Learn about the uOBMRI

The University of Ottawa Brain and Mind Research Institute (uOBMRI) is Ottawa’s largest collection of basic researchers and clinician scientists that are focused on brain and mind related health. The uOBMRI helps orchestrate research in a collaborative and innovative fashion by overcoming the barriers that exist between research at the basic and clinical levels. It does so by helping to coordinate research efforts of its research members at the various uOttawa faculties, resident hospitals, affiliated networks and local research institutes.

Our Vision
To create one of the world’s top neuroscience centres for the treatment of brain disorders.

Our Mission
To develop new therapies, by harnessing the brain’s internal potential for regeneration, protection, and recovery, and to implement fundamental changes in patient care.


Paving the Way into the Future

This had been an exciting year! The uOBMRI is hard at work and has laid the foundational framework required for creating positive impact. The uOBMRI has successfully established the Scientific Strategic Plan by effectively identifying key collaborative areas of strength and priority, which informed and initiated central scientific projects and validated great collaborations.

We are looking forward to developing further endeavours.

SEMINAR INFORMATION

To keep the doors of collaborative networking and scientific discussion open, the uOBMRI has amalgamated a comprehensive list of all the Brain and Mind related seminars being held throughout Ottawa.

For more information, please visit our website at: http://www.uottawa.ca/brain/training

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Research Pillars

At the start of 2014, the uOBMRI sat with many stakeholders and evaluated the local neuroscience scene, with a focus on establishing a scientific strategic plan.

From these discussions stemmed the initial research plan that identified the uOBMRI strengths and areas of expertise.

The uOBMRI is proud to announce its 5 Pillars of Research

**Integrated Parkinson's Care Network (IPCN)**

This is a unique program where patients will meet with a healthcare coordinator that will create a personalized healthcare portfolio by: 1) identifying all the aspects (movement, dementia, depression etc.) of their everyday living conditions and 2) then linking the patient to the proper hospital/community resources. Through this process, patients will provide information that will help advance PD-related health services and research and the results of their health outcomes will determine the effectiveness of this program. **This program is currently in Phase I of development.**

**Early interventional Rehabilitation care for Stroke (ERS)**

This program will help determine whether management of depression, dementia and physical rehabilitation in the early phases of post-stroke care can affect the long-term recovery of patients. Rather than waiting for patients to enter rehabilitation programs, this program will bring rehabilitation to the hospitalized patient almost immediately; a critical time which research indicates that the brain has the greatest capacity for self-renewal and healing following a stroke. **Patients have already enrolled in this program!**

**Vision 20X20**

The uOBMRI supports this innovative program for suicide prevention which brings together multiple hospital and community partners including the Community Suicide Prevention Network to reduce the local suicide rate by 20% in the next 5 years (2020). This is the first time that a strategy for reducing the suicide rate in a North American urban centre has ever been attempted. This program integrates: community education, research of populations at risk, early monitoring programs, effective follow-up initiatives and the implementation of guidelines for suicide related media coverage. **The monitoring system, Phase I of the project, has been established.**

**Protect and Repair (PandR)**

This program is centred on the basic scientific research aspect of brain disorders. It focuses on understanding how brain circuit connections are altered in disease and how protective and regenerative strategies can improve brain circuit function. The early phases of this project will have a particular emphasis on the primary health-related conditions identified by the uOBMRI: depression, stroke and Parkinson's disease. **Funding for the University of Ottawa Centre for Neural Dynamics is underway and has supported research in: the computational analysis of neural activity, networking of the prefrontal cortex and optogenetics for mapping and treatment of psychiatric disorders.**

**Bench to Bedside & Back - Neuromuscular Disease (B3 for NMD)**

This initiative unites Ottawa's world-renowned basic and clinical neuromuscular disease (NMD) researchers to work towards unveiling the mechanisms by which NMDs are caused. It will efficiently advance promising therapies from discovery phases to clinical trial settings and transforming healthcare strategies for patients affected by NMD. **The rejuvenation of the University of Ottawa Centre for Neuromuscular Disease is underway! See pg.7 for more details.**

### Funding Successes

**Ontario Brain Institute Research Funding**

The Ontario Brain Institute (OBI) has awarded 2 large scale grants that are basic and clinical in nature to Ottawa-based research teams. A total of **$1.3 Million** from the OBI with matching funds from the uOBMRI (through the uOttawa Development Team and the Faculty of Medicine), will be dispersed by the uOBMRI to include its networks.

