Award Announcement

Jonathan Dostrovsky Award in Neuroscience

Effective 2019 there are two Jonathan Dostrovsky Awards in Neuroscience for outstanding achievement in graduate neuroscience research towards a Ph.D. degree.

- 1 Junior Award: Outstanding achievement in initial graduate neuroscience research (<2 years in Ph.D. program)
- 1 Senior Award: Outstanding achievement in graduate neuroscience research towards a Ph.D. degree (< 4 years in Ph.D. program)

Awards Overview:

Student Application Deadline: May 8, 2022 for the 2022 award
Where to apply: Office of the Collaborative Program in Neuroscience
Value of the annual awards: Each award will be \$1000 (for the 2022 award)

Duration of award: 1 year **Level of study:** Graduate Studies

Purpose:

Established by the generosity of Dr. Jonathan Dostrovsky, these annual awards recognize and support excellence amongst graduate students enrolled in the Collaborative Program in Neuroscience and will be selected based on academic merit.

Dr. Jonathan Dostrovsky:

Dr. Dostrovsky completed his undergraduate studies in physics and mathematics at the Israel Institute of Technology in 1969 and then proceeded to graduate studies in the Department of Physiology at University College London where he obtained his M.Sc. degree in 1971 under the supervision of John O'Keefe. His master's research project with O'Keefe led to the important discovery of 'place cells' in the hippocampus, and their seminal paper describing their findings has become a cornerstone in the field of spatial navigation and hippocampal function. Dr. Dostrovsky moved to Toronto where he obtained his PhD degree in the Zoology Dept. in 1974 for studies on pain processing in the spinal cord. Following 3-years of postdoctoral research in London on the somatosensory system with special emphasis on plasticity, with Pat Wall, he returned to the University of Toronto to take up a position in the Department of Physiology. He was promoted full professor in 1989 and is currently a Professor Emeritus in the Department of Physiology and Faculty of Dentistry.

Throughout his career Dr. Dostrovsky has made significant advances in our understanding of the neurophysiological basis of pain perception, somatosensory information processing, brain plasticity and basal-ganglia related movement disorders. A hallmark of these studies is the elegant combination of experiments executed in various animal models and in humans. For example, data from the Dostrovsky lab shed light on how thermal and noxious information is processed at the level of the thalamus in humans and in a rat model of allodynia. In a publication in Nature, Dr. Dostrovsky demonstrated how thalamic networks could contribute to phantom sensations in amputees. He also studied this question in animal models, where the plasticity of the sensory map in thalamic networks was demonstrated in rats after the removal of the hind-limb input. In a series of elegant studies he has unveiled the relationship between movement disorders and altered basal ganglia oscillatory activity. These studies have significantly contributed to our current understanding of central physiological mechanisms in the somatosensory and motor networks which underlie our

perception of tactile, thermal and painful stimuli and the pathophysiological alterations that occur following certain traumatic or disease-induced injuries to the nervous system.

Dr. Dostrovsky was also very actively involved in neuroscience education at the University at the undergraduate, graduate and postdoctoral levels, and has served on many committees at all levels. In particular he served as Director of CPIN from 1993 to 2008, and as the President /Vice President of the Canadian Association for Neuroscience from 2003 to 2007.

Eligibility:

Junior Award: Outstanding achievement in initial graduate neuroscience research

Eligibility: student must be in her/his Ph.D. studies less than 2 years, and registered in CPIN at time of application, and in good standing toward CPIN requirement completion.

Senior Award: Outstanding achievement in graduate neuroscience research towards a Ph.D. degree **Eligibility:** student must be in her/his Ph.D. studies less than 4 years, and registered in CPIN at time of application, and in good standing toward CPIN requirement completion.

Selection Criteria:

The recipients of the awards will be selected by a committee appointed by the Collaborative Program in Neuroscience for this purpose. The committee will make their decision based on, but not limited to, the following criteria: intellect, originality and judgement, research skills, independent research potential, motivation, and progress in research towards their graduate degrees.

Application Process:

All applicants must complete the official application form at the CPIN website (http://www.neuroscience.utoronto.ca/award_opportunities/jonathan_dostrovsky_award.htm)

Completed applications will include the following:

- CV including Education; Awards received; Publications, including presentations (oral, poster), publications Papers (refereed), (non-refereed.), Books, Abstracts, honors and scholarships/grants. In publications listed include brief mention of student's contribution to the work and paper published; and Extracurricular activities/Leadership activities and positions held,
- 3 letters of support (minimum 2), including one from the student's supervisor, to be sent in PDF format to the CPIN Office (p.neuroscience@utoronto.ca) directly from the issuing professor's official email address
- Summary of student's current research project (1 page maximum)
- Future career plans (1/2 page maximum)

Results:

All applicants will be notified of the results of the competition at the 2022 CPIN Research Day on Friday, May 27, 2022.

Contact Info:

For more information, please contact the CPIN Office; Tel. (416) 978-8637; E-mail: p.neuroscience@utoronto.ca