



University of Toronto Neuroscience Program Newsletter  
May 2011 | Volume 27 | Number 9

## DISTINGUISHED LECTURESHIP SERIES



**WEDNESDAY, JUNE 8, 2011**

Time | 4:00 pm – 5:00 pm

Topic | Stroke Rehabilitation Trials, Outcomes,  
Disappointments, and Path to Recovery

Location | Sanford Fleming, Room 1105. Videoconferencing  
to UTM and UTS. Refer to website for room locations.

Speaker | Dr. Bruce Dobkin, UCLA

Host | Prof. Molly Verrier

*CPIN Students must attend 75% of the Lectureship Series each year according to their program (Masters or PhD) requirements.*

## CPIN POSTER DAY

CPIN Poster Day 2011 was held at the Stone Lobby of the Medical Sciences Building on Thursday, April 14. Sixty-five posters were presented and judged by fourteen judges from UTNP. Poster judging was followed by UTNP's Distinguished Lecture, "When Good RNAs Go Bad - FXTAS as a Paradigm for Neurodegenerative Disorders" by Dr. Paul Hagerman.

Congratulations to this year's winners:

1. **Jessica Pressey**, "Calcineurin-mediated regulation of KCC2 and synaptic inhibition in hippocampal neurons"
2. **Cornelia McCormick**, "Functional dissociation between the hippocampus and basal temporal cortex for highly familiar and novel scenes: an intracranial EEG study in humans"
3. **Ziad Butty**, "Structure-Function Relationship using SD Ocular Coherence Tomography, Flicker Defined Form and Standardized Automated Perimetry in Glaucoma Patient"
4. **Gregory Hawryluk**, "Neural precursor cells express trophins following transplantation but remyelination is the key mechanism by which they augment functional recovery"
5. **Tina Hu**, "Beta-1 selective antagonism preserved brain perfusion in anemic rats"

The winners were awarded gift certificates to the UofT bookstore in recognition of their efforts.

Special thanks go to our judges: Richard Aviv, Limor Avivi-Arber, Jeffrey Dason, Jonathan Dostrovsky, Zhong-Ping Feng, Alan Fung, William MacKay, Lorelei Silverman, Rosalind Silverman, Frances Skinner, Hong-Shuo Sun, Alexander Velumian, Naomi Visjani, Melanie Woodin, and John Yeomans.

Thanks to all participants for making this a very successful day.

## UTNP Administration



**Michael G. Fehlings - Director, UTNP**



**David R. Hampson - Director, CPIN  
Graduate Studies**

Planning & Operations |  
Alexander A. Velumian PhD, DSc  
Interim Program Coordinator |  
Andrea Kwan

UTNP Administrative Office | MP 11-315,  
Toronto Western Hospital  
399 Bathurst St.  
Toronto, Ontario M5T 2S8

Collaborative Program in Neuroscience |  
Room 904, Leslie Dan Faculty of Pharmacy,  
144 College Street  
Toronto Ontario M5S 3M2  
University of Toronto

Email | [p.neuroscience@utoronto.ca](mailto:p.neuroscience@utoronto.ca)  
Phone | 416 978 8761  
Fax | 416 978 8511

Website | [www.neuroscience.utoronto.ca](http://www.neuroscience.utoronto.ca)

## IN THIS ISSUE

Pg. 1.....Upcoming Distinguished Lecture  
Pg. 1.....CPIN Poster Day  
Pg. 2.....CAN Bus, Brain Bee  
Pg. 3.....ASIA Lifetime Achievement Award  
Pg. 4 .....Neuroscience News  
Pg. 6 .....Neuroscience Events & Seminars  
Pg. 7 .....Upcoming Meetings  
Pg. 9 .....Fellowships and Awards  
Pg. 12.....Positions Available  
Pg. 14.....Funding Announcements



University of Toronto Neuroscience Program Newsletter  
May 2011 | Volume 27 | Number 9

## UTNP CAN MEETING BUS SPONSORSHIP

May 29 - June 1, 2011 - Quebec City Convention Centre



**Did you know that a greyhound bus fare from Toronto to Quebec City can cost upwards of \$300!**

UTNP is proud to sponsor a bus to take conference participants to and from Quebec City. Cost is only \$30 for CPIN students and faculty. There are still some spots left, so register soon to take advantage of this fantastic opportunity: [http://neuroscience.utoronto.ca/students/2011\\_CAN\\_Meeting\\_Bus\\_Registration.htm](http://neuroscience.utoronto.ca/students/2011_CAN_Meeting_Bus_Registration.htm)

## 13<sup>TH</sup> ANNUAL TORONTO BRAIN BEE



The 13th Annual Toronto Brain Bee competition took place at the Medical Sciences Building, on March 25, 2011. There were a record 62 students from 16 high schools in the Toronto area who participated in the competition. Between the first and second rounds of questions, the students visited the Anatomy museum at the Division of Anatomy, watched the video of 2010 National Brain Bee event, and listened to short research presentations from five graduate students.

Following three rounds of questions, the top three winners were:

First place: Soohyun Park from University of Toronto Schools  
Second place: Jessica Zung from University of Toronto Schools  
Third place: David Kim from Sinclair Secondary School

The first place winner Soohyun will represent Toronto at the 4th Annual CIHR Canadian National Brain Bee competition ([www.brainbee.ca](http://www.brainbee.ca)), which will take place at McMaster University in Hamilton on May 28, 2011.

The 2011 Brain Bee competition was sponsored by the University of Toronto Neuroscience Program, the Department of Physiology and the Firefly Foundation. The students were welcomed by Professor Jonathan Dostrovsky (on behalf of UTNP), Professor Stephen Matthews (Chair, Department of Physiology) and Ms Sharon Zillmer (Program Manager, Firefly Foundation).

The event was organized by the following 6 faculty members and 22 graduate students.

The faculty members are Drs. Zhong-Ping Feng (Physiology, Toronto Brain Bee coordinator), Jonathan Dostrovsky (Physiology, past-Toronto Brain Bee coordinator), Isabelle Aubert (Laboratory Medicine and Pathology), Morgan Barense (Psychology), Michelle Arnot (Pharmacology), and Hong-Shuo Sun (Anatomy, Surgery/Physiology).

The graduate students are Mila Aleksic (Prep Course coordinator), Sakina Rizvi (Prep Course coordinator), Tom Lu, Jason Lam, Christine Bae, Yi Quan, Amanda Gao, Shira Rosenzweig, Nasrin Nejatbakhsh, Jessica Jordao, Ewelina Maliszewska-Cyna, Paul Nagy, Emmanuel Thevenot, Meghan Sauve, Meredith Kuipers, Massimo Tarulli, Brooke Acton, Aimee Caron, Emma Duerden, Joanna Soczynska, Kathy Li, and Andrew Barszczyk.

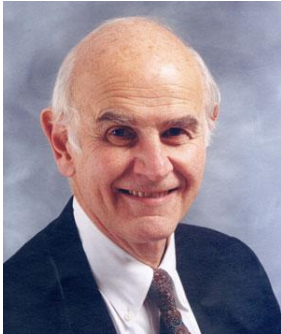


Special thanks to Maureen Peng, outgoing Interim UTNP coordinator, for her help with organizing the Brain Bee.



