DR. MAUD L. MENTEN

MEMORIAL LECTURE SERIES AND SYMPOSIA

(2007-PRESENT)
2016

Friday, 5 Feb 2016
Dr. Brian Kennedy, President and CEO of the Buck Institute for Research on Aging, Novato, CA
"Drugs that forestall aging - extending healthspan"
Host: Dr. Fred Dick

Friday, 4 Mar 2016
Dr. Mikko Taipale, Dept. of Molecular Genetics, Donnelly Centre for Cellular & Biomolecular Research, University of Toronto
"Systematic phenotyping of Mendelian disease variants"
Hosts: Depts. of Biochemistry and Pathology & Laboratory Medicine (Drs. Martin Duennwald and David Litchfield)

Friday, 8 Apr 2016
Dr. Karsten Hiller, Luxembourg Centre for Systems Biomedicine, University of Luxembourg
“Metabolic rewiring of macrophages during inflammation: How metabolism provides antimicrobial activity and regulates inflammation”
Host: Dr. Ilka Heinemann

Friday 15 Apr 2016
Dr. Jim R. Woodgett, Director of Research, The Lunenfeld-Tanenbaum Research Institute, Toronto
“Reduction to practice: anecdotes of cell signaling robustness”
Host: Dr. Shawn Li

Thursday, 19 May 2016 – SPRING SYMPOSIUM
9:30 am
Welcome - Dr. David Litchfield, Chair, Dept. of Biochemistry, Western University, London, ON
9:35 am
Dr. James Choy, Dept. of Biochemistry, Western University, London, ON
"Intrinsically disorder-based protein-protein interactions in the Nrf2/Keap1 pathway"
10 am
Keynote Speaker
Dr. Julie Forman-Kay, Senior Scientist and Program Head, Molecular Structure and Function, Hospital for Sick Children; Professor, Dept. of Biochemistry, University of Toronto, Toronto, ON
"Dynamic interactions of intrinsically disordered proteins in biological regulation and cellular organization"
Host: Dr. Shawn Li
11 am
Coffee Break
11:15 am
Dr. Brian Shilton, Dept. of Biochemistry, Western University, London, ON
"Quinone reductase 2: enzyme or redox switch?"
11:45 am
Keynote Speaker
Dr. Elias Arner, Dept. of Medical Biochemistry and Biophysics, Karolinska Institutet, Stockholm, Sweden
"The selenoprotein thioredoxin reductase in control of cellular signaling pathways and as an anticancer drug target"
Host: Dr. David Litchfield

Thursday, 29 Sept 2016
Dr. Dieter Soll, Dept. of Molecular Biophysics and Biochemistry, and Dept. of Chemistry, Yale University, New Haven, CT
“The genetic code in the age of synthetic biology”
Host: Dr. Patrick O'Donoghue

Friday, 4 Nov 2016 - FALL SYMPOSIUM
9:30 am
Welcome - Dr. David Litchfield, Chair, Dept. of Biochemistry, Western University
9:35 am
Dr. Stephen Barr, Dept. of Microbiology & Immunology, Western University
"HERC5: a novel antiviral E3 ligase 500 million years in the making"
10:05 am
Dr. Martin Duennwald, Dept. of Pathology & Laboratory Medicine, Western University
"Protein quality control gone astray? - the ubiquitin ligase Parkin in Parkinson's Disease"
10:35 am
Coffee Break
11:00 am
Introduction of Key Note - Dr. Gary Shaw, Dept. of Biochemistry, Western University
Keynote Speaker
Dr. David Barford, MRC Laboratory of Molecular Biology, Cambridge, UK
"Structural basis for the regulation of the anaphase promoting complex in mitosis"
Host: Dr. Gary Shaw

2015

Friday, 30 Jan 2015
Dr. Brendan Frey, Department of Electrical and Computer Engineering, Banting & Best Department of Medical Research, Department of Computer Science, University of Toronto
"The human splicing code reveals new insights into the genetic determinants of disease"
Host: Dr. Rob Hegele

Friday, 6 Feb 2015
Dr. Stephane Richard, Departments of Oncology and Medicine, McGill University
"Low complexity harboring proteins and protein methylation in cancer"
Host: Dr. Shawn Li

