

CSI Program 2019 / Programme de la SCI 2019

32nd Annual Spring Meeting of the Canadian Society for Immunology

32^e Réunion annuelle de la Société canadienne d'immunologie

The Banff Centre, Banff, Alberta

April 12 – 15, 2019 / 12 – 15, avril 2019

Friday, April 12 / Vendredi, 12 avril

- 15:00 – 21:00 CSI Meeting Registration / Inscriptions (Kinnear 1st Floor Foyer)
- 15:00 – 20:00 Exhibitor Set-up / Installation des kiosques des exposants
Poster Set-up / Installation des affiches (Kinnear Room 201 / 203 / 205)
- 16:00 – 20:00 CSI Council Meeting / Réunion
du Conseil de la SCI (*CSI Council only*) (Kinnear Room 206)
- 16:00 – 18:00 Career Development Session for Trainees / Session de développement de
carrières pour les étudiants/post-docs (Kinnear Room 103 / 105)
- 18:00 – 20:00 Trainee Mixer / Soirée de réseautage pour
les étudiants et post-docs (Kinnear Room 101)
- 18:30 – 20:00 Registrants on their own for dinner / Le souper n'est pas fourni
- 20:00 Exhibits Open (Kinnear Room 201 / 203 / 205)
- 20:30 – 21:30 **Keynote Address** (Kinnear Room 103 / 105)
"Stromal-Immune Interactions in Health and Cancer"
Dr. Shannon Turley, *Staff Scientist, Cancer Immunology, Genentech,
San Francisco, CA, USA*
- 21:30 – 23:30 Opening Reception / Réception d'ouverture (Kinnear Room 201 / 203 / 205)
Meet the Exhibitors / Rencontre des exposants

Saturday, April 13 / Samedi, 13 avril

- 07:00 Registration / Inscriptions (Kinnear 1st Floor Foyer)
- 07:00 – 09:00 Breakfast / Déjeuner (Vistas Dining Room – Sally Borden Bldg.)
- Poster Set-up Odd Numbers /
Installation des affiches impaires (Kinnear Room 201 / 203 / 205)
- 08:30 Meet the Exhibitors / Rencontre des exposants (Kinnear Room 201 / 203 / 205)

Sponsored by / Parrainé par:

BioLegend

- 09:00 – 11:25 **Symposium 1: The Impact of Diet on Immunity Against Infection and Chronic Disease** (Kinnear Room 103 / 105)
- Chairs: **Dr. Irah King**, *Assistant Professor, McGill University, Montreal, PQ, Canada*
- Dr. Elena Verdu**, *Professor, McMaster University, Hamilton, ON, Canada*
- 09:00 – 09:30 “Diet and Microbiome Contributions to Mucosal Erosion and Spontaneous Inflammation”
- Dr. Eric Martens**, *Associate Professor, Department of Microbiology and Immunology, University of Michigan Medical School, Ann Arbor, MI, USA*
- 09:30 – 10:00 “Should You Control the Diet of Your Subjects/Animals in Immunology Studies”
- Dr. Catherine Field**, *Professor, Agricultural Life and Environmental Sciences, Agricultural Food and Nutritional Sciences, University of Alberta, Edmonton, AB, Canada*
- 10:00 – 10:25 Refreshment Break / Pause (Kinnear Room 201 / 203 / 205)
- Meet the Exhibitors / Rencontre des exposants

10:25 – 10:55 “The Impact of Early Life Gut Dysbiosis on the Development of Host Immune Tolerance”

Dr. Eugene Chang, *Martin Boyer Professor, Department of Medicine Associate Section Chief for Research, Section of Gastroenterology, Hepatology, and Nutrition, The University of Chicago, Chicago, IL, USA*

10:55 – 11:25 "Opportunistic Pathogen Mechanisms that Incite Food Sensitivity"

Dr. Elena Verdu, *Professor, Division of Gastroenterology, Department of Medicine, McMaster University, Hamilton, ON, Canada*

Sponsor Presentations:

(Kinneer Room 103 / 105)

11:25 – 11:32 "Advancements in Immune Cell Isolation Technology"

Marie Mutabaruka, *Scientific Sales Representative, Cell Separation Products, StemCell Technologies*

11:33 – 11:40 “MACS Technology and New Developments for Miltenyi Biotec”

Georgina Lopez Padilla, *Technical Sales Consultant, Western Canada, Miltenyi Biotec, Inc.*

11:41 – 11:46 “One Immunology Solution – Single-Cell Multiomics for Discovery and Characterization”

Timothy Crawford, *PhD, Application Scientist, FlowJo*

11:47 – 11:52 “Sony Flow Cytometry – More than just colors”

Riccardo Ricciardi, *M.Sc., Cytometry System Specialist, Sony Biotechnology*

11:53 – 12:03 “TotalSeq™ and the Future of Single Cell Analysis”

Karen Morley, *Ph.D., Applications Scientist 1, BioLegend*

12:00 Exhibits Close / Fermeture des kiosques

12:03 – 13:30 Buffet Lunch / Dîner *(Vistas Dining Room – Sally Borden Bldg.)*

Sponsored by / Parrainé par:
Miltenyi Biotec, StemCell Technologies Inc.