University of Toronto Neuroscience Program Newsletter  
May 2011 | Volume 27 | Number 9

## DR. CHARLES TATOR TO RECEIVE LIFETIME ACHIEVEMENT AWARD



UTNP faculty member Dr. Charles Tator has been named as the recipient of the American Spinal Injury Association's 2011 Lifetime Achievement Award.

Dr. Tator graduated from the faculty of Medicine at the University of Toronto and trained there in research and neuropathology. He then

completed the Neurosurgery resident training program. In 1989, he became Chair of Neurosurgery at the University of Toronto and Chief of Neurosurgery at the Toronto Western Hospital, and University Health Network. In 1992, he founded ThinkFirst, Canada, a national brain and spinal cord injury foundation. He has published 321 papers in peer reviewed journals and 85 book chapters, most in the field of brain and spinal cord injury. He developed the first acute spinal cord injury unit in Canada in 1974 at Sunnybrook Medical Centre. Currently, he is focused on the use of stem cells for regeneration of the spinal cord after trauma, ischemic or demyelinating disease. He is a member of the Order of Canada, and an inductee into the Canadian Medical Hall of Fame. He is currently Senior Scientist in the Toronto Western Research Institute and a Professor of Neurosurgery at the University of Toronto. He is the Director of the Canadian Paraplegic Association Spinal Cord Injury Research Laboratory in the Krembil Neuroscience Centre at the Toronto Western Hospital.

Dr. Tator will receive the award at the 2011 Annual Scientific Meeting in Washington, D.C., on Monday, June 6th.

## NEW CPIN STUDENT

We would like to welcome the following student to the Collaborative Program in Neuroscience:

Name	Degree	Department	Supervisor
Shervin Gholizadeh Moghaddam	PhD	Pharmaceutical Sciences	David Hampson

## NEW UTNP FACULTY AND POSTDOC MEMBERS

We would like to welcome the following faculty and postdoctoral fellows who have recently joined the UTNP:

Name	Department	Location
Hansen Wang, PhD (postdoctoral fellow)	Laboratory Medicine and Pathology	University of Toronto
Stephen Perry, PhD	Rehabilitation Sciences	Toronto Rehab

### NOTICE TO GRADUATING STUDENTS

Please notify the CPIN 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 CPIN office to indicate that you have completed the program's requirements. **CPIN students must complete all the Collaborative Program requirements to receive the notation.** Please inform the office of your mailing address and thesis title. If you have transferred from a Master's degree to a PhD, please notify the CPIN office.



University of Toronto Neuroscience Program Newsletter  
May 2011 | Volume 27 | Number 9

## NEUROSCIENCE NEWS

### FUNCTIONING SYNAPSE CREATED USING CARBON NANOTUBES

Engineering researchers at the University of Southern California have made a significant breakthrough in the use of nanotechnologies for the construction of a synthetic brain. They have built a carbon nanotube synapse circuit whose behavior in tests reproduces the function of a neuron, the building block of the brain. The team, which was led by Professor Alice Parker and Professor Chongwu Zhou in the USC Viterbi School of Engineering Ming Hsieh Department of Electrical Engineering, used an interdisciplinary approach combining circuit design with nanotechnology to address the complex problem of capturing brain function.

In a paper published in the proceedings of the IEEE/NIH 2011 Life Science Systems and Applications Workshop in April 2011, the Viterbi team detailed how they were able to use carbon nanotubes to create a synapse.

Carbon nanotubes are molecular carbon structures that are extremely small, with a diameter a million times smaller than a pencil point. These nanotubes can be used in electronic circuits, acting as metallic conductors or semiconductors.

"This is a necessary first step in the process," said Parker, who began the looking at the possibility of developing a synthetic brain in 2006. "We wanted to answer the question: Can you build a circuit that would act like a neuron? The next step is even more complex. How can we build structures out of these circuits that mimic the function of the brain, which has 100 billion neurons and 10,000 synapses per neuron?"

Parker emphasized that the actual development of a synthetic brain, or even a functional brain area is decades away, and she said the next hurdle for the research centers on reproducing brain plasticity in the circuits. The human brain continually produces new neurons, makes new connections and adapts throughout life, and creating this process through analog circuits will be a monumental task, according to Parker.

For Jonathan Joshi, a USC Viterbi Ph.D. student who is a co-author of the paper, the interdisciplinary approach to the problem was key to the initial progress. Joshi said that working with Zhou and his group of nanotechnology researchers provided the ideal dynamic of circuit technology and nanotechnology.

"The interdisciplinary approach is the only approach that will lead to a solution. We need more than one type of engineer working on this solution," said Joshi. "We should constantly be in search of new technologies to solve this problem."

MORE | <http://neurosciencenews.com/synapse-using-carbon-nanotubes-synthetic-brain/>

### DISCOVERY OF A COMMON GENETIC CAUSE OF AUTISM AND EPILEPSY

Researchers from the CHUM Research Centre (CRCHUM) have identified a new gene that predisposes people to both autism and epilepsy. Led by the neurologist Dr. Patrick Cossette, the research team found a severe mutation of the synapsin gene (SYN1) in all members of a large French-Canadian family suffering from epilepsy, including individuals also suffering from autism. This study also includes an analysis of two cohorts of individuals from Quebec, which made it possible to identify other mutations in the SYN1 gene among 1% and 3.5% of those suffering respectively from autism and epilepsy, while several carriers of the SYN1 mutation displayed symptoms of both disorders.

"The results show for the first time the role of the SYN1 gene in autism, in addition to epilepsy, and strengthen the hypothesis that a deregulation of the function of synapse because of this mutation is the cause of both diseases," notes Cossette, who is also a professor with the Faculty of Medicine at the Université de Montréal. He adds that "until now, no other genetic study of humans has made this demonstration."

The different forms of autism are often genetic in origin and nearly a third of people with autism also suffer from epilepsy. The reason for this comorbidity is unknown. The synapsin gene plays a crucial role in the development of the membrane surrounding neurotransmitters, also referred to as synaptic vesicles. These neurotransmitters ensure communication between neurons. Although mutations in other genes involved in the development of synapses (the functional junction between two neurons) have previously been identified, this mechanism has never been proved in epilepsy in humans until the present study.

The results of the present study were published in the latest online edition of *Human Molecular Genetics*.

