

PhD Position in Experimental and Computational Neuroscience

Federated Department of Biological Sciences
Rutgers University / New Jersey Institute of Technology (NJIT)

Applications are to work in joint projects of the research groups led by Profs. Horacio G. Rotstein and Jorge Golowasch to work on project that address the problem of the relationship between intrinsic/network neuronal variability and stability of neuronal activity: How can neuronal activity be stable if the ionic currents that generate this activity are highly variable? (See publication examples below).

1. Golowasch, J. *Mechanisms underlying nervous system plasticity and stability*. BioScience, 64(7): 570-580, 2014;
2. Rotstein, H.G., Olarinre, M. and Golowasch, J. (2016) Dynamic compensation mechanism gives rise to period and duty-cycle level sets in oscillatory neuronal models. *J. Neurophysiol.*, 116: 2431-2452)

The successful applicant will be eligible for NSF-funded support. Student applicants should have a strong background in neuroscience, biology or applied mathematics/physics and a genuine interest in conducting interdisciplinary research. Training will be provided in the other areas. In addition, students must be able to show English proficiency both written and verbal as required by US universities.

The ideal candidate would be highly motivated, technically skilled, a team player and show signs of independent and critical thinking. The PhD program will contribute to the further development of these skills. PhD students have also the opportunity to teach and write grant proposals. Overall, the PhD program is designed to prepare the participating students for a large variety of jobs both academic and in industry.

Research in Neuroscience at the Rutgers/NJIT campus is thriving, with a well-funded faculty interacting and collaborating on many projects across disciplines. Students have the possibility of attending a wide variety of seminars and colloquia across campus (biology, neuroscience, mathematical biology). The campus is less than 30 min from Manhattan and the many academic and cultural activities the city has to offer.

Interested candidates please contact Dr. Jorge Golowasch (golowasch@njit.edu) or Dr. Horacio G. Rotstein (horacio@njit.edu) for informal enquiries. Please e-mail (i) CV, (ii) brief statement of scientific research, and (iii) three reference letters.

Formal applications will be accepted until December 15th, 2017 for enrollment in the next academic year through NJIT's Admissions Office. Full list of

requirements can be found in <http://biology.njit.edu/academics/graduate/phd-program.php>.