

Collaborative Program in Neuroscience (CPIN)

University of Toronto

Newsletter – Vol. 32, No. 4 – December 2015

Featured In This Issue

Season's Greetings CPIN would like to wish all members a happy holiday season.

Call for CPIN 2016-2017 Distinguished Lecturer Nominations CPIN trainee & faculty members are welcome to nominate potential speakers for the 2016-2017 Distinguished Lectureship Series. The nominations will be reviewed by the CPIN Executive Committee for approval. Your participation is important and contributes to the multidisciplinary nature of the lectureship. The online form is provided at:

http://www.neuroscience.utoronto.ca/events/lectureship/distinguished_lecturer_nominations.htm

Welcome New CPIN Faculty Members We would like to welcome **Dr. Elaine Biddiss** (Assistant Professor, Institutes of Biomaterials & Biomedical Engineering & Rehabilitation Sciences), **Dr. William Mark Erwin** (Assistant Professor, Institute of Medical Science & Surgery), **Dr. Meng-Chuan Lai** (Assistant Professor, Psychiatry), **Dr. Emily Nalder** (Assistant Professor, Occupational Science and Occupational Therapy) and **Dr. Catriona Steele** (Professor, Speech-Language Pathology, Institutes of Rehabilitation Sciences & Biomaterials and Biomedical Engineering) to the CPIN community. Please see page 2 for more details.

News – CPIN Faculty Members We would like to welcome **Dr. Angela Colantonio** (Director, Rehabilitation Sciences Institute; Professor, Rehabilitation Sciences Institute, Department of Occupational Science & Occupational Therapy & Dalla Lana School of Public Health) as a new member of the CPIN Board of Directors. We would also like to welcome **Dr. Xi Huang** (Assistant Professor, Molecular Genetics) as a new faculty member from the Department of Molecular Genetics to the CPIN community. Please see page 3 for more details.

Welcome New CPIN Students Please see page 4 for details.

News – CPIN Trainees We would like to welcome postdoctoral fellow **Dr. Vijayalakshmi Easwar** (Archie's Cochlear Implant lab, Hospital for Sick Children; Supervisor: Dr. Karen Gordon) to the CPIN community. Please see page 5 for more details.

CPIN Special Undergraduate Outreach Event The CPIN Graduate Special Event Group is organizing undergrad outreach activities and will partner with the Neuroscience Association for Undergraduate Students (NAUS) to develop a joint undergraduate mentorship program (JUMP). The first event is organized in collaboration with the Human Biology Department and will take place on **Thursday, January 14th, 2016 at MSB 2172 between 4-6 pm**. Please see page 6 for details.

Neuroscience Opportunities Please see page 6 for details.

2015-16 CPIN Distinguished Lectureship Series

<http://www.neuroscience.utoronto.ca/events/lectureship.htm>



Speaker | **Dr. John Disterhoft**, Ernest J. and Hattie H. Magerstadt Memorial Research Professor of Physiology and Weinberg College of Arts & Sciences, Northwestern University Feinberg School of Medicine

Title | *Neuronal Changes in Forebrain during Acquisition and after Consolidation of Trace Eyeblink Conditioning*

Date | **Wednesday, December 9, 2015**

Time | 4:00 pm

Location | Rm. 2170, Medical Sciences Building, 1 King's College Circle, U of T

Host | Dr. Kaori Takehara-Nishiuchi, Associate Professor, Departments of Psychology, Cell and Systems Biology and the Institute of Medical Science, U of T

Co-sponsor | Department of Psychology, U of T

CPIN Newsletter

Zhong-Ping Feng
Director
CPIN
Graduate Studies

Suhail Asrar
Administrator
CPIN Office

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Lead Faculty
Faculty of Medicine

CPIN Participating Units
Applied Psychology & Human Development
Biochemistry
Biomaterials & Biomedical Engineering
Cell & Systems Biology
Computer Science
Dentistry
Laboratory Medicine & Pathobiology
Medical Biophysics
Medical Science
Music
Pharmaceutical Sciences
Pharmacology & Toxicology
Physiology
Psychology
Rehabilitation Science

Contributors:

Human Biology Program
Krembil Research Institute
St. Michael's Neuroscience Research Program

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Welcome New CPIN Faculty Members



Dr. Elaine Biddiss

Assistant Professor, Institute of Biomaterials & Biomedical Engineering & Graduate Department of Rehabilitation Science

Research Interests: Active video gaming for activity promotion Interactive media in healthcare spaces Virtual Reality Therapy (VRT) Emotion-Aware Assistive Technology

Research Profile Link: <http://research.hollandbloorview.ca/ResearchCentresLabs/PEARLLab>



Dr. William Mark Erwin

Assistant Professor, Institute of Medical Science & Surgery

Research Interests: Degenerative spinal disease, degenerative disc disease, stem cell therapeutics, ALS, neural repair

