

NEUROSCIENCE NEWSLETTER

PROGRAM NEWS

NEW PIN STUDENTS:

We would like to welcome the following students to the Neuroscience Program:

Student's Name	Degree	Supervisor	Department
Joshua Bell	PhD	Andrew Baker	IMS
Claire Salloum	MSc	Harrison/Gordon	IMS
Taylor Schmitz	MA	Anderson/De Rosa	Psychology
Nevena Simic	PhD	Joanne Rovet	Psychology

GRADUATING STUDENTS:

We would like to congratulate the following PIN graduates:

Student's Name	Degree	Supervisor	Department
Ava Elahipanah	MSc	Bruce Christensen	IMS
<u>Thesis title:</u> "Mechanisms of Visual Search Impairment among Patients with Schizophrenia"			
Chris Tsang	PhD	William Trimble	Biochemistry
<u>Thesis title:</u> "SEPTIN GTPases in the Central Nervous System: An investigation into axon specification, formation and function"			

UPCOMING PIN DISTINGUISHED LECTURES

Friday, March 2, 2007 3pm
GYORGY BUZSAKI, Center for Molecular and Behavioral Neuroscience, Rutgers University
 "Oscillatory organization of internally generated cell assembly sequences"
 Pharmacy Building, 144 College St., Rm B250

Volume 23 Number 6

February 2007

Program Committee Members

J.O. Dostrovsky / PHYSIOLOGY (Dir.)	J. Peever / CELL AND SYSTEMS BIOLOGY.
W.M. Burnham / PHARMACOLOGY	S. Nag / LAB. MED. PATHOBIOL.
P. Carlen / INST. MED. SCIENCE	J. Roder / MOL. MED. GENETICS
L.F.De Nil / SPEECH LANG. PATHOL.	B.J. Sessle / DENTISTRY
Z. Jia / PHYSIOLOGY	M. Shoichet / INST. BIOMAT. & BIOMED. ENG.
N. Kabani / MEDICAL BIOPHYSICS	W. Trimble / BIOCHEMISTRY
M. Lewis / HUMAN DEVELOPMENT AND APPLIED PSYCHOLOGY	J.W. Wells / PHARMACY
W. McIlroy / REHAB. SCI.	J.S. Yeomans / PSYCHOLOGY

PIN Office: Room 102, Tanz Neuroscience Building, M5S 3H2.
 Telephone: 416-978-4894 Fax: 416-978-1878
 e-mail: p.neuroscience@utoronto.ca.
<http://www.utoronto.ca/neurosci>
 Office Hours: Wednesdays - 1:15pm-5:00pm;
 Thursdays - 8:45am-5:00pm; Fridays - 8:45am-5:00pm

Wednesday, April 4, 2007 4pm
MICHAEL YOUNG, Harvard Medical School, Boston, MA
 Title: TBA
 Medical Sciences Building, Rm 3153 (note room change)

2007 U of T BRAIN BEE

The Program in Neuroscience is once again hosting a neuroscience competition for High School students and it will take place on Tuesday, February 13, 2006, from 3-6pm in Room 3171 of the Medical Sciences Building. If you wish to volunteer for this event, please contact the PIN office.

PIN FACULTY NEWS

New Faculty

We are pleased to announce that **Dr. Bernard Le Foll** of the Department of Pharmacology has joined the PIN faculty.

Dr. Le Foll is a clinician-scientist specialized in drug addiction. He is Head of the Translational Addiction Research Laboratory at the Centre for Addiction and Mental Health and Associate Professor at University of Toronto in the Departments of Family and Community Medicine, Pharmacology and Psychiatry. His clinical activity is centered on tobacco dependence. He is the coordinator of a clinical trial for treatment of tobacco dependence. His research evaluates novel therapeutic approaches using various preclinical models and uses genetic and brain imaging approaches to explore the neurobiological factors underlying drug addiction.

Dr. Le Foll can be reached at: Centre for Addiction and Mental Health, 33 Russell Street, Toronto, Canada M5S 2S1. Tel: 416-535-8501, ext. 4772; Fax: 416-595-6922; e-mail address: bernard_lefoll@camh.net

NOTICE TO GRADUATING STUDENTS

Please notify the PIN office upon your graduation to ensure that you will receive the notation "completed Collaborative Program in Neuroscience" on your degree transcript as well as a separate certificate suitable for framing from the PIN office to indicate that you have completed the program's requirements. Please let the office know the address you wish your certificate sent to and please also send us your thesis title. If you have transferred from a Master's degree to a Ph.D., please notify the PIN office.