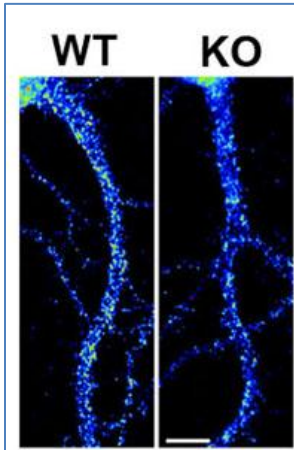
MORE | <http://hmg.oxfordjournals.org/search?submit=yes&fulltext=SYN1+loss>





University of Toronto Neuroscience Program Newsletter  
May 2011 | Volume 27 | Number 9

#### LINK BETWEEN FRAGILE X SYNDROME AND EPILEPSY



Researchers have now discovered a potential mechanism that may contribute to the link between epilepsy and fragile X syndrome. The protein that is missing in fragile X syndrome, FMRP, controls the production of a protein that regulates electrical signals in brain cells, scientists at Emory University School of Medicine have found. The results were published April 13 in the *Journal of Neuroscience*.

Individuals with fragile X syndrome tend to have a hyperexcitable nervous system, which can be displayed in several ways: hyperactivity, anxiety, increased sensory sensitivity, and epileptic seizures in 20 percent of all cases. The Emory team's findings suggest that a therapeutic strategy against fragile X syndrome now being tested in clinical trials could also address this aspect of the disease.

"The link between fragile X syndrome and epilepsy was not well understood," says senior author Gary Bassell, PhD, professor of cell biology and neurology at Emory University School of Medicine. "This finding might provide a molecular explanation that could also give some clues on therapeutic strategies." The researchers found that in mice missing FMRP - a model for humans with fragile X syndrome - brain cells produce less of a protein called Kv4.2.

FMRP is known to regulate several genes, and it's possible that changes in others besides Kv4.2 contribute to the development of epilepsy. For many of the genes that FMRP controls, it normally acts as a brake, by interfering with the step in which RNA is made into protein. In FMRP's absence, this leads to runaway protein production at synapses the junctions between brain cells where chemical communication occurs. Kv4.2 appears to be an exception, because in FMRP's absence, less Kv4.2 protein is produced. Kv4.2 is the major ion channel regulating the excitability of neurons in the hippocampus, a region of the brain important for learning and memory. A mutation of the gene encoding Kv4.2 leads to temporal lobe epilepsy in humans.

In laboratory tests, drugs that tamp down glutamate signaling could partially restore levels of the Kv4.2 protein in mice missing the fragile X protein. This suggests that drugs that act

against glutamate signaling, which are now in clinical trials, could reduce hyperexcitability in humans with fragile X syndrome.

MORE | <http://shared.web.emory.edu/whsc/news/releases/2011/04/new-clue-found-for-fragile-x-syndrome-epilepsy-link.html>

#### TOWARD A COMPUTER MODEL OF THE BRAIN: NEW TECHNIQUE POISED TO UNTANGLE BRAIN'S COMPLEXITY

In a study published online April 10 in *Nature*, a team at UCL describe a technique developed in mice which enables them to combine information about the function of neurons together with details of their synaptic connections.

The researchers looked into the visual cortex of the mouse brain, which contains thousands of neurons and millions of different connections. Using high resolution imaging, they were able to detect which of these neurons responded to a particular stimulus, for example a horizontal edge.

Taking a slice of the same tissue, the researchers then applied small currents to a subset of neurons in turn to see which other neurons responded -- and hence which of these were synaptically connected. By repeating this technique many times, the researchers were able to trace the function and connectivity of hundreds of nerve cells in visual cortex.

The study has resolved the debate about whether local connections between neurons are random -- in other words, whether nerve cells connect sporadically, independent of function -- or whether they are ordered, for example constrained by the properties of the neuron in terms of how it responds to particular stimuli. The researchers showed that neurons which responded very similarly to visual stimuli, such as those which respond to edges of the same orientation, tend to connect to each other much more than those that prefer different orientations.

Using this technique, the researchers hope to begin generating a wiring diagram of a brain area with a particular behavioural function, such as the visual cortex. This knowledge is important for understanding the repertoire of computations carried out by neurons embedded in these highly complex circuits. The technique should also help reveal the functional circuit wiring of regions that underpin touch, hearing and movement.

MORE | <http://www.sciencedaily.com/releases/2011/04/110410181302.htm>



University of Toronto Neuroscience Program Newsletter  
May 2011 | Volume 27 | Number 9

## U OF T NEUROSCIENCE EVENTS AND SEMINARS

### MONDAY, MAY 2, 2011

Time | 11:30 a.m.

Topic | Identification of a novel role associated with the *Streptococcus mutans* CipB bacteriocin: peptide regulator of the stress-induced competence pathway

Location | Room #237, Fitzgerald Building

Speaker | Delphine Dufour, Oral Microbiology, Dental Research Institute, Faculty of Dentistry

Host | CIHR Group in Matrix Dynamics seminar

### MONDAY, MAY 2, 2011

Time | noon

Topic | *Functional modularity of background activities in normal and epileptic brain networks*

Location | Room 4-254 Black Wing, Hospital for Sick Children

Speakers | Drs. Tom Akiyama and Sam Doesburg.

Host | Epilepsy Journal Club

### MONDAY MAY 2, 2011

Time | 1:00 pm

Topic | Seeing a membrane protein in a membrane: cryo-EM study of the BK potassium channel

Location | Room 1250 Burton Wing, The Hospital for Sick Children

Speaker | Dr. Fred Sigworth, Professor of Physiology & Biomedical Engineering, Yale University

Host | Dr. John Rubinstein & Dr. Christine Bear, Molecular Structure and Function Seminar Series

### MONDAY, MAY 2, 2011

Time | 3:30 p.m.

Topic | Multiple Forms of Memory Guide Decisions and Actions

Location | Classrooms ABC, 2nd Floor, Baycrest Hospital and via telecast at Toronto Western Hospital, Room 3McL-405

Speakers | Dr. Daphna Shohamy, Ph.D., Assistant Professor, Department of Psychology, Columbia University

Host | Rotman Research Institute, Baycrest Hospital

### MONDAY MAY 2, 2011

Time | 4:00 pm

Topic | Roles of phosphatidylinositol 3,5 bis phosphate, a lipid with unexpected links to neurodegenerative disease

Location | Room 4171, Medical Sciences Building

Speaker | Dr. Lois Weisman, University of Michigan

Host | Dr. J. Brill, Department of Molecular Genetics Guest Speaker Seminar

### FRIDAY MAY 6, 2011

Time | 1:00pm

Topic | Longitudinal multi-tracer studies in sporadic and LRRK2-related PD

Location | Main Auditorium, 2 West Wing, Room 401, Toronto Western Hospital

Speaker | Dr. Vesna Sossi University of British Columbia Department of Physics and Astronomy

Host | Dr. Antonio Strafella, Toronto Western Research Institute Visiting Speaker Series

### FRIDAY MAY 6, 2011

Time | 1:30 pm - 2:30 pm

Topic | The function and regulation of the adapter protein SH2B1: A JAK2 binding protein implicated in human obesity

Location | Room 1527, Hill Wing, Hospital for Sick Children

Speaker | Dr. Christin Carter-Su, Department of Molecular and Integrative Physiology, University of Michigan Medical School

Host | Program in Cell Biology Seminar Series

### FRIDAY MAY 13, 2011

Time | 1:30 pm - 2:30 pm

Topic | 2-photon stimulation and imaging techniques: Understanding the mechanisms behind synapse structure modulation in learning and memory