The first is through their **Ontario Neurodegenerative Disease Research Initiative (ONDRI) Basic Science Program (BSP)** and was awarded for the submission, “**Generation and analyses of novel preclinical models of Parkinson’s disease,**” to local researchers within the uOBMRI to develop better animal models of disease for preclinical testing and monitoring or disease progression which provide insight to causes, outcomes and the validation of therapeutic targets and treatment strategies.

The second is through their **Ontario Neurodegenerative Disease Research Initiative (DNORD), Clinical Research Program,** for the submission entitled, “**The Role of Ischemic Vasculopathy in Adult Onset Neurodegenerative Disease and the creation of the Dementia Network of Ontario Research Database (DNORD),**” which is being led through our partner - The Ottawa Hospital’s Parkinson’s Disease and Movement Disorders Clinic and Stroke Prevention Clinic. This work focuses on cognitive decline and will help to define genetic outcomes in well characterized patients, while scanning for commonalities between PD and stroke cases.

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Brain Health Awareness Week

In 2014, the uOBMRI proudly hosted its very first, annual Brain Health Awareness Week.

This exciting week kicked off with open discussion from three Canadian athletes, who delved into their personal stories and struggles with depression and mental illness. They also helped re-iterate the importance of both basic and clinical research in the fight against mental health conditions.

Day two featured the Complicated Brain: Brain Anatomy, Brain Imaging and Brain Diseases in partnerships with the University of Ottawa - Faculty of Medicine’s Mini-Medical School.

This was followed on Wednesday with Mayor Jim Watson’s official proclamation of September 22nd – 26th, 2014 as the city’s “Brain Health Awareness Week.”

Thursday evening session, which featured an open, exciting debate surrounding the topic "Antidepressants: Are they overprescribed and ineffective?"

Friday’s session focused on research discoveries and current efforts with: Dr. Ruth Slack – stem cell regulation for post-stroke recovery, Dr. Dennis Bulman – Care for Rare genetic screening and Dr. Georg Northoff – imaging techniques to diagnose patients with depression.

The week wrapped up on Saturday evening with the 2nd Annual Faculty of Medicine Gala: Abracadabra: A Night of Magic and Medicine, which featured the talented Juno award winning Canadian artist - Serena Ryder.

This year’s Brain Health Awareness Week is shaping up to be quite exciting! Check out the Session Research Themes listed below:

When: Monday, September 14th – Saturday, September 19th, 2015

Where: uOttawa Main Campus, Faculty of Social Sciences Building

Monday – Parkinson’s disease
Tuesday – Stroke
Wednesday – Vision 2020 & Mental Health
Thursday – Neuromuscular Disease
Friday – Open Debate: Stem Cell Therapy
Saturday – Community Event - Yoga & You for Brain Health

More details to come on our website:
http://brainhealthawarenessweek.ca
Brain Health Research Days

On Friday, June 13th, 2014, the uOBMRI hosted its 7th Brain Health Research Day (BHRD) at the Desmarais Building of the University of Ottawa’s Main Campus.

The full day event featured a Keynote address, by Dr. Jean-Pierre Changeux, a professor at the Collège de France, and the Director of the Laboratory of Molecular Neurobiology and Institut Pasteur (centre, front). He presented an address entitled, “Theoretical and empirical approaches to conscious processing: from molecular biology to cognition.”

The program also featured seminars presented by local researchers covering topics ranging from electrophysiology to mental illness and neurogenesis.