Friday, 27 Mar 2015
Dr. Jeff Brodsky, Avinoff Professor of Biological Sciences, Department of Biological Sciences, University of Pittsburgh
"Endoplasmic Reticulum Associated Degradation (ERAD) and Protein Quality Control: Lessons from Model Systems and Novel Therapeutics"
Host: Dr. David Haniford

Friday, 22 May 2015 – SPRING SYMPOSIUM
Dr. Stefan Knapp, Professor of Structural Biology, Structural Genomics Consortium, University of Oxford, Oxford, UK
“Selective Targeting of Epigenetic Effector Domains of the Bromodomain Family in Cancer”
Host: Dr. David Litchfield

Schedule:
9:00 am Welcome & Introductory Lecture - Dr. David Litchfield
"Deciphering Cellular Decisions of Life and Death"
9:30 am Dr. Patrick O'Donoghue
"Genetically Encoded Protein Phosphorylation"
10:00 am Dr. Shawn Li
"Post-translational Modifications in Health and Disease"
Friday, 19 June 2015
Prof. Mingjie Zhang, Kerry Holdings Professor of Science, Chair Professor, Division of Life Science, Hong Kong University of Science and Technology
"Scaffold Proteins in Neuronal Development and Signaling"

Thursday, 8 Oct 2015
Jeffrey A. Whitsett, MD, Co-Director, Perinatal Institute; Chief, Section of Neonatology, Perinatal and Pulmonary Biology; Interim Director, CCRF, Basic Science; Cincinnati Children’s Hospital Medical Center
"Dissecting Lung Formation Using Single Cell Transcriptomics"
Host: Dr. Fred Possmayer

Friday, 6 Nov 2015
Dr. Natalie Ahn, Department of Chemistry and Biochemistry, University of Colorado at Boulder
"Phosphorylation-regulated protein dynamics in kinases, and implications for inhibitor design: The case of ERK2"
Host: Dr. David Litchfield

2014

Friday, 31 Jan 2014
Prof. Pierre Thibault, Institute for Research in Immunology and Cancer, University of Montreal
"Unraveling specific versus promiscuous phosphorylation using time-resolved phosphoproteomics"
Host: Dr. Lars Konermann

Friday, 7 Feb 2014
Dr. Senthil Muthuswamy, OCI and Dept. of Medical Biophysics, University of Toronto
"Cell polarity and initiation and progression of cancer"
Host: Dr. Shawn Li

Friday, 28 Mar 2014
Dr. Wenqing Xu, Dept. of Biological Structure, University of Washington, Seattle, WA
"Structural basis of Wnt signaling and PARylation-dependent ubiquitination"
Host: Dr. Hong Ling

Friday, 25 Apr 2014
Dr. Charlie Boone, University of Toronto, Donnelly Centre
"Genetic Landscape of a Cell"
Host: Dr. David Litchfield

Friday, 9 May 2014
Dr. John Moran, Dept. of Human Genetics, University of Michigan
"Studies of a Human Transposable Element"
Host: Dr. Fred Dick

Friday, 30 May 2014
Dr. Benjamin Cravatt, Department of Chemical Physiology, The Scripps Research Institute, La Jolla, CA
"Activity-based proteomics – applications for enzyme and inhibitor discovery"
Host: Dr. David Litchfield

Friday, 10 Oct 2014 – FALL SYMPOSIUM
Dr. Yi Zhang, Howard Hughes Medical Institute, Program in Cellular and Molecular Medicine, Boston Children’s Hospital, Dept. of Genetics and Dept. of Pediatrics, Harvard Medical School, Boston, MA
"Mechanism and function of dynamic regulation of DNA methylation"
Host: Dr. Shawn Li

Schedule:
Introductory Remarks - Dr. David Litchfield, Chair, Department of Biochemistry
9:00 am - Dr. Joe Mymryk, Department of Microbiology & Immunology
“Reorganization of the host epigenome by the adenovirus E1A oncoprotein”
9:45 am - NEW FACULTY SEMINAR SERIES SPEAKER - Dr. Jamie Kramer, Department of Physiology & Pharmacology
“Epigenetics in Intellectual Disability”
10:30 am - Break
11:00 am - Keynote Speaker: Dr. Yi Zhang