Concurrent Sessions:

14:30 – 16:30 **Workshop 1 / Atelier 1** (Kinnear Room 301)

Leukocyte Development, Activation and Signalling

Chairs: Dr. Gurpreet Kaur Aulakh, *University of Saskatchewan,*
Saskatoon, SK, Canada

Dr. Hélène Decaluwe, *University of Montreal, Montreal, PQ,*
Canada

Dr. Mani Larijani, *Memorial University of Newfoundland, St.*
John's, NL, Canada

14:30 – 16:30 **Workshop 2 / Atelier 2** (Kinnear Room 303)

Host-Pathogen Interactions: From Innate to Adaptive Host Responses

Chairs: Dr. Julia B. Montgomery, *University of Saskatchewan,*
Saskatoon, SK, Canada

Dr. Judith Mandl, *McGill University, Montreal, PQ, Canada*

Co-Sponsored by / Parrainé par:
CIHR – Institute for Infection and Immunity

16:30 – 18:00 **CIHR-III/CSI Early Career Investigator Session** (Kinnear Room 103/105)
Refreshments Served

Introduction: **Dr. Charu Kaushic**, *Scientific Director, CIHR – Institute of*
Infection and Immunity

“Host-Microbiome Interactions as Regulator of Tissue Immune
Homeostasis”

Dr. Arthur Mortha, *Canada Research Chair in Mucosal Immunology,*
University of Toronto, CIHR-III Bhagirath Singh Award Recipient (2017)

“Ebola Virus Exploitation of Signalling and Trafficking Pathways During Viral Entry”

Marceline Côté, *Canada Research Chair in Molecular Virology and Antiviral Therapeutics, University of Ottawa, CIHR-III Bhagirath Singh Award Recipient (2017)*

18:00 – 19:30 Buffet Dinner / Souper (Vistas Dining Room – Sally Borden Bldg.)

20:00 – 22:00 **1st Poster Session / 1^{ère} Séance d'affiches** (Kinneer Room 201 / 203 / 205)

Odd Numbered Posters / Affiches à nombres impairs

Cash bar / bar payant

Meet the Exhibitors / Rencontre des exposants

22:00 Exhibits Close / Fermeture des kiosques

Remove Odd Numbered Posters / Retirer les affiches à nombres impairs

Sunday, April 14 / Dimanche, 14 avril

07:00 – 09:00 Breakfast / Déjeuner (Vistas Dining Room – Sally Borden Bldg.)

Poster Set-up Even Numbers / (Kinneer Room 201 / 203 / 205)
Installation des affiches paires

08:30 Meet the Exhibitors / Rencontre des exposants (Kinneer Room 201 / 203 / 205)

09:00 – 12:00 **Symposium II: Human Immunology: New Insights into Immune Regulation from Tissue Studies** (Kinneer Room 103 / 105)

Chairs: **Dr. Megan Levings**, *Professor, University of British Columbia, Vancouver, BC, Canada*

Dr. Sarah Crome, *Assistant Professor, University of Toronto, Toronto, ON, Canada*

09:00 – 09:30 "Skin Resident T Cells in Human Health and Disease"

Dr. Rachael Clark, *Shing-Yiu Yip and Cecilia M. Hepp Associate Professor of Dermatology, Dermatology, Harvard Medical School; Associate Dermatologist, Dermatology, Brigham And Women's Hospital, Boston, MA, USA*