Location | Room 1527, Hill Wing, Hospital for Sick Children

Speaker | Dr. Kenichi Okamoto, Samuel Lunenfeld Institute, Mount Sinai Hospital

Host | Program in Cell Biology Seminar Series

### TUESDAY, MAY 24, 2011

Time | 12:30 pm - 2:00 pm

Topic | Addiction Neurobiology Research: Possible Ethically and Socially Adverse Impacts

Location | CAMH Russell Street Site, Meeting Centre, Room 2022

Speaker | Dr. Wayne Hall, Professor and NHMRC Australia Fellow, Centre for Clinical Research, University of Queensland and Royal Brisbane Hospital

Panelists | Jim Cullen, Clinic Head/Manager of CAMH's Addictions Program's Rainbow Services and IGT Concurrent Disorders Group and Daniela Lobo, psychiatrist-scientist in CAMH's Addictions Program and Neuroscience Department  
Host | CAMH

*A light lunch will be available to registrants starting at noon. Seating is limited so please reserve a seat by contacting Barbara Russell at [barbara\\_russell@camh.net](mailto:barbara_russell@camh.net) or 416 535-8501, extension 3415.*



University of Toronto Neuroscience Program Newsletter  
May 2011 | Volume 27 | Number 9

### FRIDAY MAY 27, 2011

Time | 1:30 pm - 2:30 pm  
Topic | TOR kinase signaling cascade regulates endocytosis via phosphoinhibition of an arrestin-related Ub ligase adaptor  
Location | Room 1527, Hill Wing, Hospital for Sick Children  
Speaker | Dr. Scott D. Emr, Weill Institute for Cell and Molecular Biology & Department of Molecular Biology and Genetics, Cornell University  
Host | Program in Cell Biology Seminar Series

## UPCOMING NEUROSCIENCE MEETINGS

### ADVANCES IN CEREBRAL PALSY - CELL TO PERSON SYMPOSIUM

Date | Friday May 13th, 2011  
Location | Holland Bloorview Kids Rehabilitation Hospital, 150 Kilgour Road, Toronto, Ontario, Canada M4G 1R8  
Flyer/Registration Form | [CP Conference Flyer](#)  
Register | <https://gmhost1.gomembers.com/clients/t-bmcc/etrakwebapp/meetings.aspx>

### XXVTH INTERNATIONAL SYMPOSIUM ON CEREBRAL BLOOD FLOW, METABOLISM, AND FUNCTION & XTH INTERNATIONAL CONFERENCE ON QUANTIFICATION OF BRAIN FUNCTION WITH PET

Dates | May 24-28, 2011  
Location | Barcelona, Spain  
Website | <http://www2.kenes.com/brain/Pages/Home.aspx>

### INTERNATIONAL NEUROETHICS CONFERENCE BRAIN MATTERS 2

Theme | Ethics in the Translation of Neuroscience Research to Psychiatric and Neurological Care  
Dates | May 26-27 2011  
Location | Montréal, Québec, Canada  
Website | <http://www.brainmatters2.com/>  
Contact | [neuroethics@ircm.qc.ca](mailto:neuroethics@ircm.qc.ca)

### THE 5TH ANNUAL CANADIAN ASSOCIATION OF NEUROSCIENCE MEETING

Date | May 29-June 1, 2011  
Location | Québec City Convention Centre  
Special Guest Speakers | Bert Sakmann - Max Plank Florida Institute, William T. Newsome - Stanford University, Fred H. Gage - Salk Institute for Biological Studies  
Website | <http://www.canmeeting.ca/>

Take the bus to Quebec City for only \$30 return! Register online at:

[http://neuroscience.utoronto.ca/students/2011\\_CAN\\_Meeting\\_Bus\\_Registration.htm](http://neuroscience.utoronto.ca/students/2011_CAN_Meeting_Bus_Registration.htm)

### INTERNATIONAL SYMPOSIUM ON NEUROBIOLOGY

Date | June 2, 2011  
Location | Ben Sadowski Auditorium - 18th Floor Mount Sinai Hospital  
Keynote Speakers | Arturo Alvarez-Buylla, University of California, San Francisco, CA, USA  
Silvia Arber, University of Basel, Basel, Switzerland  
Robert Darnell, The Rockefeller University, New York, USA  
Liqun Luo, Stanford University, Stanford, CA, USA  
John Flanagan, Harvard Medical School, Boston, MA, USA  
Antoine Triller, Institut National de la Sante del la Recherche Medicale, Paris, France  
Oliver Hobert, Columbia University Medical Centre, New York, NY, USA

### BRAIN & BEHAVIOUR DAY SYMPOSIUM

Date | June 2nd, 2011 - 8:00 am -4:30pm  
Location | Old Mill, Toronto  
Theme | Neural Networks of the Brain: Structure, Function and Dysfunction

Registration is open until May 27th. To register for this symposium please email Susy O'Neill at [susy.oneill@sickkids.ca](mailto:susy.oneill@sickkids.ca) or call ext 6659. You will be required to provide your name, email, organization affiliation, role/title, and a cost centre number. While this is a free event for members of the SickKids Centre for Brain & Behaviour, if you register and fail to show up at the event, your cost centre will be debited \$50.00. If you do not have a cost centre, speak to your manager to obtain one, and provide your manager's name at registration.

For individuals from other interested organizations, we welcome your attendance at the symposium at the registration fee of \$50.00. Cheques should be made out to the Centre for Brain & Behaviour and mailed to Susy O'Neill - Neurology Rm 6544, SickKids, 555 University Avenue, Toronto, M5G 1X8.

### FICCDAT: THE FESTIVAL OF INTERNATIONAL CONFERENCES ON CAREGIVING, DISABILITY, AGING AND TECHNOLOGY

Date | June 5-8, 2011  
Location | The Sheraton Centre Toronto Hotel - Toronto, Ontario, Canada  
Theme | 2nd Advances in Neurorehabilitation  
Keynote Speakers |  
Bruce H. Dobkin, MD, FANA, FRCP, Professor of Neurology | Director, Neurologic Rehabilitation and Research Program, University of California Los Angeles, Geffen School of Medicine, Reed Neurological Research Center



University of Toronto Neuroscience Program Newsletter  
May 2011 | Volume 27 | Number 9

John Whyte, MD, PhD | Director, Moss Rehabilitation Research Institute, Philadelphia, USA | Principal Investigator of the Neuro-Cognitive Rehabilitation Research Network | Professor of Rehabilitation Medicine at Thomas Jefferson University

Julius P. A. Dewald, PT, PhD, Associate Professor and Department Chair, Physical Therapy and Human Movement Sciences, Northwestern University | Associate Professor, Physical Medicine & Rehabilitation, Biomedical Engineering, Northwestern University  
Website | <http://www.ficcdat.ca/>