Research Profile Link: <http://orthopaedics.utoronto.ca/faculty/list/erwin.htm>



Dr. Meng-Chuan Lai

Assistant Professor, Psychiatry

Research Interests: Child and adolescent psychiatry sex and gender social cognitive neuroscience developmental neuroscience neurodevelopmental disorders autism ADHD anxiety & depression developmental psychology resilience

Research Profile Link:

http://www.camh.ca/en/research/about_research_at_CAMH/scientific_staff_profile/Pages/Meng-Chuan-Lai.aspx



Dr. Emily Nalder

Assistant Professor, Occupational Science and Occupational Therapy

Research Interests: Community integration following acquired brain injury cognitive rehabilitation, eHealth

Research Profile Link: <http://ot.utoronto.ca/about/core-faculty/emily-nalder/>



Dr. Catriona Steele

Professor, Speech-Language Pathology, Rehabilitation Sciences Institute & the Institute for Biomaterials and Biomedical Engineering

Research Interests: Swallowing neurophysiology and rehabilitation

Research Profile Link: www.steeleswallowinglab.ca

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News - CPIN Faculty Members

http://www.neuroscience.utoronto.ca/communications/news_cpिन_faculty_members.htm



We would like to welcome **Dr. Angela Colantonio** (Director, Rehabilitation Sciences Institute; Professor, Rehabilitation Sciences Institute, Department of Occupational Science & Occupational Therapy & Dalla Lana School of Public Health) as a new member of the CPIN Board of Directors. Dr. Colantonio was also recently elected as a fellow of the Canadian Academy of Health Sciences (CAHS).

Link to CAHS Announcement:

<http://cahs-acss.ca/wp-content/uploads/2015/09/2015-CAHS-Elected-Fellows1.pdf>

Dr. Angela Colantonio holds a Canadian Institutes of Health Research (CIHR) Research Chair in Gender, Work and Health focusing on brain injury. She is also a Senior Scientist at Toronto Rehabilitation Institute leading the Acquired Brain Injury and Society Team. Dr. Colantonio received her PhD in Epidemiology and Public Health from Yale University, and an MSc in Community Health and a BSc in Occupational Therapy from the University of Toronto.

Dr. Colantonio leads a broad, internationally recognized program of research on acquired brain injury (ABI) examining ABI in the population, targeting injury prevention and post-acute care with a special focus on how ABI impacts the lives of those most vulnerable to health service inequities, such as homeless and criminalized people and older adults. Dr. Colantonio's research program also examines work-related TBI, long term outcomes among women with ABI, the impact of sex/gender on outcomes, and innovative approaches to intervention.

Dr. Colantonio has authored over 200 publications and has given over 300 presentations to research, clinical and lay audiences; she has been principal investigator on 64 grants and co-investigator on 42 grants. In 2014, she received a Graduate Faculty Teaching Award from the Faculty of Medicine at the University of Toronto for her role as a Graduate Student Mentor. Additional awards include a Leadership Award from the Ontario Rehabilitation Research Advisory Network and a national Research Award from the Brain Injury Association of Canada. Dr. Colantonio is also the first Canadian to be awarded the 2015 Robert L. Moody Prize, which is presented for Distinguished Initiatives in Brain Injury Research and Rehabilitation by the University of Texas Medical Branch School of Health Professions. She currently serves on the Board of Brain Injury Canada.



The Colantonio Lab



We would like to welcome **Dr. Xi Huang** (Assistant Professor, Molecular Genetics) as a new faculty member from the Department of Molecular Genetics to the CPIN community.

Dr. Xi Huang is a Scientist of the Developmental & Stem Cell Biology Program at The Hospital for Sick Children, and a Principal Investigator at the Arthur and Sonia Labatt Brain Tumour Research Centre. Dr. Xi Huang received his PhD in Developmental Biology at Vanderbilt University by studying Sonic hedgehog signaling in brain development and tumorigenesis. He then completed a postdoctoral fellowship in Physiology at University of California, San Francisco (UCSF) by studying potassium channel function in medulloblastoma, the most common malignant pediatric brain tumor.

Dr. Huang has long-standing interest in translating his basic science discoveries into novel therapy for patients. Recent examples include the identification of a US FDA-approved anti-psychotic drug as a novel potassium channel blocker with marked efficacy in treating medulloblastoma in preclinical mouse models and a patient. Dr. Huang started his research laboratory at SickKids since April 2015, and his team focuses on studying the function of ion channels in brain development and tumorigenesis using multi-disciplinary approaches including Drosophila and mouse genetics, xenograft modeling, cell biology, electrophysiology and in vivo pharmacology.