- 09:30 – 10:00 "Do Tissue Repair Tregs Exist in Humans?"
Dr. Megan Levings, *Professor, Department of Surgery, Faculty of Medicine, University of British Columbia, Vancouver, BC, Canada*
- 10:00 – 10:30 "B Cells: the Immune System's Secret Weapon to Combat Intratumoral Heterogeneity?"
Dr. Brad Nelson, *Director and Distinguished Scientist, Deeley Research Centre, BCCA; Adjunct Professor, Department of Biology, University of Victoria; Professor, Department of Medical Genetics, University of British Columbia, Victoria, BC, Canada*
- 10:30 – 11:00 Refreshment Break / Pause (Kinross Room 201 / 203 / 205)
- 11:00 – 11:30 "Human Innate Lymphoid Cells in Health and Disease"
Dr. Sarah Crome, *Assistant Professor, Department of Immunology, University of Toronto, Toronto, ON, Canada*
- 11:30 – 12:00 "Dendritic Cells, Monocytes and Macrophages: From Development to Functions"
Dr. Florent Ginhoux, *Senior Principal Investigator and EMBO Young Investigator, Singapore Immunology Network (SIgN), A*STAR, Singapore*
- 12:00 Exhibits Close / Fermeture des kiosques
- 12:00 – 13:00 CSI Annual General Meeting / (Kinross Room 103 / 105)
Assemblée Générale de la SCI
- 12:00 – 13:30 Buffet Lunch / Dîner (Vistas Dining Room – Sally Borden Bldg.)

Sponsored by / Parrainé par:
Miltenyi Biotec, StemCell Technologies Inc.

Concurrent Sessions:

- 13:30 – 15:30 **Workshop 3 / Atelier 3** (Kinross Room 301)
Immune-Mediated Diseases: Tolerance, Autoimmunity and Inflammation
Chairs: Dr. John Gordon, *University of Saskatchewan, Saskatoon, SK, Canada*
Dr. Mark Larché, *McMaster University, Hamilton, ON, Canada*
Ghassan Al-Yassin, *University of Saskatchewan, Saskatoon, SK, Canada*

- 13:30 – 15:30 **Workshop 4 / Atelier 4** (Kinnear Room 303)
Tumor Immunology, Immunotherapy and Vaccination
Chairs: Dr. Heather Wilson, *University of Saskatchewan, Saskatoon, SK, Canada*
Dr. Colin Anderson, *University of Alberta, Edmonton, AB, Canada*
Brodie Deluco, *University of Saskatchewan, Saskatoon, SK, Canada*
- 13:30 – 15:30 **Workshop 5 / Atelier 5** (Kinnear Room 101)
Human Immunity
Chairs: Dr. Megan Levings, *University of British Columbia, Vancouver, BC, Canada*
Dr. Sarah Crome, *Assistant Professor, University of Toronto, Toronto, ON, Canada*
- 15:45 – 17:45 **2nd Poster Session / 2^{ème} Séance d'affiches** (Kinnear Room 201 / 203 / 205)
Even Numbered Posters / Affiches aux nombres pairs
Meet the Exhibitors / Rencontre des exposants
Cash bar / Bar payant
- 17:45 Exhibits Close / Fermeture des kiosques
Remove Even Numbered Posters / Retirer les affiches aux nombres pairs
- 17:45 – 18:45 **Bernhard Cinader Award Lectureship / Conférence du prix Bernhard Cinader** (Max Bell Auditorium)
“Building Bridges with Mast Cells”
Dr. Jean S. Marshall, *Professor, Department of Microbiology and Immunology, Faculty of Medicine, Dalhousie University, Halifax, NS, Canada*



Congratulations / Félicitations

***Jean S. Marshall, PhD
Professor, Department of Microbiology and
Immunology, Faculty of Medicine, Dalhousie
University***

The 2019 CSI – Hardy Cinader Award Recipient

Presentation: “Building Bridges with Mast Cells”

Dr. Jean Marshall received her B.Sc in Biochemistry and Ph.D. in Immunology from the University of Manchester, U.K. She completed postdoctoral training both in Manchester and at McMaster University, with Dr. John Bienenstock, where she became an Assistant Professor in 1989. In 1997 she relocated to Dalhousie University where she is a Professor in Microbiology and Immunology and a former head of the Department. Her team at Dalhousie are part of the growing, multi-disciplinary Dalhousie Human Immunology and Inflammation Group.

Dr. Marshall’s laboratory is internationally recognized for its studies of the role of mast cells and their mediators in defence against infection, chronic inflammatory diseases and cancer. Her laboratory has investigated many aspects of mast cells in innate immune function and defined novel roles for mast cells and their mediators in regulating effective responses to infection and cancer. Her team also has an interest in the role of Toll-like receptors in mucosal immune regulation. She has published over 120 peer reviewed papers which range from basic cell biology to clinical studies.

Dr. Marshall has led multiple multidisciplinary research teams in the inflammation, cancer and food allergy research areas. She is a past president of the Canadian Society for Immunology and was awarded a prestigious Arthur B. McDonald Chair by Dalhousie University. She participates in peer review for multiple national and international funding agencies and journals. Her work has been continuously funded by CIHR/MRC for the past 28 years and has also attracted substantial funds from a variety of other agencies. She continues to take particular pleasure in training and mentoring young scientists, many of whom have gone on to successful careers in academia and industry.