OTHER NEUROSCIENCE NEWS

Canadian Association for Neuroscience/ Association Canadienne des Neurosciences. First Annual Meeting

Wednesday, May 23 to Friday, May 25, 2007
89 Chestnut Conference Centre
University of Toronto
Toronto, Canada

Please join us in Toronto in May 2007 and be part of CAN-ACN's exciting 3 day scientific meeting. This will be an excellent opportunity to meet fellow Canadian and international neuroscientists and trainees, discuss common interests and concerns, develop collaborative projects and find out about the newest neuroscience discoveries.

The meeting will include plenary presentations, symposia and poster presentations. The first day of the meeting will be held jointly with the Institute of Neurosciences, Mental Health and Addiction of the Canadian Institutes of Health Research. The meeting will also comprise the annual meeting of the Southern Ontario Neuroscience Association and will serve as part of the first North American International Brain Research Organization (IBRO) Neuroscience School.

Poster submissions

Poster submissions can now be made online through our web-site (www.can-acn.org). Abstract submission deadline is **March 15, 2007**.

Keynote Speaker:

Dr. Cliff Saper
James Jackson Putnam Professor of Neurology
Harvard Medical School

Plenary Lectures:

Dr. Michael Tymianski, University of Toronto; Dr. Michael Meaney, McGill University; Dr. Keir Pearson, University of Alberta; Dr. Avi Chaudhuri, McGill University; Dr. Brenda Milner, McGill University; Dr. Jean-Claude Lacaille, Université de Montréal.

16 Symposia highlighting Canadian Neuroscience discoveries from molecules to bedside – see website for full details.

Deadlines

Abstract submission: March 15, 2007. Early Bird registration: March 22, 2007.

Visit our web-site for further details about the program and accommodation and to submit abstracts and register.

www.can-acn.org

Or contact:

Doreen Ostrowski

Conference Coordinator

Email: Doreen.canacn@sympatico.ca

Tel. 416-465-8756

Corporate sponsors: Pfizer, Medtronic, Eli-Lilly

Gene nominations open for KOMP

NIH launched the Knockout Mouse Project (KOMP) in September 2006. A press release detailing the KOMP effort and plans can be found at <http://www.nih.gov/news/pr/sep2006/nhgri-07a.htm>

A key piece of this effort is the Data Coordination Center (DCC) that will provide a central web site for information about the KOMP and its progress. This web site is now live, containing basic project information, <http://www.knockoutmouse.org/>. The site will grow and provide significant added functionality as the KOMP project gears up.

Community input is key to ensuring that KOMP provides the knockouts most useful to the research scientist. A web-based system has been set up through which you can nominate genes to be knocked out. Links to the nomination form are found at the KOMP Data Coordination site (<http://www.knockoutmouse.org/>) and on the MGI homepage (<http://www.informatics.jax.org/>); or you can access the form directly at <http://www.informatics.jax.org/mgihome/KOMP/nominationForm.shtml>

The nomination process will be ongoing throughout the 5-years of the KOMP program, with nominations tabulated and reviewed on a monthly basis. The priority list for genes to be knocked out by the KOMP centers will be adjusted based on this input.

- the KOMP-DCC team
Martin Ringwald
Janan Eppig
Carol Bult
Jim Kadin

XXIXth International Symposium
"The Essence of Memory"
May 14-15, 2007
Université de Montréal

We are pleased to announce that the XXIXth International Symposium of the Groupe de recherche sur le système nerveux central, entitled "The Essence of Memory", will be held on May 14-15, 2007 at 3200 Pavillon Jean-Brillant at the Université de Montréal

The symposium is organized by Dr Jean-Claude Lacaille, Dr Vincent Castellucci, Dr Sylvie Belleville and Dr Wayne Sossin.

