



Molecular Genetics  
UNIVERSITY OF TORONTO

**MoGen is celebrating**

**50**  
**YEARS**

**May 31 2019 @ The Carlu**

444 Yonge St, Toronto M5B 2H4

Scientific Symposium, Career Development  
Lunch, and Dinner Reception

   **#MoGen50**

# Sponsors



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# Program



8:00 am Registration (pick up name tags) and coffee

8:30 am **Leah Cowen**, Professor & Chair



Discussion leader: Ian Scott

8:45 am **James Friesen**, Professor Emeritus

8:55 am **Keynote Presentation: Lap-Chee Tsui**

President, Hong Kong Academy of Sciences

*"From Phage Biology to Molecular Genetics — Research in Evolution"*

9:25 am **Liz Patton**, PhD 2001 (Tyers lab)

Professor, University of Edinburgh

*"New Targets for Melanoma using Zebrafish Chemical Genetics"*

9:50 am **Cheryl Birmingham**, PhD 2008 (Brumell lab)

CMC Leader, Sanofi-Pasteur

*"The 'D' in Vaccine R&D"*

10:15 am Coffee break



Discussion leader: Frank Sicheri

10:45 am **Stephen Scherer**, University Professor

10:55 am **Anastasia Baryshnikova**, PhD 2012 (Boone lab)

Principal Investigator, Calico Life Sciences

*"Systematic analysis of the yeast knock-out phenome"*

11:20 am **Angela Andersen**, PhD 2001 (Collins lab)

Editor, Life Science Editors

*"Life Science Editors: Maximize Your Impact"*

11:45 am **Scott Dixon**, PhD 2007 (Roy lab)

Assistant Professor, Stanford University

*"From Worms to Synthetic Lethality and Beyond"*



12:10 pm Box lunch

12:15 pm **Trainee-Alumni Mentorship Workshop**

(organized by graduate students)

## Program (continued)



1:40 pm **Announcement:**  
David Dime and Elisa Nuyten Catalyst Fund Award Recipients  
**Leah Cowen & David Dime**



Discussion leader: Barbara Funnell

1:45 pm **Brenda Andrews**, University Professor

1:55 pm **Keynote Presentation: Roderick McInnes**

Professor, McGill University

*"Reflections on a Brilliant Department: a Template for Great Science"*

2:25 pm **Christopher Koth**, PhD 2002 (Edwards lab)

Principal Scientist, Genentech

*"Violating Murphy's Law to Modulate Membrane Signaling and Transport"*

2:50 pm **Kristin Hope**, PhD 2007 (Dick lab)

Assistant Professor, McMaster University

*"Understanding hematopoietic stem cells and unlocking their regenerative potential"*

3:15 pm **Arvin Dar**, PhD 2006 (Sicheri lab)

Associate Professor, Icahn School of Medicine at Mount Sinai, NY

*"Chemical Genetic Discovery of Cancer Targets and Anti-Targets"*

3:40 pm Coffee break



Discussion leader: Peter Roy

4:10 pm **Pleasantine Mill**, PhD 2004 (Hui lab)

Reader, University of Edinburgh

*"Cilia in Development and Disease: Dynamics, Diversity and Dogma"*

4:35 pm **Tina McDivitt**, PhD 2009 (Gray-Owen and Ireton labs)

President, Spindle

*"The business of science"*

5:00 pm **Joe Bondy-Denomy**, PhD 2014 (Davidson lab)

Assistant Professor, University of California, San Francisco

*"50 MoRons for MoGen 50: How bacteriophages inhibit CRISPR-Cas immunity"*

5:25 pm **Leah Cowen**, Professor & Chair

*Closing remarks*



5:30 pm Dinner Reception

Entertainment (Music, Photos, and Science Arcade)

## Keynote Speakers



**Lap-Chee Tsui**, OC, OOnt, GBM, FRS, FRSC, PhD  
President, Hong Kong Academy of Sciences  
President, Victor and William Fung Foundation  
Director, Qiushi Academy for Advanced Studies, Zhejiang University  
University Professor Emeritus, University of Toronto

Prof. Lap-Chee Tsui, world-renowned molecular biologist, is currently Founding President of the Academy of Sciences of Hong Kong, President of Victor and William Fung Foundation, Director of Qiushi Academy for Advanced Studies and Master of Residential College in International Campus of Zhejiang University, and University of Toronto's Emeritus University Professor. He was the 14 th Vice Chancellor of The University of Hong Kong. He is world renowned for his research work in human genetics and genomics. He has over 300 peer-reviewed scientific publications and 65 invited book chapters. He is the recipient of many national and international prizes, including the 2018 Warren Alpert Foundation Prize. His other awards include 16 honorary doctoral degrees from prestigious universities around the world.