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Welcome New CPIN Students

Surname	First Name	Home Unit	Degree	Supervisor(s)
Arshad	Hamza	BCM	MSc	Joel Watts
Audrain	Samantha	PSY	PhD	Mary Pat McAndrews
Binko	Mary	PSL	MSc	Evelyn Lambe
Burke	Charles	IMS	MSc	Carmela Tartaglia
Ceniti	Amanda	IMS	MSc	Sidney Kennedy
Da Silva	Susana	IMS	MSc	George Foussias
Decker	Alexandra	PSY	MA	Donald Mabbott
DuBois	Denise	REHSC	PhD	Emily Nalder & Helene Polatajko
Gauvreau	Samantha	PSY	MA	Donald Mabbott
Jacob	Alexander	PSY	MA	Sheena Josselyn
Kowalchuk	Chantel	IMS	MSc	Margaret Hahn
Lau	Angus	BCM	MSc	Joel Watts
Li	Feiya	PSL	MSc	Hong-Shuo Sun
McEwen	Elizabeth	APHD	MA	Kang Lee
Mihaescu	Alexander	IMS	MSc	Antonio Strafella
Mogadam	Alexandra	IMS	MSc	Elizabeth Pang
Mossad	Sarah	PSY	PhD	Margot Taylor
Nabbouh	Fadl	IMS	MSc	Anurag Tandon
Parker	Nadine	IMS	MSc	Tomas Paus
Ramsaran	Adam	PSY	MA	Paul Frankland
Rodgers	Christopher	IMS	MSc	Michael Fehlings
Saeed	Usman	IMS	MSc	Mario Masellis & Sandra Black
Sebanayagam	Vinoja	IMS	MSc	Jennifer Ryan & Randy McIntosh
Shah	Kairavi	IMS	MSc	Mark Erwin
Stojic	Filip	IBBME	MASc	Tom Chau
Taghdiri	Foad	IMS	MSc	Carmela Tartaglia
Yu	Xiaotian (Tag)	CSB	MSc	Kaori Takehara

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News - CPIN Trainees

http://www.neuroscience.utoronto.ca/communications/news_cpिन_students.htm



We would like to welcome postdoctoral fellow **Dr. Vijayalakshmi Easwar** (Archie's Cochlear Implant lab, Hospital for Sick Children; Supervisor: Dr. Karen Gordon) to the CPIN community.

Dr. Easwar completed her PhD at the National Centre for Audiology, Western University, Canada, under the supervision of Drs. Susan Scollie and David Purcell. During her dissertation work, she developed a novel electrophysiological technique to objectively measure hearing aid benefit. This tool is intended for use in infants with hearing loss who are fitted with hearing aids at a very young age. Dr. Easwar's thesis work was recognized with awards from the American Academy of Audiology and International Symposium in

Auditory Implants, and she has been invited to present her work in conferences pertaining to hearing science. She was also endorsed as Western University's candidate for the 2015 Council of Graduate Schools (CGS)/ProQuest Distinguished Dissertation award in the Biology and Life Sciences category.

Dr. Easwar is currently a postdoctoral research fellow at the Archie's Cochlear Implant lab (Supervisor: Dr. Karen Gordon) in the Hospital for Sick Children (Neurosciences and Mental Health). Her research focuses on binaural hearing in children with bilateral cochlear implants measured using electrophysiological methods. She is a recipient of the SickKids Restrcomp postdoctoral fellowship and has so far won two travel awards to present her postdoctoral work at international conferences.

Dr. Easwar is an audiologist and advocates hearing conservation, early intervention and evidence based practice. Alongside her postdoctoral fellowship, she contributes to the Canadian Academy of Audiology's Science and Education Committee, and is also the Director of Research of Audiology India, a not-for-profit organization aiming to improve hearing health care in India.

Select publications:

Easwar, V., Purcell, D. W., Aiken, S. J., Parsa, V., & Scollie, S. D. (2015). Evaluation of Speech-Evoked Envelope Following Responses as an Objective Aided Outcome Measure: Effect of Stimulus Level, Bandwidth, and Amplification in Adults With Hearing Loss. *Ear and Hearing*, 36(6), 635-652. doi: 10.1097/AUD.0000000000000199.

Easwar, V., Beamish, L., Aiken, S., Choi, J. M., Scollie, S., & Purcell, D. (2015). Sensitivity of envelope following responses to vowel polarity. *Hearing Research*, 320, 38-50. doi:10.1016/j.heares.2014.11.008.

2015-16 CPIN Neurotalk

<https://www.facebook.com/groups/CPINneurotalk/>

<http://www.neuroscience.utoronto.ca/events/Neurotalk.htm>

Our discussion this month is inspired by curiosity to understand the landscape of one's remembered thoughts. Memories may be positive recollections of time well spent, or they may trigger strong negative emotions from prior discomfort or trauma. Memory-expert Elizabeth Loftus once said, "Memory, like liberty, is a fragile thing." What exactly does this mean? Is it possible to manipulate one's memories?