Friday, 21 Nov 2014
Dr. Or Gozani, Department of Biology, Stanford University, Stanford, CA
"Role of Lysine Methylation Signaling in Epigenetic and Disease Regulation"
Host: Dr. Shawn Li

Friday, 28 Nov 2014
Dr. Reinhart Reithmeier, Dept. of Biochemistry, University of Toronto
"Mentorship Matters: the Case for Graduate Professional Development"
Host: David Litchfield

Friday, 5 Dec 2014
Dr. Tim Hughes, CRC in Genomics, Dept. of Molecular Genetics, and Terrence Donnelly Centre for Cellular and Biomolecular Research, University of Toronto
"DNA and RNA binding motifs for decoding gene regulation"
Host: Dr. Peter Rogan

2013

Friday, 11 January, 2013
Dr. Gerry Wright, Dept. of Biochemistry and Biomedical Sciences, McMaster University
"Resistance guided antibiotic discovery"
Host: Dr. Gilles Lajoie

Friday, 12 April, 2013
Dr. John Vederas, Dept. of Chemistry, University of Alberta
"Assembly of Bioactive Metabolites by Fungal Polyketide Synthases (PKS)"
Host: Dr. Gilles Lajoie

Friday, 26 April, 2013
Dr. Rick Bushman, Dept. of Microbiology, University of Pennsylvania
"HIV Pathogenesis and the human microbiome in health and disease"
Host: Dr. David Haniford

Friday, 10 May, 2013
Dr. Philippe Gros, Dept. of Biochemistry, McGill University, Montreal
"Genetic Control of Susceptibility to Infections and Inflammation: IRF8 and Beyond"
Host: Dr. Nathalie Berube

Friday, 31 May, 2013 - SPRING SYMPOSIUM
Dr. Kym Boycott, Medical Geneticist, Regional Genetics Program Investigator, CHEO Research Institute
"Canadian geneticists collaborate to help children with rare diseases"
Hosts: Dr. Victoria Siu, Dr. Tony Rupar

Schedule
Introductory Remarks - Dr. David Litchfield, Chair, Department of Biochemistry
9:00 am - Dr. Michael J. Strong, Dean, Schulich School of Medicine & Dentistry
9:30 am - Dr. Rob Hegele, Robarts Research Institute, Western University “Rare and common contributions to complex traits”
10:00 am - Dr. Victoria Siu, Department of Paediatrics, Western University “But what does it really mean? What is a mutation in the era of genomic medicine?”
10:30 am - Break
10:45 am - Dr. Kym Boycott

2012

Thursday March 8, 2012
Dr. Rosemary Redfield, Life Sciences Institute, Bacterial Adaptation and Response Networks, University of British Columbia
"arsenic life and open science"
Host: Dr. David Edgell

Friday, March 9, 2012
Dr. Rosemary Redfield, Life Sciences Institute, Bacterial Adaptation and Response Networks, University of British Columbia
"Do Bacteria Have Sex"
Host: Dr. David Edgell

Friday, April 13, 2012
Dr. Susan Gottesman, National Cancer Institute
"Regulating with Small RNAs: The Hidden Circuitry of Bacteria"
Host: Dr. David Haniford

Friday, April 20, 2012
Dr. Jack Greenblatt, Terrence Donnelly Centre for Cellular & Biomolecular Research, University of Toronto
"Protein interaction networks in bacteria, yeast, and man: implications for membrane biology and transcriptional regulation"
Host: Dr. Megan Davey

Friday, April 27, 2012
Dr. Jean Vance, University of Alberta
"Cholesterol Transport in the Brain and Niemann-Pick C Disease"
Host: Dr. Fred Possmayer

Friday, May 4, 2012
Dr. Ben Blencowe, The Donnelly Centre, University of Toronto
"Alternative Splicing: Decoding an Expansive Regulatory Layer"
Host: Dr. Chris Brandl

Friday, May 18, 2012
Dr. Brian Sykes, Department of Biochemistry, University of Alberta
"Structural Basis of Cardiac Function: Ischemia and Drug Design"
Host: Dr. Gary Shaw
Friday, May 25, 2012 - SPRING SYMPOSIUM
Dr. Sergio Grinstein, Sick Kids Hospital, Department of Biochemistry University of Toronto
"Imaging phagocytosis: receptors, signal transduction and the cytoskeleton"
Host: Dr. David Litchfield