#### **15TH INTERNATIONAL CONGRESS OF PARKINSON'S DISEASE AND MOVEMENT DISORDERS**

Date | June 5 - 9, 2011  
Theme | Behavioral and motor interfaces of movement disorders: From laboratory to patient care  
Location | The Metro Toronto Convention Centre, South Building, 222 Bremner Boulevard, Toronto, ON  
Registration Deadline | May 10, 2011  
Website | <http://www.movementdisorders.org/congress/congress11/>

#### **CANADIAN NEUROLOGICAL SCIENCES FEDERATION 46<sup>TH</sup> ANNUAL CONGRESS**

Date | June 15-17, 2011  
Location | Hyatt Regency Vancouver, 655 Burrard Street, Vancouver, BC  
Website | <http://www.ccns.org/congress.html>

#### **BRAIN CONNECTIVITY WORKSHOP**

Date | June 21-23, 2011  
Location | Montreal, QC  
Theme | The tripartite relationship between anatomical connectivity, brain dynamics and cognitive function  
Website | <http://bcw2011.org/>

The Brain Connectivity Workshop (BCW) series aims to bring together experts in computational neuroscience, neuroscience methodology and experimental neuroscience with a special interest in understanding the tripartite relationship between anatomical connectivity, brain dynamics and cognitive function. This year marks the 10th annual Brain Connectivity Workshop (BCW) and the event will be hosted by the University of Montreal and Ste-Justine Hospital research centre in Montreal, Canada on June 21-23, 2011. The workshop will cover animal models and connectivity, the connectivity of the developing brain, and epilepsy in a developing brain. Childhood is a critical period

where brain regions become specialized and neural networks are organized for efficient information processing. Pathological development, such as that observed in epileptic brains is highly disruptive. Regrettably, our understandings of the mechanisms involved in the pathogenic processes are still unclear. Advances in brain connectivity analyses will push forward state-of-the-art research in brain development and epilepsy. For more information and to register, please go to: <http://bcw2011.org/>

#### **2011 INTERNATIONAL CONFERENCE ON BRAIN INJURY IN CHILDREN**

Dates | July 12-14, 2011  
Topics | Pre-and Peri-natal brain injury, Non-accidental brain injury, Head injury in sport, Management of severe traumatic brain injury, Non-traumatic causes of brain injury, Neurorehabilitation  
Location | The Four Seasons Hotel, 21 Avenue Road, Toronto, ON, Canada  
Website | [www.sickkidsbrainconference.ca](http://www.sickkidsbrainconference.ca)

#### **ACQUIRED BRAIN INJURY 2011 PROVINCIAL CONFERENCE**

Date | November 2-4, 2011  
Location | Sheraton on the Falls Hotel, Niagara Falls, Ontario  
Website | [www.obia.on.ca](http://www.obia.on.ca)

#### **NEUROSCIENCE SCHOOL OF ADVANCED STUDIES (SAN QUIRICO D'ORCIA, ITALY) WWW.NSAS.IT**

The Neuroscience School of Advanced Studies is home of residential, intensive Courses, where leading investigators from around the world spend two full weeks discussing upcoming research challenges with a small, highly selected number of participants in the unique atmosphere of the fortified medieval village of San Quirico d'Orcia, all within the most idyllic Tuscan countryside.

The Courses of the Neuroscience School of Advanced Studies are unique. Faculties are undisputed leaders in their own field and intense scientific interaction takes place in a manner that cannot be experienced in a typical conference venue. The walled town lends itself nicely as a self-contained campus to a relaxed yet intense learning experience. This atmosphere spontaneously combines with the Tuscan countryside, with its people and tradition and with the natural thermal spas of Bagno Vignoni, part of the village. The associated art, cultural and wine & gourmet programs are the natural completion of each Course learning experience.

May 16-28: Endocannabinoids. Coordinator: D. Piomelli (USA)  
June 13-25: Neurodegeneration and molecular neuropathology. Coordinator: P.L. Nicotera (D)





University of Toronto Neuroscience Program Newsletter  
May 2011 | Volume 27 | Number 9

July 18-30: Protein misfolding disorders. Coordinator: A. Aguzzi (CH)  
September 12-24: Pathophysiology of basal ganglia disorders. Coordinator: A.A. Grace (USA)  
October 3-15: Translational research for CNS diseases. Coordinator: G.C. Terstappen (D)  
October 24 - November 5: Addictive disorders. Coordinator: G.F. Koob (USA)

## FELLOWSHIPS AND AWARDS

### 2011 CANADA COUNCIL FOR THE ARTS - KILLAM RESEARCH FELLOWSHIP

These awards, which are administered by the Canada Council for the Arts, provide support to scholars of exceptional ability who are engaged in research projects of broad significance and widespread interest. The awards honour the memory and exceptional achievements of Mrs. Dorothy J. Killam's husband, Izaak Walton Killam.

The Killam Research Fellowships are awarded annually, on a competitive basis, to support scholars doing research in any of the following fields: humanities, social sciences, natural sciences, health sciences, engineering, or studies linking any of the disciplines within these fields.

Killam Research Fellowships provides two full years of release time from teaching and administrative duties to individual scholars who wish to pursue independent research. They are intended for established scholars who have demonstrated outstanding research ability, have published the results of their research in substantial publications in their field and are expected to continue contributing to the Canadian research community after they have completed their fellowship project. These awards are valued at \$70,000 per year. Fellowship recipients must obtain support for research and laboratory costs from other sources. Applicants who are retired are not eligible.

All applicants MUST submit their Applications electronically (via the Killam website by clicking on "University approval") by May 16, 2011, including a signed RIS Form. \*\*For those who would like an editorial review of their proposal, submit your draft application by Monday, May 2, 2011.

**Internal Deadline for Applications: May 9, 2011.**

For more information, see <http://killam.canadacouncil.ca/welcome.asp>

### NEURODEVNET FELLOWSHIP AWARDS

Fellowship Opportunities:

Doctoral Fellowships

Postdoctoral Fellowships

Clinical Research Fellowships

**Deadline for submissions: May 10, 2011, 11:59 PDT**

Incomplete or late applications will not be accepted.

The principal emphasis of the NeuroDevNet Research Training Program is to develop cross-disciplinary and collaborative skill sets for the next generation of Scientists, Clinicians, and Health Services professionals involved in the study of neurodevelopmental disorders. This cross-disciplinary approach will help provide young researchers with the diverse vocabulary and experience to interact with the broad research community. A goal for successful applicants may be, for example, to provide basic science researchers with aspects of clinical or social sciences research experience or providing neuroethicists with basic or clinical laboratory experience. In order to accomplish this goal, NeuroDevNet is offering Doctoral Fellowship, Postdoctoral Fellowship, and Clinical Research Fellowship Awards for study and training in the areas of the basic biology, neuroinformatics, neuroethics, diagnostics, treatments of neurodevelopmental disorders, and/or knowledge translation.

NeuroDevNet's mandate is to enhance the training of highly qualified personnel (HQP) going above and beyond the traditional training opportunities offered in academia. NeuroDevNet Fellowship support is geared to provide the trainee with enriched experiences ranging from the initial research discovery to its practical application, with an emphasis on the bidirectional translation of knowledge between the bench and the bedside.

