 / Office/Lab 315 • MSC x1578 / A-501B
Role of adhesion-GPCRs and the endocannabinoid system in retinoblastoma and prostate cancer development and progression.

Juan C. Jorge, Professor
juan.jorge@upr.edu
MSC x1506 / Office /Lab A-521
Behavioral neuroendocrinology: Sexual differentiation of behavior, urogenital malformations and sexual differences in abdominal anatomy.

Robert W. Kensler, Professor
robert.kensler@upr.edu
MSC x1507 / Office /Lab A-502
Macromolecular structure of muscle thick filaments and associated accessory proteins.

Roberto I. Meléndez, Associate Professor
roberto.melendez2@upr.edu
MSC x2107 / Office A-529, Lab A-527
Neural regulation of ethanol intake and ethanol relapse propensity during periods of inhibition in adolescents and adults.

Mark Miller, Professor
mark.miller@upr.edu
INB x222, Office 214, Lab 112J • MSC x2269 / Office A-566
Rhythmic activities in the nervous system of invertebrates. Neuroanatomy of Biomphalaria alexandrina and its potential role in impeding propagation of schistosomiasis.