The objectives of this symposium are to consider with a multidisciplinary approach what constitutes the fundamental character of memory, from its most elementary features to its cognitive aspects, as well as its implications in human pathology and therapy, such as aging and Alzheimer's disease. The symposium will include presentations that cover the molecular, cellular, systems and behavioural aspects of memory.

Registration is now open. Please visit <http://www.grsnc.umontreal.ca/XXIXs/> for information.

Submissions are invited for a limited number of poster presentations. A selection will be made from the submitted abstracts and certain authors will be invited to contribute a short chapter to a special issue of the book series Progress in Brain Research for the Symposium.

Deadline for poster submissions: Friday, March 16, 2007.

Eleventh International Conference on Cognitive and Neural Systems
May 16 - 19, 2007
Boston University
677 Beacon Street
Boston, Massachusetts 02215 USA
<http://www.cns.bu.edu/meetings/>

This interdisciplinary conference is attended each year by approximately 300 people from 30 countries around the world. As in previous years, the conference will focus on solutions to the questions: How Does The Brain Control Behavior?
How Can Technology Emulate Biological Intelligence?

The conference is aimed at researchers and students of computational neuroscience, cognitive science, neural networks, neuromorphic engineering, and artificial intelligence. It includes invited lectures and contributed lectures and posters by experts on the biology and technology of how the brain and other intelligent systems adapt to a changing world. The conference is particularly interested in exploring how the brain and biologically-inspired algorithms and systems in engineering and technology can learn. Single-track oral and poster sessions enable all presented work to be highly visible. Three-hour poster sessions with no conflicting events will be held on two of the conference days. Posters will be up all day, and can also be viewed during breaks in the talk schedule.

Sixteenth Annual Computational Neuroscience Meeting - Planned Workshop

Dr. Velazquez plans to conduct a workshop during the Sixteenth Annual Computational Neuroscience Meeting CNS2007 July 8th - 12th 2007, all information about the meeting is at <http://www.cnsorg.org/>. The workshop will be focused on the problems associated with synchrony analysis, technical (recordings method) and theoretical. Dr. Velazquez expects to bring one or two very important figures in the field.

Please direct any questions to Dr. Velazquez at jose-luis.perez-velazquez@sickkids.ca or jlvp@sickkids.ca

Title: Synchronization of brain signals: what is real, what is not

Organizers: Dr. Jose-Luis Perez Velazquez, Hospital for Sick Children, Toronto, Ontario, Canada; Dr. Richard Wennberg, Toronto Western Hospital and Department of Medicine (Neurology), University of Toronto, Toronto, Ontario, Canada

Description: The purpose of this one-day workshop is to bring together people with common interest in studying brain coordination dynamics in order to discuss outstanding issues with the methodologies employed. We will focus on detection of synchrony patterns from neuronal signals, from MEG and EEG to in vitro electrophysiological recordings. The present plan is to centre the workshop around a few talks leading to much discussion, rather than presenting large amounts of data.

The workshop will be divided into two parts:

- 1) Techniques used to record brain signals and the associated problems when specific methods are used to detect synchronization (such as the use of the analytic signal methodology to assess phase synchrony derived from referential recordings like scalp EEG).
- 2) Theoretical issues that pose limits on the applicability of the analytic methodologies to specific data sets (such as nonstationarity of signals).

Interested Speakers and Discussants are invited to contact the workshop organizer at: jose-luis.perez-velazquez@sickkids.ca or jlvp@sickkids.ca

2007 Summer Student Fellowships Available For Bright, Motivated Students Who Have Finished Undergraduate Junior or Senior Year and are Interested in Neuroscience Research

Would you like the opportunity to work with & be trained by an established, experienced scientist in the field of brain research? Are you in the process of deciding if Neuroscience research is to be part of your career plans?

IES Brain Research Foundation summer fellows will receive a stipend of \$2500 and are expected to spend 8-10 weeks (full time) during summer 2007, being trained in a first rate laboratory. Applicants should arrange training with & be accepted by a faculty sponsor, who is the head of a first rate laboratory at a University, Medical School or Research Institute.

The fellowship recipients will submit a report on their summer research and how this experience has helped and influenced them. The fellowship recipients and faculty sponsors will be asked to present briefly their research results and impressions of the summer, at the annual Foundation Gala Dinner in person (or by video if unable to attend). Application forms can be printed from the web site www.iesbrainresearch.org or by contacting: Faye Simon Harac faye@iesbrainresearch.org; Tel: 973-726-6218 or Dr. Eric J. Simon, Eric.Simon@nyu.edu.