Schedule:
Introductory Remarks
9:00 am  Dr. Geoffrey Pickering, Dept. of Biochemistry, Western
9:30 am  Dr. Bryan Heit, Dept. of Microbiology & Immunology, Western
10:00 am Dr. Shawn Li, Dept. of Biochemistry, Western
10:30 am Coffee Break
11:00 am Dr. Sergio Grinstein

Friday, Aug 24, 2012 - SUMMER SYMPOSIUM
Dr. Jay Keasling, Department of Chemical and Biomolecular Engineering, University of California, Berkeley
"Metabolic Engineering of Hydrocarbon Production"
Host: Dr. Chris Brandl

Schedule:
Introductory Remarks
9:20 am  Dr. Dave Edgell, Department of Biochemistry, Western  "Designing nucleases for targeted integration of DNA"
9:50 am  Dr. Franco Berutti, Chemical and Biochemical Engineering, Western  "Pyrolytic Conversion of Biomass Residues into Bio-Oil and Bio-Char: Turning Waste into Black Gold"
10:20 am  Break
10:30 am  Keynote Speaker: Dr. Jay Keasling

Friday, 2 November, 2012
Dr. Douglas Lowy, National Cancer Institute, Bethesda, MD
"Cooperating pro-oncogenic pathways can drive concerted activation of Cdc42 and Rho"
Host: Dr. Shawn Li

Friday, 23 November, 2012
Dr. Liliana Attisano, Dept. of Biochemistry, University of Toronto
"Multidimensional hightthroughput screening reveals crosstalk between the Wnt and hippo pathway"
Host: Dr. Susan Meakin

2011

Thursday, March 03, 2011
Dr. Nahum Sonenberg, McGill University, Dept. of Biochemistry and Goodman Cancer Centre
"Mechanism of action of microRNAs"
Host: Dr. David Litchfield

Friday, March 25, 2011
Dr. Jacques Cote, Laval University Cancer Research Center
"MYST-family acetyltransferase complexes in genome expression and maintenance"
Host: Dr. Chris Brandl

Friday, May 06, 2011
Dr. Britt-Marie Sjöberg, University of Stockholms, Dept. of Molecular Biology and Functional Genomics
"Biosynthesis of DNA building blocks - essential and redundant"
Host: Dr. David Edgell
Friday, May 13, 2011 – SPRING SYMPOSIUM
Dr. Jean Wang, UC San Diego, Division of Biological Sciences
"Regulation of Cell Death Decision"
Host: Dr. Fred Dick

Friday, December 2, 2011
Dr. Chris Adami, Professor of Applied Life Sciences, Keck Graduate Institute, Claremont, CA
Visiting Professor in Microbiology and Molecular Genetics, Michigan State University
"Rewiring Gene Interaction Networks in Yeast"
Host: Dr. Peter Rogan

Friday, December 9, 2011
Dr. Thomas Surrey, London Cancer Institute U.K.
"Microtubule end binding proteins: from structure to network functioning"
Host: Dr. Lars Konermann

2010

Friday, January 29, 2010
Dr. Christopher D. Lima, Memorial Sloan-Kettering Institute, Structural Biology, New York
"Structural and mechanistic insights to post-translational modification by SUMO, a ubiquitin-like modifier.
"Host: Dr. Gary Shaw

Friday, February 12, 2010 – WINTER SYMPOSIUM
Dr. David Allis, Rockefeller University in New York
"Beyond the Double Helix: Reading and Writing the Histone Code"
Host: Dr. Megan Davey

Friday, April 30, 2010
Dr. Trevor Archer, National Institute of Environmental Health Sciences, Chromatin & Epigenetics & Transcription
"Using Chromatin Remodeling Proteins to Regulate Gene Transcription"
Host: Dr. David Rodenhiser

Friday, May 14, 2010
Dr. Michael Resnick, National Institutes of Health, Chromosome Stability Group Repair, Replication & Checkpoint Function
"The Expanding Universe of p53 Targets"
Host: Dr. Bonnie Deroo

Friday, June 4, 2010
Dr. Stephen Michnick, Canada Research Chair in Integrative Genomics Département de Biochimie Université de Montreal
"Maud Menten’s perfect solution to a cell fate decision"
Host: Dr. David Litchfield