Many people have been in situations which they later would rather forget. Horrific automobile accidents. Terrorist attacks. Relationship breakups. How may modern neuroscience be used one day to change unwanted memories? When ethically can this be useful or disastrous? Where are we now, and where are we going?

Join us for a stimulating discussion on the neuroscience of erasing memory.

Location: GSU Pub (16 Bancroft Ave.), upstairs portion

Date & time: Thursday, December 3rd at 5:30pm

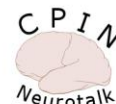
Moderated by Julianne Baarbé, Institute of Medical Science, U of T

Collaborative Program in Neuroscience (CPIN) Neurotalk presents

Neurotalk 16

Exploring the hidden mind of forgotten memories

Moderated by Julianne Baarbé
Institute of Medical Science
University of Toronto



5:30PM, December 3rd

Upstairs at the GSU Pub, 16 Bancroft Ave.
Join us for a drink and discussion and enjoy an evening about neuroscience!

- Topics of discussion will include:
- * Is it possible to manipulate one's memories?
 - * How may modern neuroscience be used one day to change unwanted memories?
 - * When ethically can this be useful or disastrous?
 - * Where are we now and where are we going?



for more information visit
[facebook.com/groups/CPINneurotalk/](https://www.facebook.com/groups/CPINneurotalk/)
[neuroscience.utoronto.ca/events/Neurotalk](http://www.neuroscience.utoronto.ca/events/Neurotalk)

<http://www.neuroscience.utoronto.ca/communications/newsletter.htm>

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The CPIN Graduate Special Event Group is organizing undergrad outreach activities and will partner with the Neuroscience Association for Undergraduate Students (NAUS) to develop a joint undergraduate mentorship program (JUMP). The first event is organized in collaboration with the Human Biology Department and will take place on **Thursday, January 14th, 2016 at MSB 2172 between 4-6 pm.**

During the first hour, there will be a panel discussion where 6-8 CPIN graduate students can address questions from undergraduate students on their home departments, application process and graduate school experience. The panel will be followed by a mixer/networking event where graduate and undergraduate students can interact in an informal setting. Light refreshments will be provided.

Upcoming Events

U of T Neuroscience Seminars

<http://neuroscience.utoronto.ca/events/seminar.htm>

Conferences and Meetings

http://neuroscience.utoronto.ca/events/Conf_M.htm

Neuroscience Opportunities

http://www.neuroscience.utoronto.ca/communications/Positions_Available.htm

MSc or PhD position

Centre de Recherche du CHU de Québec, Axe Neurosciences

Québec, Canada

Description: The goal of the Neurorestorative effects of cystamine in the context of Parkinson's disease project is to deepen our understanding of the mechanisms of action underlying the beneficial effects of this molecule using in vitro and in vivo models. Moreover, we are working closely with the industry in order to test the molecule in a clinical setting. The techniques to be employed are numerous and include the use of animal models of PD (injection of neurotoxins and transgenic mice), immunohistochemistry and immunofluorescence, flow cytometry, cell culture (cell lines and primary cells from the central nervous system), neuropharmacology, and various techniques of molecular biology and biochemical analyses.

For further information, please see the attachment on the CPIN website:

http://www.neuroscience.utoronto.ca/communications/Positions_Available.htm

MSc, PhD and Postdoctoral positions

Centre de Recherche du CHU de Québec, Axe Neurosciences

Québec, Canada

Description: The purpose of the Prion-like protein spread in neurodegenerative diseases of the CNS and development of therapeutic approaches project is thus to study various mechanisms of transmission of pathological mHtt protein using a multidisciplinary approach which include the use of transgenic animals, immunohistochemistry/immunofluorescence, confocal microscopy and two-photon real time intravital imaging, flow cytometry, cell culture, and various molecular biology techniques and biochemical analyses.

For further information, please see the attachment on the CPIN website:

http://www.neuroscience.utoronto.ca/communications/Positions_Available.htm

Reminders

Volunteer Opportunity at the 2016 Toronto Brain Bee CPIN Faculty and trainee members are invited to volunteer at the **18th Annual Toronto Brain Bee** that will be held on **Friday, April 1, 2016** at the University of Toronto. Please fill out the online volunteer form at <http://www.neuroscience.utoronto.ca/events/brainbee.htm>

Submissions for News Updates The CPIN Office requests trainee and faculty members to submit updates in research discoveries, events, and other achievements involving CPIN members. Please send your submissions to p.neuroscience@utoronto.ca

<http://www.neuroscience.utoronto.ca/communications/newsletter.htm>