*The deadline for 2007 IESBRF Summer Fellowship applications is March 15, 2007 (early submission appreciated)

*Please submit the original application plus 4 copies by mail to: Prof. Eric J. Simon, Department of Psychiatry, Room MHL 517, NYU School of Medicine, 550 First Ave, New York, NY 10016. (Note: Fax and email applications Will NOT be accepted)

**Cellular Biology of Addiction Course
Cold Spring Harbor Laboratory, Cold Spring Harbor, NY
August 7 - 13, 2007
Application Deadline: March 15, 2007**

Instructors:
Christopher Evans, University of California, Los Angeles
Mark Von Zastrow, University of California, San Francisco

The primary objective of the proposed workshop is to provide an intense dialogue of the fundamentals, state-of-the-art advances and major gaps in the cell and molecular biology of drug addiction. Targeted to new or experienced investigators, the workshop will combine formal presentations and informal discussions to convey the merits and excitement of cellular and molecular approaches to drug addiction research.

Course application instructions:
http://meetings.cshl.edu/courses/courseapp_instr.shtml

POSITIONS AVAILABLE

**UNIVERSITY OF TORONTO AND
AFFILIATED INSTITUTIONS**

POSTDOCTORAL POSITION

**Postdoctoral Fellow in Developmental Neurobiology
Samuel Lunenfeld Research Institute**

We have one position for a postdoctoral Fellow in the Samuel Lunenfeld Research Institute. The chosen candidate will be responsible for carrying out research in genetic engineering and functional analysis of mice for novel molecular players for synapse functions.

This post is a three year term. The chosen candidate will work with a team in electrophysiological and behavioural characterization of channel mutants in both mouse and *C. elegans*. He or she will be in collaboration between the labs of Dr. John Roder (www.mshri.on.ca/roder) and Dr. Mei Zhen (www.mshri.on.ca/zhen).

We are seeking a motivated, creative and articulate scientist with a PhD in biology. Experience with ES cells an asset.

Please send your CV and covering letter as well as the contact details of three referees quoting this ad, to Dr John Roder (roder@mshri.on.ca). The closing date for completed applications is March 1, 2007.

Equal Opportunities Employer

Mail to: John C. Roder, Mei Zhen Ph.D., Mount Sinai Hospital, Samuel Lunenfeld Research Institute, 600 University Avenue, Room 854, Toronto, ON M5G 1X5 Tel: (416)586-8241; Fax: (416)586-4767.

Postdoctoral Position, University of Toronto (Craniofacial Pain)

Postdoctoral Positions available for NIH and CIHR-supported neurophysiological studies of neural mechanisms related to craniofacial pain and neuroplasticity. Preference will be given to candidates with experience in *in-vivo* single-unit recordings. Salary commensurate with experience. Candidates should send via e-mail a brief statement of research interests, vita, and names and addresses of three references, to

B.J. Sessle/J.W. Hu, Dept. of Oral Physiology, Faculty of Dentistry, Univ. of Toronto, 124 Edward St., Toronto, Ontario, M5G 1G6, Tel. 416-979-4921, ext. 4544; Fax: 416-979-4936; E-mail: james.hu@utoronto.ca or Jonathan Dostrovsky, Dept. of Physiology, e-mail: j.dostrovsky@utoronto.ca.