Friday, June 11, 2010
Dr. Tom Ellenberger, Department of Biochemistry and Molecular Biophysics, Washington University in St. Louis
"An Allosteric Mechanism for Regulating DNA Recombination"
Host: Dr. Chris Brandl

Friday, September 24, 2010
**Dr. Alexandra Newton**, University of California at San Diego
"Spatiotemporal dynamics of lipid second messenger signaling"
Host: Dr. David Litchfield

**Dr. Carol Robinson**, University of Oxford, Department of Chemistry
Thursday, November 11, 2010
"Dehydrated but Unharmed? Mass Spectrometry of Protein Complexes"
AND
Friday, November 12, 2010
"The Mass Spectrometry of Membrane Protein Complexes - At Last!"
Host: Dr. Lars Konermann

Friday, November 19, 2010 – FALL SYMPOSIUM
**Dr. John Kuriyan**, University of California, Berkeley
"Regulatory Control of Catalytic Activity in Protein Kinases"

**Introductory Remarks**
9:00 am Dr. Brian Shilton, Department of Biochemistry, Western
9:30 am Dr. Eric Ball, Department of Biochemistry, Western
10:00 am Dr. James Choy, Department of Biochemistry, Western
10:30 am Coffee Break
10:45 am Dr. John Kuriyan
Hosts: Dr. Megan Davey and Dr. Hong Ling

Friday, November 26, 2010
**Dr. Tom Hudson**, OICR, Dept. of Medical Genetics and Microbiology and Dept. of Medical Biophysics, University of Toronto
"Personalized Medicine and Cancer"
Host: Dr. David Litchfield

2009

Friday, February 13, 2009
**Dr. Arnie Berk**, UCLA ACCESS, MBI IDP, Gene Regulation, LA, California
"Adenovirus small e1a drives cells through the cell cycle and actively represses antiviral responses and differentiation by relocating RB-family proteins and the p300/CBP HATs dynamically across the genome"
Host: Dr. Joe Mymryk

Friday, May 1, 2009
**Dr. Michel Desjardins**, University of Montreal
"Understanding innate and adaptive immunity: from proteomics to Systems Biology"
Host: Dr. Gilles Lajoie

Friday, June 5, 2009
**Dr. Barry Stoddard**, Fred Hutchinson Cancer Research Center, Seattle, WA
"The structure, evolution and engineering of homing endonucleases: reagents for gene targeting"
Host: Dr. David Edgell
Friday, October 2, 2009
Dr. Jay Heinecke, University of Washington School of Medicine
"Defining the proteomes of macrophages and dendritic cells: Implications for atherogenesis"
Host: Erin Mulvihill & Lazar Bojic, Huff Lab

Friday, October 30, 2009 – FALL SYMPOSIUM
Dr. Brian T. Chait, Camille and Henry Dreyfus Professor, Laboratory of Mass Spectrometry and Gaseous Ion Chemistry, Rockefeller University
"Approaches to the Study of Dynamic Phenomena in the Nucleus"
Host: Dr. Derek McLachlin

Wednesday, November 11, 2009
Dr. Jasper Rine, Department of Molecular & Cell Biology, University of California
"The Formation and Inheritance of Epigenetic States of Gene Expression"
Host: Dr. Megan Davey

Friday, November 13, 2009
Dr. Gordon C. Shore, Department of Biochemistry, McGill University
"Bcl-2 family proteins and cancer"
Host: Dr. Caroline Schild-Poulter

Friday, November 27, 2009
Dr. Steve Scherer, Sick Kids Hospital
"Discovery of Copy Number Variation in the Human Genome and its Role in Disease"
Host: Dr. Rob Hegele

2008

Friday, February 29, 2008
Dr. Peter E. Wright, Department of Molecular Biology, The Scripps Research Institute
"Exploring the energy landscape: Disorder, dynamics, and protein function"
Host: Dr. James Choy

Friday, March 14, 2008
Dr. Robert Waterland, Baylor College of Medicine, Assistant Professor of Pediatrics
"Early nutrition and your epigenomes"
Hosts: Drs. Megan Davey & Richard Rozmahel