For more information on the NeuroDevNet Fellowship Awards, including award categories, eligibility requirements, evaluation criteria, trainee opportunities and responsibilities, and how to apply, please see

<http://www.neurodevnet.ca/training/fellowship-awards>.

### VISION SCIENCE RESEARCH PROGRAM (VSRP-OSOTF) GRADUATE STUDENT FELLOWSHIP

A \$17.25M endowment from the OSOTF/U of T/ Vision Science Research Program-Toronto Western Hospital donation will provide support for a number of graduate fellowships September 2011. Graduate student projects must be in areas related to vision science.



University of Toronto Neuroscience Program Newsletter  
May 2011 | Volume 27 | Number 9

For student eligibility criteria and application forms, refer to VSRP website: <http://vsrp.uhnres.utoronto.ca>. Look for VSRP Fellowship Program in 'About' Button. Requirements

Unique in North America, two-thirds of the interest generated from our endowment supports graduate student research at the University of Toronto. As long as a student's master's thesis or doctoral thesis research falls into an area that will enhance vision health or our understanding of basic visual processes, from molecular genetics to social work and rehabilitation, he or she will be eligible for support at a level that matches the Medical Research Council of Canada's programs. Within this fellowship support there are two special awards, the William P. Callahan Fellowship and the Stella Zegas-Dunn Fellowship.

**Deadline for applications: May 13, 2011.**

#### NEUROSCIENCE SCHOLARS PROGRAM

The Neuroscience Scholars Program (NSP) is a three-year fellowship administered by the Society for Neuroscience to enhance career development and professional networking opportunities for underrepresented minority undergraduate and graduate students, and postdoctoral fellows in neuroscience. The program, funded by the National Institute of Neurological Disorders and Stroke, provides scholars with:

- Annual stipend for enrichment activities outside the scholar's home institution
- Support for and annual meeting travel expenses
- Access to annual meeting workshops, courses, and events
- Complimentary SfN meeting registration and abstract fee waivers
- Complimentary SfN membership and subscription to The Journal of Neuroscience online
- Mentoring

Other benefits include opportunities to network, expand professional contacts, and acquire professional skills.

Applicants **must be citizens or permanent residents of the United States** and enrolled in a degree-granting program or postdoctoral fellowship. According to the guidelines of the National Institute of Neurological Disorders and Stroke Diversity Research Education Grant, candidates must be from a group recognized as underrepresented in the biomedical, behavioral, clinical and social sciences. Past fellowship recipients are ineligible. Scholars are selected based on academic excellence, research interests, and experience.

**Deadline for applications: May 20, 2011**

For more information, go to:

[http://www.sfn.org/index.aspx?pagename=NeuroscienceScholars\\_Main](http://www.sfn.org/index.aspx?pagename=NeuroscienceScholars_Main)

#### SOCIETY FOR NEUROSCIENCE YOUNG SCIENTISTS' ACHIEVEMENTS AND RESEARCH IN NEUROSCIENCE AWARDS

These awards recognize students, postdoctorals, and early-career scientists who have made significant accomplishments in the field of neuroscience.

**Deadline for nominations: May 27, 2011**

If one or more of the following statements apply, you may be eligible for an award in this category:

- You are a student of neuroscience currently enrolled in a degree-granting program.
- You are a postdoctoral student of neuroscience.
- You have recently contributed outstanding research to the field of neuroscience.
- You are currently involved in research in an international setting.

For more information and to nominate, go to:

[http://www.sfn.org/index.aspx?pagename=awards\\_young\\_scientist](http://www.sfn.org/index.aspx?pagename=awards_young_scientist)

#### SOCIETY FOR NEUROSCIENCE OUTSTANDING RESEARCH AND CAREER ACHIEVEMENTS AWARDS

These awards are presented to scientists who have made outstanding contributions to the field through research and other scientific achievements.

**Deadline for nominations: June 3 or June 17, 2011**

If one or more of the following statements apply, you may be eligible for an award in this category:

- You have made significant contributions to neuroscience throughout your career.
- You have made noteworthy advances in theoretical and computational neuroscience or neuropharmacology.
- You have mentored other neuroscientists or neuroscience students.

For more information and to nominate, go to:

[http://www.sfn.org/index.aspx?pagename=awards\\_research\\_career](http://www.sfn.org/index.aspx?pagename=awards_research_career)



University of Toronto Neuroscience Program Newsletter  
May 2011 | Volume 27 | Number 9

#### **SOCIETY FOR NEUROSCIENCE PROMOTION AND MENTORING OF WOMEN IN NEUROSCIENCE AWARDS**

These awards honour individuals, both male and female, who have made significant contributions to the advancement of women in neuroscience.

**Deadline for nominations: June 3, 2011**

If one or more of the following statements apply, you may be eligible for an award in this category:

- You have significantly promoted the professional development of women in neuroscience.
- You have made outstanding contributions to neuroscience throughout your career.

For more information and to nominate, go to:

[http://www.sfn.org/index.aspx?pagename=awards\\_mentoring\\_women](http://www.sfn.org/index.aspx?pagename=awards_mentoring_women)

#### **SOCIETY FOR NEUROSCIENCE SCIENCE EDUCATION AND OUTREACH AWARDS**

These awards recognize the contributions of educators and advocates and their efforts to promote the field of neuroscience to students and the general public.

**Deadline for nominations: June 10, 2011**

If one or more of the following statements apply, you may be eligible for an award in this category:

- You are actively involved in teaching, training, and/or outreach activities to promote the understanding of neuroscience.
- You are members of an SfN chapter who carry out various activities to educate the public about neuroscience throughout your career.

For more information and to nominate, go to:

[http://www.sfn.org/index.aspx?pagename=awards\\_education\\_outreach](http://www.sfn.org/index.aspx?pagename=awards_education_outreach)

#### **CIHR'S KNOWLEDGE TRANSLATION BRANCH & HEALTH CANADA'S STRATEGIC POLICY BRANCH: NEW SCIENCE POLICY FELLOWSHIPS PROGRAM**

Here is your chance to learn about and have an impact in the policy world. Contribute to bringing evidence to inform health policy. Understand how evidence informed decision making works. We are offering fellowships for "embedded" researchers in the Health Canada policy world.

The new and exciting Funding Opportunity launched on April 18, 2011 as a pilot project, with the objective of providing highly qualified candidates at the doctoral, post-doctoral,

new investigator and mid-senior investigator stages of health research with the opportunity to learn more about current Canadian health policy activities and the science/policy interface.

The CIHR KT Branch has partnered with the Health Canada Strategic Policy Branch to help foster positive exchanges between health researchers and policy makers, helping to bridge the gap between the worlds of science and policy making. The CIHR KT Branch and the Health Canada Strategic Policy Branch will provide support through short-term policy assignments at Health Canada for highly qualified individuals who are engaged in health research to participate in and contribute to the policy making processes while learning first-hand about the intersection of science and policy.