Awards and Winners

The day was also filled with much excitement, as prizes were awarded to trainees who demonstrated excellence in presentation and research. Congratulations to our 2 oral presentation winners, who were selected to present a seminar: Dr. Cynthia Solek, a post-doctoral fellow from the laboratory of Dr. Marc Ekker and Dr. Grace Iyirhia, a doctoral graduate from the laboratory of Dr. David Park.

Also, we would like to congratulate the owners of our poster presentations. The best undergraduate poster award recipient was Lydia Richardson, the best Master’s level poster award winner was Karah Lee, the best junior (1st and 2nd year in the program) PhD poster award winner was Maheen Ceizar, while the best poster award in the senior Phd (3+ years in the program) category was James Jun. The best postdoctoral fellow and research associate poster award prize winner was Timal Kannangara. The Brain Health Research Day Image Contest Award was presented to Sébastien Maillé for his submission.

Brain Health Research Day
June 2015 Event

Please keep an eye out for announcements and registration for our next semi-annual Brain Health Research Day (June 12, 2015).
December - Brain Health Research Day

The December Semi-Annual Brain Health Research Day and Joint uOBMRI / Neurosciences Program Holiday Party was one to remember!

This evening hosted our special keynote guest speaker Dr. Michel Cayouette from l’Institut des recherches cliniques de Montréal.

Dr. Cayouette presented a very well received seminar titled “Mechanisms of cell fate decisions in the developing nervous system: lessons from the retina.” The talk was followed by a much appreciated reception and poster presentation, where trainees from the various research faculties presented their work in an open, non-competitive manner, and had the chance to network with professionals and researchers from across the different partnership organizations.

The evening progressed with a dinner followed by an open dance floor filled with scientists, all set on burning off the calories! It was great to see everyone relaxed and enjoying their time!

The Antoine Hakim Keynote Lecture

The uOttawa Brain and Mind Research Institute announced that the June Semi-Annual Brain Health Research Day keynote lecture is now officially “The Antoine Hakim Lecture” in honour and recognition of the founding-director of the uOBMRI; a great visionary and leader, Dr. Antoine Hakim.

(Left to Right) Dr. Mary Senterman - wife of Dr. Hakim, Dr. Koszycki, Dr. Jasmin, Dr. Antoine Hakim, Dr. Bradwejn, Dr. Cayouette, Dr. Park, Dr. Nemer, Dr. Grimes and Dr. Lagace celebrate the announcement.
On Friday, November 7th, 2014, the Parkinson Research Consortium (PRC) celebrated its 10 year anniversary!

The PRC was co-founded a decade ago by Drs. David A. Grimes, the Current Division head of neurology at The Ottawa Hospital and the Director of the Parkinson’s Disease and Movement Disorder Clinic, and David S. Park, the current Director of the uOttawa Brain and Mind Research Institute.

Celebratory Event Highlights

The evening continued with a set of reflection on the times – “Progress in Motion;” a theme that has been incorporated throughout all the PRC initiatives.

A Focus on the Past - with a presentation by doctoral student, Chao Chang, from the Dr. Paul Albert’s laboratory of the Neurosciences Program at the Ottawa Hospital Research Institute (OHRI).

Followed by a update on the present – which featured the keynote address titled “Stimulating the brain: The current state and future of neuromodulation for Parkinson’s disease,” by the recently recruited Dr. Adam J. Sachs, Neurosurgeon at the Department of Surgery, The Ottawa Hospital.

And provided a glimpse into the future – As Dr. David Grimes introduced the Integrated Parkinson Care Network (IPCN) to the broader Parkinson’s community, shedding light on the exciting, impactful endeavours ahead.

To stay in the loop, the PRC holds its “Progress in Motion” scientific seminars on the last Friday of every month, at 3:30pm in the RGN Neuroscience Seminar Room 1421.

Fellowship Awards

Congratulations to all of the 2014 Awardees!