Friday, March 28, 2008
Dr. C.-Ting Wu, Department of Genetics Harvard Medical School
"Thinking about homology: transvection and ultraconserved elements"
Host: Dr. Megan Davey

Friday, April 11, 2008 – SPRING SYMPOSIUM
Dr. Nicholas Tonks, Cold Spring Harbor Laboratory, Long Island, New York, USA
"Signal transduction from a protein tyrosine phosphatase perspective"

Schedule:
9:00 am - Dr. David Litchfield, Departments of Biochemistry and Oncology, Chair, Department of Biochemistry
“Deciphering cellular decisions of life and death: convergence of protein kinases and caspases.”
9:30 am - Dr. Shawn Li, Departments of Biochemistry, Oncology and Paediatrics, Children's Health Research Network and Lawson Health Research Network
“Mapping Phosphotyrosine signaling networks using peptide and protein arrays.”
10:00 am - Dr. Fred Dick, Departments of Biochemistry, Oncology and Paediatrics, The University of Western Ontario, Children's Health Research Network London Regional Cancer Program
“A unique connection between the TGF-beta and Retinoblastoma pathways.”
10:30 am – Coffee break
10:45 am - KEYNOTE SPEAKER Dr. Nick Tonks, Cold Spring Harbor Laboratory
Host: Dr. David Litchfield

Friday, April 18, 2008
Dr. Leonard Foster, Department of Biochemistry & Molecular Biology, University of British Columbia
"Using quantitative proteomics to understand host-pathogen interactions."
Host: Dr. Gilles Lajoie

Friday, May 16, 2008
Dr. Nancy Craig, H.H.M.I., Molecular Biology and Genetics at the Johns Hopkins University School of Medicine
"Tales of Transposons"
Host: Dr. Megan Davey

Friday, September 19, 2008
Dr. Irene Weber, Department of Chemistry, Georgia State University
"Crystal Structures of Proteases Guide Design of Drugs for Resistant HIV and Control of Apoptosis"
Host: Dr. Peter Rogan

Friday, October 3, 2008 – FALL SYMPOSIUM
Dr. Fred Winston, Department of Genetics, Harvard Medical School
"Factors that control transcription and chromatin structure in yeast"
Host: Dr. Chris Brandl

Friday, October 17, 2008
Dr. Phil Hieter, Department of Medical Genetics, University of British Columbia
"Chromosome Instability (CIN) Genes in Yeast and Cancer"
Host: Drs. Megan Davey & Chris Brandl

Friday, November 7, 2008
Dr. Brenda Schulman, St. Jude Faculty, Howard Hughes Medical Institute, Co-Director, Molecular Oncology Program
"Dynamic Mechanisms of Ubiquitin Conjugation"
Host: Dr. Gary Shaw

Friday, November 21, 2008
Dr. Jim R. Davie, Director, Manitoba Institute of Cell Biology
"Nucleosomal response, immediate early gene expression and neoplastic transformation"
Host: Dr. David Litchfield

Friday, December 12, 2008
Dr. David Westaway, Centre for Prions and Protein Folding Diseases, University of Alberta
"Molecular biology of mammalian prion proteins"
Host: Dr. Richard Rozmahel

2007
Friday, September 21, 2007 – FALL SYMPOSIUM
Dr. Janet Rossant, Hospital for Sick Children
"Stem cells and developmental pathways"

Schedule:
1:00 pm Introductory Remarks by Dean Carol Herbert, Schulich School of Medicine & Dentistry
1:30 pm - Dr. Janet Rossant
2:30 pm - Coffee break
3:00 pm - Dr. Mellissa Mann "Extra! Extra! Extraembryonic! Epigenetic regulation in embryonic versus extraembryonic cells" Children's Health Research Institute, Departments of Obstetrics & Gynecology, and Biochemistry, University of Western Ontario
3:30 pm - Dr. Susan Meakin “Tracking Cell Death Mechanisms in Neural Brain Tumors” Robarts Research Institute
4:00 pm - Dr. Bonnie Deroo “Estrogen Receptor Beta: An Ovarian Role for a Mysterious Receptor” Children's Health Research Institute, The University of Western Ontario, Department of Biochemistry
4:30 pm - Wine and Cheese Reception - Michael's Garden, Rm 3340 Somerville House
Host: Dr. Megan Davey