The stipend levels vary according to career stage:

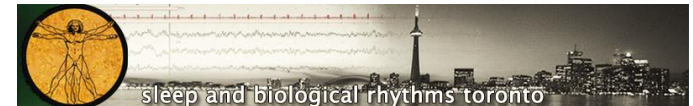
- Doctoral: \$35,000 per annum, pro-rated monthly for up to 6 months
- Post-doctoral: \$45,000 per annum, pro-rated monthly for up to 6 months
- New Investigator: \$60,000 per annum, pro-rated monthly for up to 6 months
- Mid-Senior Investigator: \$80,000 per annum, pro-rated monthly for up to 6 months

**Application deadline: June 1, 2011**

Funding start date: September 1, 2011

For more information on this funding opportunity, please view our promotional video on the CIHR YouTube channel at <http://www.youtube.com/user/CIHRIRSC> and/or contact Jasmine Lefebvre, Senior Knowledge Translation Specialist at (613) 952-8965 or by e-mail at [jasmine.lefebvre@cihr-irsc.gc.ca](mailto:jasmine.lefebvre@cihr-irsc.gc.ca)

#### **OPPORTUNITY FOR FUNDING - GRAD STUDENTS AND POST-DOCS IN NEUROSCIENCE**



The Second deadline for funding from the CIHR Team Research and Training Program in Sleep and Biological Rhythms is October 15<sup>th</sup> 2011. There are funds for at least **5 post-doc awards per year, and 6 graduate awards per year**, each accompanied by an additional **\$3,000 research allowance** and a **\$1,000 travel allowance**.



University of Toronto Neuroscience Program Newsletter  
May 2011 | Volume 27 | Number 9

For FULL application and review details please see the new website at <http://www.utoronto.ca/sleepandrhythms>

Please note:

Any research **teams** engaging in true new collaborative projects incorporating sleep-wake states, sedation and/or biological timing systems into their projects (**in whatever discipline**) are eligible to apply. No boundaries, just new science of high impact.

The vision of the program is that in 5 years time there will be more faculty and trainees incorporating some component of their research in these important areas, addressing fundamental questions in biology, physiology, medicine and health care.

If the big picture questions are addressed, this will lead to effective new collaborations, funded projects, major publications and new capacity for research, education and knowledge transfer.

**Details:** The application procedure is straightforward and short, but requires planning. In the first instance it is estimated that three post-doctoral awards will be available in the February competition, and two in the October competition (i.e., a total of 5 post-doc awards per year). Three graduate student awards will be available in each competition (i.e., a total of 6 graduate awards per year). Each stipend will also be accompanied by an additional \$3,000 research allowance to foster new research in the collaborating laboratories, and a \$1,000 travel allowance from the Program. Trainees have access to world-class infrastructure for molecular, cellular and behavioural analyses in animal models and humans. Supervisor top-up of salary to set levels is expected (all details are on the website). (5) The website is designed to be fully transparent, with all the details of the objectives of the program, eligibility to apply, application forms, how the applications will be reviewed, the reviewer forms, and how the funds will be distributed. (6) There are also funds available to support a total of **ten visits** from prominent researchers per year (**\$1,000 per visit**). Please see website for details ('funds' page).

Info: <http://www.utoronto.ca/sleepandrhythms/>

E-mail all queries to **Rhiannon Davies, Program Coordinator** at [sleep.rhythms@utoronto.ca](mailto:sleep.rhythms@utoronto.ca)

## POSITIONS AVAILABLE

UNIVERSITY OF TORONTO &  
AFFILIATED INSTITUTIONS

POSTDOCTORAL FELLOWSHIP IN COGNITIVE NEUROSCIENCE AND BRAIN FITNESS TECHNOLOGY, THE ROTMAN RESEARCH INSTITUTE, BAYCREST



The Centre for Brain Fitness of Baycrest is offering a scientific associate position in cognitive neuroscience, working with Dr. Fergus Craik, Dr. Sylvain Moreno, and Dr. Brian Levine in collaboration with a team of researchers and technology development specialists including other scientists at the Rotman Research Institute, the Kunin-Lunenfeld Applied Research Unit, MaRS Discovery District and industry partners.

The projects will be primarily in software applications of neuroscience and involve joining a team working on the development of procedures to enhance cognitive abilities and translate cognitive theory into assessment and rehabilitation tools for various platforms.

The Centre for Brain Fitness supports behavioral, neuropsychological and neuroimaging research on memory, attention, and perception, and frontal lobe function, including research on changes in cognitive function that arise from brain damage, disease and/or normal aging, and the development of cognitive rehabilitation strategies. The Rotman Research Institute has state-of-the-art electroencephalography and magnetoencephalography laboratories and a research-dedicated Siemens 3 Tesla MRI in-house at Baycrest. It is expected that the scientist would conduct rehabilitation research that incorporates neuroimaging, behavioral, and other neuroscience methodologies.

The duration of the fellowship is two years, with the option of continuing for a third year. Bursaries are in line with the fellowship scales of the Canadian Institutes of Health Research and include an allowance for travel and research expenses. Applicants should have a Ph.D., M.D. or equivalent degree and experience in psychology, neurology, or neuroscience research. The starting date is negotiable, but preferably by August 2011.





University of Toronto Neuroscience Program Newsletter  
May 2011 | Volume 27 | Number 9

More information about the Centre for Brain Fitness, Cognitici, the Rotman Research Institute and the Kunitz-Lunenfeld Applied Research Unit, including profiles of current Scientists, can be found at [www.rotman-baycrest.on.ca](http://www.rotman-baycrest.on.ca) and at [www.klaru-baycrest.on.ca](http://www.klaru-baycrest.on.ca), respectively.

The Centre for Brain Fitness welcomes applications from all qualified individuals, including members of visible groups, minorities, women, aboriginal persons, and persons with disabilities. All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.

All staff have an obligation to contribute to maintaining a safe care environment for clients, families, and visitors and a safe work environment for staff, students/researchers, physicians and volunteers.

Applicants should submit a C.V. and relevant reprints, together with a cover letter describing current research interests and future research goals, and also arrange to have three letters of reference sent independently to Dr. Brian Levine, Rotman Research Institute, Baycrest Center for Geriatric Care, 3560 Bathurst Street, Toronto, Ontario, M6A 2E1, Canada. [blevine@rotman-baycrest.on.ca](mailto:blevine@rotman-baycrest.on.ca).

While Baycrest appreciates all applications to this position, only those candidates that are selected for an interview will be contacted. Thank you!

#### **POSTDOCTORAL FELLOW - UNIVERSITY OF TORONTO AT MISSISSAUGA**

A Postdoctoral Position is available for a Canadian Institutes of Health Research-funded project, in the laboratory of Professor Voula Kanelis at the University of Toronto Mississauga (UTM).

The successful candidate will investigate the nucleotide binding domains (NBDs) of the sulfonyl urea receptors (SURs), using biophysical approaches, including NMR spectroscopy. SUR proteins are ABC transporters that form the regulatory subunits of ATP-sensitive potassium (KATP) channels. We are studying the effects of disease-causing mutations in the SUR NBDs, on their stability, structure and interactions with other regions in the SURs and in KATP channels.

