

Institut de recherche sur le cerveau Brain and Mind

Research Institute





The Ottawa | L'Hôpital Hospital | d'Ottawa



In this issue:

PAGE 2 In the NEWS!

Celebrating our Young Scientists

PAGE 3 FUNraising for PD

PAGE 4 Meet Dr. Max Rousseaux

PRC Advisory Board

QUICK FACTS

- Parkinson's disease is a devastating neurodegenerative disease
- Parkinson's disease
 affects 1 in 100 people
 over the age of sixty
- •The exact cause of the disease is unknown
- •The disease was discovered almost 200 years ago and still today there is no cure or proven treatment available

PRC | Year-in-Review

PARKINSON RESEARCH CONSORTIUM

MAY 2018

A message from our Co-Directors

The past year has been incredibly successful as we celebrate exciting new advancements in clinical and research efforts of our PRC members who work in the Parkinson's community in Ottawa.

One of our most exciting success stories is the recruitment of Dr. Maxime Rousseaux, Principal Investigator, Assistant Professor at the uOttawa and the uOttawa Brain and Mind Research Institute and whose work is dedicated to Parkinson's disease. To meet Dr. Rousseaux and learn more about his research, go to page 4.

Tremendous success has also been achieved with the Integrated Parkinson's Care Network (IPCN) founded by Dr. David Grimes. As part of the network, Dr. Tiago Mestre received a \$197,000 New Investigator Award from the Physicians' Services Incorporated Foundation to test this new model of care for people living with Parkinson's disease, highlights on page 2.

We are also very proud of the successes of our members and achievements by our young scientists. We also want to take the opportunity to recognize our committed volunteers who tirelessly work together to support our Parkinson's community by being the champions of our shared cause.

On behalf of all us, whether you are living with Parkinson's, a caregiver, volunteer or working behind the scenes in finding a cure for this debilitating disease... We thank you!

Very special thanks to those involved in the Partners Investing in Parkinson's Research (PIPR) who work very closely to the PRC and are incredibly committed and passionate ambassadors of the cause!



Dr. David Grimes

Division Head, Neurology, Department of Medicine, The Ottawa Hospital, uOttawa Brain and Mind Research Institute, **Co-Director Parkinson Research Consortium**



Director, uOttawa Brain and Mind Research Institute, **Co-Director, Parkinson Research Consortium,** Professor, University of Ottawa

Special Thanks to our **Research Fellowship** contributors!

- The Crabtree Family
- The Toth family •
- Ms. Audrey Grant
- The Poole Family
- The Hayter Family
- The Haffner family



Mr. Larry Haffner

In Memory of

we, at the PRC, will fondly his spirit continues to live in the fellowship that bears his name.









Parkinson's Research IN THE NEWS!



Researchers to test patient-centered approach to Parkinson's care Dr. Tiago Mestre has received a \$197,000 New Investigator Award

from the Physicians' Services Incorporated Foundation

Nature Communications published Dr. David Park's latest paper "PINK1-mediated phosphorylation of LETM1 regulates mitochondrial calcium transport and protects neurons against mitochondrial stress". Learn more in his interview here. Click here to read the paper.





Parkinson's-related protein also protects against infections

New research led by Drs. Michael Schlossmacher and Julianna Tomlinson shows that alpha-synuclein helps protect the body from infections.

Grant helps researchers better study important young-onset Parkinson's protein Dr. Michael Schlossmacher and BioLegend Inc.'s Dr. Peggy Taylor were awarded \$200,000 USD by The Michael J. Fox Foundation for Parkinson's Research

Science published Dr. David Park's team paper " β 2-Adrenoreceptor is a regulator of the α -synuclein gene driving risk of Parkinson's disease" Click here to read the paper.

Click on the links above for details of these exciting stories!

Celebrating Our Young Scientists

PRC Fellowship Awardees 2017

Crabtree Family Fellowship (\$30,000)

Awarded to: Richard Harris (post-doctoral fellow)

Title: Manipulating Mitochondrial Dynamics to Rescue Neural Stem Cell Depletion in Parkinson's Disease Mentor: Dr. Ruth Slack

Toth Family Fellowship (\$15,000)

Awarded to: Olanta Negeri (graduate student)

Title: The Role of the RNA-binding Protein HuD in Lrrk2-dependent Parkinson's Disease Models Mentor: Dr. Derrick Gibbings

Audrey Grant Parkinson's Research Fellowship (\$15,000)

Awarded to: Daniel El Kodsi (graduate student)

Title: Parkin Protein: From its Function in the Brain to a New Model and its Characterization Mentor: Dr. Michael Schlossmacher

Bonnie & Don Poole Parkinson's Research Fellowship (\$15,000)

Awarded to: Katelyn Ventura (graduate student)

Title: Alpha-synuclein Binding Aptamers as Novel Therapeutics in Murine Model of Parkinson's Disease Mentor: Dr. Matthew Holahan

2-year Fellowships (in their 2nd year)

Shelby Hayter Fellowship (\$15,000 for 2 years)

Awarded to: Zachary Dwyer (graduate student)

Title: Inhibition of the CSF-1 Receptor in LRRK2 G2019S Mice to Investigate the CX3CR1 Pathway in an Environmental Toxin Model of Parkinson's Disease

Mentor: Dr. Shawn Hayley

Larry Haffner Fellowship (\$15,000 for 2 years)

Awarded to: Chao-Chia (David) Lu (graduate student)

Title: Real-time Identification of Subcortical Structures During Deep Brain Stimulation Surgery Mentor: Dr. Adam Sachs

The FUN in fundraising!