**Roderick R. McInnes**, CM, OOnt, MD, PhD, FRSC, FCAHS  
Alva Chair in Human Genetics  
Professor of Human Genetics and Biochemistry  
Director, Lady Davis Institute  
McGill University

Prof. McInnes is the Director of the Lady Davis Institute of the Jewish General Hospital, Alva Chair in Human Genetics, Professor of Human Genetics and of Biochemistry at McGill, where he was Tier 1 Canada Research Chair in Neurogenetics.

At the University of Toronto he was a University Professor, Head of the Program in Developmental Biology at the Hospital for Sick Children, an International Research Scholar of the HHMI and the Inaugural Scientific Director (2000-2010) of the Institute of Genetics of CIHR.

Prof. McInnes has made important contributions to understanding of the molecular basis of retinal and eye development, identification of genes and processes associated with inherited retinal degeneration, and knowledge of synaptic accessory proteins that modulate the activity of ion channels in the nervous system. He is one of three coauthors of the 5th, 6th, 7th and 8th editions of the classic textbook Thompson and Thompson's Genetics in Medicine, for which the authors received the 2015 American Society of Human Genetics Award for Excellence in Human Genetics Education. In 2010, Dr. McInnes was the President of the American Society of Human Genetics. Amongst other honours, he is a Fellow of the Royal Society of Canada and the Canadian Academy of Health Sciences. He was appointed to the Order of Ontario in 2008 and made a Member of the Order of Canada in 2009. Dr. McInnes was the Acting President of the Canadian Institutes of Health Research in 2017-2018.

# Career Development Lunch



As part of our day of science and celebrations, during our lunch period, there will be a Trainee-Alumni Mentorship Workshop, organized by MoGen students.

The goal of this session is to connect current trainees with alumni who have gone on to pursue exciting careers in a wide variety of fields. We hope this casual setting will facilitate discussion including personal anecdotes about career choices, struggles, and successes.

We invite all participating alumni and trainees to proceed to the Round Room once you have collected your box lunch. To manage the event, alumni have been categorized into six distinct career fields, designated by a coloured sticker on their name tag. The six career fields, designated by coloured signs, will be localized around the periphery of the Round Room. We ask alumni to remain near their designated location during this time to make it easier for trainees to find the alumni they're most excited to talk to. Examples of some of the careers represented today include:

- Policy, Government, and Law (e.g. Analysts, Lawyers)
- Science Communication and Writing (e.g. Research Communications Officers, Journal Editors)
- Academic Research (e.g. Professors, Research Associates)
- Science Education (e.g. Teaching Professors, Department Heads)
- Biotechnology and Industry (e.g. Directors, Program Managers)
- Medical Professional Programs (e.g. Physicians, Genetic Counsellors)

Although the event is scheduled for 1.5 hours, we encourage both trainees and alumni to take breaks throughout the workshop to relax before the afternoon scientific speakers.

To learn more about the alumni mentors, please direct your attention to the large poster board outside the Round Room that lists all participating alumni in their designated career field.

We hope this event will inspire new connections between alumni and trainees, and bring 50 years of Molecular Genetics closer as a community.



*“If I have seen further it is by standing on the shoulders of giants.”*

— Isaac Newton



## MoGen Stories

As part of the celebration of 50 years of Molecular Genetics at the University of Toronto, we ask our community to share their thoughts, experiences, and anecdotes about their time in MoGen, which we are posting on our Anniversary website:

<http://www.moleculargenetics.utoronto.ca/anniversary-stories>

Later this year we will assemble the stories into a booklet that you will be able to download.

Please share your story with us!



### Thank you to our donors:

*We are sincerely grateful to our donors for their generous contributions which have established awards that support research and graduate study in the Department of Molecular Genetics.*

#### **Zhangbin-Niugensheng Bethune Bursaries and Award**

Zhang Bin and Niu Gensheng

#### **David Stephen Cant Graduate Scholarship in Stem Cell Research**

Peter and Sally Cant

#### **Eric Hani Fellowship**

Kurt O. and Rita Hani

Cora Donely

#### **Hannah Farkas Himsley & Alexander Himsley Memorial Prize**

Ruth and Yehuda Geva

Leorah Kroyanker

#### **MacPherson Prize in Microbiology**

L.W. MacPherson

#### **Dr. Roman Pakula Memorial Award**

Andrew Pakula

#### **Barbara Vivash Award in Molecular Genetics**

John and Barbara Vivash

#### **David Dime and Elisa Nuyten Catalyst Fund Award**

David Dime and Elisa Nuyten