A Ph.D. in biochemistry or a related discipline is required. Candidates should have experience with protein expression and purification and protein NMR spectroscopy.

Interested applicants should submit their CVs, contact information for three references and descriptions of previous research experience, to Voula Kanelis ([voula.kanelis@utoronto.ca](mailto:voula.kanelis@utoronto.ca)).

#### **INTEGRATIVE NEUROSCIENCE POSTDOCTORAL POSITIONS**

Multiple postdoctoral positions available immediately for recent PhDs with strong background in molecular neuroscience, electrophysiology, neuroanatomy, or mouse genetics and behaviors. The successful applicant must have completed a PhD degree within three years and have first author publication(s). Projects involve gene manipulation, plasticity, memory, anxiety and chronic pain. May need travel between Canada and Asia. Please fax or e-mail resumes to Dr. Min Zhuo at the Department of Physiology, University of Toronto. E-mail: [min.zhuo@utoronto.ca](mailto:min.zhuo@utoronto.ca).

#### **CANADA**

#### **POSTDOCTORAL FELLOW IN PROTEOMICS – UNIVERSITY OF OTTAWA**

We have an immediate opening for a post-doctoral fellow interested in the application of proteomics and microfluidic technologies for the discovery by proteomics and the screening of biomarkers in cardiovascular and Alzheimer diseases. The role of the postdoctoral fellow will be to develop methods for the analysis of biomarkers using the microfluidic devices with mass spectrometry and to participate in research projects in cardiovascular and Alzheimer diseases. The ideal candidate will hold a PhD Degree in analytical chemistry or biochemistry, and will have solid expertise in microfluidic, nanoflow chromatography, bioanalytical technologies and biological mass spectrometry. The successful candidate will join a dynamic research team ([http://www.oisb.ca/members/member\\_daniel\\_figeys.htm](http://www.oisb.ca/members/member_daniel_figeys.htm)) in a recently built and well-equipped facility at the Ottawa Institute of Systems Biology ([www.oisb.ca](http://www.oisb.ca)) at the University of Ottawa. Applicants should include a CV, a brief description of present research activities and the names and contact information for three references with their application materials. We thank all applicants in advance. Only the candidates selected for interviews will be contacted. Interested candidates may send their applications to Dr. Daniel Figeys at [sysbio@uottawa.ca](mailto:sysbio@uottawa.ca).



University of Toronto Neuroscience Program Newsletter  
May 2011 | Volume 27 | Number 9

## FUNDING ANNOUNCEMENTS

### CENTRES OF EXCELLENCE IN NEURODEGENERATION

Estimates from the WHO suggest that by 2040 age-associated neurodegenerative disorders will be the world's second leading cause of death, after cardiovascular diseases and overtaking cancer. Age-associated neurodegenerative disorders are complex and their aetiology is largely unknown. Research is therefore needed across a broad spectrum, addressing the underlying mechanisms of neurodegeneration from preclinical laboratory studies, through clinical and population studies to public health, ultimately leading to improvements in diagnosis, treatment or prevention of neurodegenerative disease.

A major obstacle to the integration of research on neurodegenerative disorders is the relative lack of common standards and mechanisms for efficient validation of potentially important findings in preclinical, clinical and population-based studies. Such problems are best and most rapidly addressed by utilising investments in existing large centres and institutes where there is the necessary critical mass of resources and expertise to immediately focus on these key barriers to progress.

To this end, on 10th June 2010, the Canadian Institutes of Health Research (CIHR), the Deutsches Zentrum für Neurodegenerative Erkrankungen (DZNE, Germany) and the Medical Research Council (MRC, UK) launched a funding initiative to establish collaborative activity between national centres of excellence in research into neurodegenerative disorders. These founding members were joined by the Department of Economy, Science and Innovation (Flanders Institute for Biotechnology, VIB, Flanders, Belgium), the Health Research Board/Science Foundation Ireland (HRB/SFI), and the Ministry of Health Italy (Ministero della Salute, MDS) in October 2010.

Funds Available: CIHR's and partner contribution to the amount available for this initiative is subject to availability of funds. Should CIHR or partner funding levels not be available or be decreased due to unforeseen circumstances, CIHR and partner reserve the right to defer or suspend payments to grants received as a result of this funding opportunity.

The initiative will make up to £4.8m (equivalent to €5.8m or CA\$7.2m) available to the call. It aims to provide funds for pilot projects up to 24 months in duration, with total combined costs across collaborating CoEs typically in the range of £250-£500k (equivalent to €300-€600 or CA\$375-CA\$750).

Each funding partner will fund the research component performed by researchers associated with CoEs / institutions within their respective jurisdiction, according to their standard Terms and Conditions. Partner contributions to the call: CIHR Canada CA\$1.5 (£1m) DZNE, Germany €1.2m (£1m), MRC, UK £1m, VIB, Flanders Belgium €1m (£0.8m), HRB/SFI, Ireland €0.6m (£0.5m), MDS, Italy €0.6m (£0.5m).

Closing date for submissions is 4pm on Thursday 9th June (London time). Applications will not be accepted after this time.

For more information, please consult the Centres of Excellence in Neurodegeneration (COEN) website at <http://coen.org/home.html>.

### FOX FOUNDATION FOR PARKINSON'S RESEARCH,



Rapid Response Innovation Awards - Edmond J. Safra Core Program for PD Research. To promote testing of novel hypotheses, funding from our Rapid Response Innovation Awards program quickly supports high-risk, high-reward projects with little to no existing preliminary data, but potential to significantly impact our understanding or treatment of PD.

**Deadline for Applications: Continuous**

### CEREBRAL PALSY INTERNATIONAL RESEARCH FOUNDATION



Research Grant Program. The foundation provides funding for pilot studies on research important to the prevention and treatment of cerebral palsy, including improvement in the quality of life of persons with disabilities due to cerebral palsy and closely related developmental brain disorders. This broad research agenda includes basic, clinical and applied research in the biomedical and bioengineering sciences.

**Deadlines for Submissions: Continuous**

**SUBMISSION & SUBSCRIPTION INFORMATION** If you would like to subscribe to the RSS feed for up-to-date information weekly, please point your reader at the following urls: News | <http://neuroscience.utoronto.ca/Page745.rss> | Seminars | <http://neuroscience.utoronto.ca/Page744.rss> | Conferences | <http://neuroscience.utoronto.ca/Page861.rss> Email: [p.neuroscience@utoronto.ca](mailto:p.neuroscience@utoronto.ca) | Fax: 416-978-8511 Attn: UT Neuroscience Program Newsletter Submissions to the newsletter must be made by the 25th of the previous month. Previous issues of the newsletter are posted on our website at: <http://www.neuroscience.utoronto.ca/newsletter> To unsubscribe, please email [p.neuroscience@utoronto.ca](mailto:p.neuroscience@utoronto.ca) with subject line "unsubscribe from UTNP Newsletter"