USA

ASSISTANT PROFESSOR, ASSOCIATE PROFESSOR OR PROFESSOR LEVEL

Faculty Positions at the MIT McGovern Institute for Brain Research

The McGovern Institute for Brain Research at MIT is seeking two faculty members at the Assistant Professor, Associate Professor or Professor level. The McGovern Institute's general focus is in systems neuroscience with an emphasis on the neural basis of perception, cognition, and action. We are seeking two candidates with a research focus in any of these three areas, one using human subjects and the other using animal models. We would regard it as a plus if the candidate's work bridges levels using a variety of tools and/or the candidate were interested in translating basic research findings into new ideas for studying the pathophysiology or treatment of brain disorders. The mission of the McGovern Institute is to understand the relationship of neuronal processes, circuits and computations to behavior, ultimately providing benefits to human health and welfare. Research in the McGovern Institute is expected to help people with brain disorders ranging from sensory system impairments to movement disorders and emotional and cognitive disorders. McGovern Institute scientists have many opportunities for collaboration in a diverse and cutting-edge environment. In the fall of 2005, the Institute moved to occupy a new building, which includes a brain imaging center for human subjects and animals. Applicants should submit a curriculum vitae, a summary of current and proposed research programs, and should arrange for three letters of recommendation to be sent electronically (preferably PDF) to the McGovern Institute Search Committee, at the following email address: McGovernInstituteSearch@mit.edu. Please indicate which of the two positions you are applying for in your cover letter. Consideration of applications will begin on March 1, 2007. For more information on the McGovern Institute please visit our website at <http://web.mit.edu/mcgovern>. MIT is an affirmative action/equal opportunity employer. Qualified women and minority candidates are especially encouraged to apply.

POSTDOCTORAL POSITION

Developmental physiology/neurobiology in the Center for Perinatal Biology, Loma Linda University

The focus of this research is on the regulation of cerebral blood flow (CBF) in the fetus. In vivo studies include CBF measurement in fetal sheep under a wide variety of circumstances. To complement this work, in vitro studies explore signal transduction mechanisms (both pharmaco-mechanical and electromechanical coupling of Ca²⁺-dependent and Ca²⁺-independent pathways) in cerebral arteries, and their change with development. In conjunction with the developmental aspects of these mechanisms (fetus to newborn to adult), we are exploring the modulation of these in response to acclimatization to high altitude, long-term hypoxia. A postdoctoral

fellow will be involved with many in vivo techniques, as well as in vitro techniques of cell and molecular biology.

An ideal candidate should be a highly motivated researcher with a background in physiology. Experience in data analysis and MATLAB programming is desirable. Candidates should have a doctoral degree (PhD, MD, DVM, or equivalent) with a track record of scientific achievement, as documented by peer-reviewed journal publications. The position will consist of a yearly appointment with renewal contingent upon performance. Remuneration will be commensurate with experience. Loma Linda University is an Equal Opportunity/Affirmative Action Employer.

Applicants should send a cover letter outlining their research experience and interests, along with a curriculum vitae, copies of relevant publications, and names and contact details of three references to: Lawrence D. Longo, MD, Center for Perinatal Biology, Loma Linda University School of Medicine, Loma Linda, California, 92350, E-mail: llongo@llu.edu.

POSITIONS WANTED

Parag Mahanti - I am currently pursuing a postgraduate degree in chemistry, at St. Stephen's College, University of Delhi. I have scored an overall 74% in three years with an 85% marks in the final year of graduation. I have been selected for two national summer research fellowship programmes in India in the past two years and have gained valuable research experience in the field of synthetic organic chemistry and I believe this would help me to learn new techniques required in the Neuroscience field much more easily. I would like a short term research training position for 3 months from May to August in any area of neuroscience research especially the fields of neurotransmitters, ion channels and synaptic plasticity. I want to undergo this research training in order to facilitate my transition from chemistry to neuroscience. The field of neurotransmitters has fascinated me from a long time and it was only because of lack of availability of post graduate courses in neuroscience in India that I have to wait to finish my Msc. in Chemistry and then shift to neurosciences. Contact Information: parag.mahanti@gmail.com, paragmahanti@yahoo.co.in, phone : 91-9818008334.

Shahryar (Shary) Rafi-Tari is looking for a permanent position in medical research. He has obtained his BSc with high distinction from University of Toronto (Pharmacology). He also holds an MSc which he earned from faculty of pharmacy at the same university. Shary has been in research environment since 1992 and is experienced in Human Brain Imaging Analysis (PET/SPECT & MRI, since 1998). He is also very skilled in database programming (VBA in MS Access Since 1998 & Telefrom in 2004). If any permanent position is available, please e-mail Shary at shary@rogers.com (preferred) or call him after 6:30pm weekdays at 416-447-1863.

SUMMER POSITIONS WANTED

Information about students seeking summer positions can be found on our website at:
http://www.utoronto.ca/neurosci/jobs_summer_wanted.html.