# Neurogenetics & Bioimaging at the Institute of Neurobiology

The Institute is a multidisciplinary interdepartmental facility dedicated to the study of nervous system structure and function. The Institute is presently composed of eleven laboratories that utilize a variety of model systems to address some of the most challenging issues facing modern

Neuroscience – ranging from synapse development and specification in Drosophila to the molecular basis of addiction.

The Institute of Neurobiology houses a NeuroImaging Core (confocal, live imaging, electron microscopy), a shared Molecular Neurobiology Core, a Neurogenetics Core and a Cell Culture Room.

The Molecular Neurogenetics Research Unit is maintained on a day-to-day basis by Mr. Luis Quiñones who provides support to all users.

# **Contact Us**

Translational Neurogenetics Program http://www.neuro.upr.edu/

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#### Institute of Neurobiology

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Translational Neurogenetics Program (TNP)

Center for Collaborative Research in Health Disparities at the Institute of Neurobiology

## **Facility Description**

The TNP core facility at the MSC's Institute of Neurobiology intends to provide support to investigators and students related to cell culture facilities, imaging and image analysis instrumentation, training, and technical support.



The TNP will transition to become the Neurogenetics and Bioimaging Service (NBS) and will act as a shared resource to assist investigations conducting studies addressing genetic mechanisms in neurological systems.

## The Nikon Center of Excellence Confocal Imaging Facility

Our facilities houses a state-ofthe-art Nikon A1R laser scanning confocal microscope with Galvano and resonant scanner speeds, four lasers, four standard fluorescence detectors, transmitted light detector (TD) and spectral detector.

Training in using the microscope and aid in image acquisition and analysis is provided by a specialist in scientific instrumentation. The center operates from Monday to Friday 8:30am- 5:00pm by appointment.



### Instrumentation

#### Neurogenetics Facility is

designed to work with insects, mostly Drosophila and consists of four working stations including:

- Inverted microscopes
- CO<sup>2</sup> beds to apply anesthesia
- Drosophila incubators
- All paraphernalia to prepare Drosophila food

#### **Bioimaging Facility**

- A Nikon A1R Laser Scanning Confocal microscope (LSCM)
- A Zeiss Pascal Laser
- Scanning Confocal
- Microscope

#### **Culture Room**

- Biological hood
- Incubator
- Inverted microscope
- Basic material supply