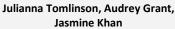
In the past year, the following community events were successfully organized by our many volunteers and all the funds raised went to support our scientist trainees and development of better integrated personalized strategies for our Parkinson's patients. In 2017, our events raised:

- October 22: Parkinson's Benefit Concert at Greenfield's Pub raised over \$12,000 (NEW RECORD!)
- June 25: Lap the Gats for Parkinson's raised over \$85,000 and;
- April 10: Audrey Grant's Better Bridge Event raised \$21,500 (NEW RECORD!) so far in 2018!

SAVE THE DATES ! Benefit Concert - Oct 21, 2018 Lap the Gats - June 24, 2018 Audrey Grant - April 2, 2019



AUDREY GRANT





Very special thanks to Audrey Grant who gives of her time year-after-year as well as Dave and Jill Hogg who lead the planning of the benefit concert who together have raised over \$150K for Parkinson's disease research!





Lap the Gats for Parkinson's

Lap the Gats for Parkinson's, our annual fundraising cycling event to help raise awareness and funds for Parkinson's research, was held on June 25, 2017 in the beautiful hills of Gatineau Park in Chelsea, Quebec.

The event took take place on the 21 km loop and attracted over 300 riders, supporters and volunteers who together raised over \$85,000. The event is designed for cyclists of all levels. Participants seeking a challenge competed for Fastest Cyclist and Overall Hill Climber in male and female categories. A King and Queen were also awarded the coveted yellow jersey for Fastest Cyclist and a red and white jersey for Overall Hill Climber.

Our next event is taking place June 24, 2018 as part of NOKIA Sunday Bike Day in cooperation with the NCC. We are always looking for volunteers and of course riders to participate!

Registration is NOW OPEN! lapthegats.org







Meet Dr. Max Rousseaux

For Dr. Max Rousseaux, studying neuroscience was never a question. He was always interested in the immense complexity of the brain and understanding what makes people tick. So why did he focus on neurodegenerative diseases like Parkinson's disease (PD) and Lou Gehrig's disease? Beyond wanting to explore the role that neurodegenerative diseases play in understanding the fundamental function of the brain, he's always been motivated by the Parkinson's community.

"Growing up as a scientist in a community entrenched in Parkinson's and meeting with patients really gave me a sense of responsibility and passion for the field"

Dr. Rousseaux's career began in Ottawa, where his training went hand-in-hand with his involvement with the Parkinson Research Consortium (PRC) and Partners Investing in Parkinson's Research (PIPR). While he worked to understand models of PD and stroke, he grew attached to the Parkinson's community. Being embedded in the community is a reminder of the challenges patients living with Parkinson's face everyday.

"Even when the work is challenging, I always feel motivated and engaged by the research."

Dr. Rousseaux's passion for improving patient care continued with his post-doctoral fellowship at the Howard Hughes Medical Institute/Baylor College of Medicine (Texas), where he established a PD-centered research program that employed genetic screening methods that "shed light onto new pathways for therapeutic intervention in diseases such as PD and Alzheimer's disease."

After a successful stint in Houston, Texas where he also continued to advocate for scientific literacy by serving on the judging committee for Junior Breakthrough Prize (2017) as well as lobby alongside scientists, physicians and patients in Washington for more funding in PD, Dr. Rousseaux has recently returned to Ottawa.

Listing the uOBMRI's strong collaborative network and the PRC as his main reasons to come back, Dr. Rousseaux is launching his lab with the ultimate goal "to help the patient population by identifying new therapeutic avenues" in PD and ALS.

He's excited to work alongside the uOBMRI researchers and once again be immersed in the Parkinson community...including biking in the 5th annual Lap the Gats.

Written by Victoria Racher

We are very grateful for the support of our esteemed Advisory Board of Directors

Chair: David Cork, Tom Belton, Rob Gibson, David Grimes, MD, John Hamilton, John Hanneford, Shelby Hayter, David Hogg, Nick Kaethler, Debra Lynkowski, Tiago Mestre, MD, David Park, PhD, Bea Robertson, Michael Schlossmacher, MD, PhD, Ian Toth

Special Thanks to Richard Shantz, our past Chair for his dedication, support and commitment & we sincerely thank David Cork for taking the lead!



For more information, or to make a donation, Please visit our website at www.ohri.ca/prc or contact our Office: Parkinson's Research Consortium | 451 Smyth Road, Ottawa, Ontario, K1H 8M5 | Tel: 1-613-562-5461