- Christopher Rudyk – Toth Family Fellowship presented by: Mr. John Toth
- Megan Fitzpatrick – Audrey Grant Research Fellowship presented by: Ms. Bea Robertson
- Chadwick Boulay – Crabtree Family Fellowship presented by: Mr. Richard Shantz
- Jungwoo Yang – UCB Fellowship presented by: Mr. Bron Vasic
- Nour Yahfoufi – Shelby Hayter Fellowship presented by: Ms. Shelby Hayter

The evening featured special guest and Master of Ceremonies, CTV Ottawa News Sportscaster, Terry Marcotte.
Centre for Neuromuscular Disease

CNMD Scientific Launch

The 2014 University of Ottawa Centre for Neuromuscular Disease (CNMD) Scientific Launch was held on Friday, October 24th, 2014 at The Ottawa Hospital, General Campus.

CNMD basic scientists and clinician researchers presented their work at the Launch, highlighting the quality and quantity of innovative breakthroughs in NMD research in Ottawa.

The “Graham Mainwood Endowed Lecture” was presented by the dynamic keynote speaker: Dr. Elizabeth McNally MD, PhD, Director of the Cardiovascular Genetics Clinic, University of Chicago.

Trainees had an opportunity to showcase their research through a poster session, and the top trainees demonstrating the highest quality received awards.

Upcoming Events

Community focused events:

To support the local NMD community, the CNMD has initiated planning for a “Community-focused CNMD Symposium” and “CNMD Scientist for a Day”.

The former event will provide an informal forum for adult patients and parents to interact with CNMD researchers, and learn about our Centre and our research. The latter event is designed more for children affected with NMD to experience life as a scientist.

Dates: To Be Determined
Key an eye on our website for more information!

Scholarships in Translational Research (STaR) Awards

Congratulations to the 2014 recipients:

- Dr. Charles Meunier, of Dr. Michael Rudnicki’s Laboratory,
- Emma Bondy-Chorney, of Dr. Bernard Jasmin’s Laboratory,
- Benjamin Pryce, of Dr. Luc Sabourin’s Laboratory,
- Andréanne Didillon, of Dr. Jocelyn Côté’s Laboratory, and
- Ellias Horner, of Dr. Alexander Blais’s Laboratory.

KEEP AN EYE ON

The CNMD website to learn more about the exciting advancements in NMD research:

http://www.uottawa.ca/brain/research/neuromuscular-disease
http://thinkottawamedicine.ca/research/neuromuscular/
Achievements & Highlights

Congratulations to our very own

Dr. Tracy Vaillancourt, PhD
Professor and Canada Research Chair, Children’s Mental Health and Violence Prevention
Counselling, Faculty of Education
School of Psychology, Faculty of Social Sciences; University of Ottawa.

For her acceptance to: The Royal Society of Canada’s College of New Scholars, Artists and Scientists.

MEET OUR NEWEST RECRUITS

Dr. Kathleen Pajer
The new Chief of Psychiatry at CHEO:
http://www.cheo.on.ca/en/KathleenPajer

Dr. William Gardner
Senior Scientists at CHEO Research:
http://www.cheo.org/en/researchers?id=122

SEND US YOUR NEWS HIGHLIGHTS

The uOBMRI is proud of each and every member of this institute!

If you have news, highlights, achievements or stories that you wish to share with us and your fellow colleagues, please send them to:

Elizabeth Abdel-Messih
eabdelme@uottawa.ca

We love to hear from you and share your successes!

News will be featured on our website and in our Newsletter.

For all other uOBMRI related inquiries, please

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OUR PARTNERS AND AFFILIATED NETWORKS

OUR PARTNERS

- The Ottawa Hospital
- Ottawa Hospital Research Institute
- Children’s Hospital of Eastern Ontario (CHEO)
- CHEO Research Institute
- The Royal (Royal Ottawa Health Care Group)
- University of Ottawa Institute of Mental Health Research
- Bruyère Continuing Care
- Bruyère Research Institute
- Hôpital Montfort
- Institut de recherche de l’Hôpital Montfort

AFFILIATED NETWORKS

- Parkinson Research Consortium
- Canadian Partnership for Stroke Recovery
- Centre for Neural Dynamics
- Centre for Neuromuscular Disease
- CARE for RARE