CSI Investigator Award

Congratulations / Félicitations



Dr. Alberto Martin, *Professor, Department of Immunology, University of Toronto*

Dr. Martin is a Professor in the Department of Immunology at the University of Toronto. He did his undergraduate training at McGill University. He then completed his PhD in 1999 in the Department of Immunology at the University of Toronto with Dr. Florence Tsui, working on the autoimmune condition dermatomyositis. He then pursued post-doctoral training at Albert Einstein College of Medicine in New York, U.S.A., with Dr. Matthew Scharff, focusing on characterizing the molecular mechanisms of secondary antibody responses, namely somatic hypermutation and class switch recombination, which are two processes that are central to the efficient neutralizing of pathogens and toxins. In 2003, he was recruited as a faculty member to the Department of Immunology at the University of Toronto.

Dr. Martin's research is focused in three main areas. His main interest is on antibody production, on how high-affinity antibodies are generated, and how antibodies of different classes are produced. Both of these processes are necessary for an efficient antibody response. In addition, he has also been investigating how these processes are linked to lymphoma generation due to the now recognized link between antibody production and cancer development. Dr. Martin is also investigating the role of the gut microbiota in the etiology of colon cancer. His laboratory is currently funded by the CIHR and Canadian Cancer Society.

CSI New Investigator Award

Congratulations / Félicitations



Dr. Bebhinn Treanor, *Associate Professor, Department of Biological Sciences and Department of Immunology, University of Toronto*

Bebhinn Treanor is an Associate Professor in the Department of Biological Sciences at University of Toronto Scarborough. Bebhinn's research is focused on the molecular mechanisms controlling the organization and dynamics of antigen receptors and the functional significance for lymphocyte activation through the development and implementation of cutting-edge optical microscopy. Bebhinn completed her PhD at Imperial College London under the supervision of Dr. Daniel M. Davis, where she visualized the spatial confinement of phosphorylated NK cell inhibitory receptors to 'hotspots', providing a new framework for understanding how NK cells integrate activating and inhibitory signals. She then went on to complete her postdoctoral work in the laboratory of Dr. Facundo Batista at the London Research Institute of Cancer Research UK, where she identified that the cortical actin cytoskeleton plays a critical role in controlling B cell receptor signaling. Her laboratory at the University of Toronto interrogates B cell activation at the level of single molecules within individual cells, and they have recently identified two novel regulators of B cell activation; the glycan-binding protein galectin-9, and the channel-kinase, TRPM7. In 2014, Bebhinn was awarded the CIHR Bhagirath Singh Early Career Award in Infection and Immunity, and in 2016, a Tier 2 Canada Research Chair in Spatially-resolved Biochemistry.

19:00 Banquet Dinner / Banquet (Kinnear Room 103 / 105)

21:00 Presentation of Investigator Awards and Travel/Poster Awards /
Présentation de bourses de voyages et prix des chercheurs

Monday, April 15 / Lundi, 15 avril

07:00 – 09:00 Breakfast / Déjeuner (Vistas Dining Room – Sally Borden Bldg.)

09:00 – 12:00 **Symposium III: Recent Advances in Neuroimmunology**
(Kinnear Room 103 / 105)

Chairs: **Dr. Jennifer Gommerman**, *Professor, University of Toronto*
Dr. Shannon Dunn, *Associate Professor, University of Toronto*

09:00 – 09:30 “Adolescent Obesity and MS risk: Modelling Impact of Obesogenic Diet on T Helper Immunity in Mice”

Dr. Shannon Dunn, *Associate Professor, Department of Immunology, University of Toronto, Toronto, ON, Canada*

09:30 – 10:00 “Interplay Between CD4 and CD8 T Cells in Shaping Central Nervous System Autoimmunity”

Dr. Joan Goverman, *Professor and Chair, Department of Immunology, University of Washington, Seattle, WA, USA*

10:00 – 10:30 “Environmental Control of Astrocyte Pathogenic Activities”

Dr. Francisco J. Quintana, *Associate Professor, Department of Neurology, Harvard Medical School, Boston, MA, USA*

10:30 – 11:00 Refreshment Break / Pause (Kinnear 1st Floor Foyer)

- 11:00 – 11:30 “Harnessing the Benefits of Inflammation for Neural Repair”
Dr. V. Wee Yong, *Professor and Head, Translational Neuroscience,
Department of Clinical Neurosciences, University of Calgary, Calgary, AB,
Canada*
- 11:30 – 12:00 “Understanding Multiple Sclerosis Progression Using Translational and
Reverse Translational Approaches”
Dr. Jennifer Gommerman, *Professor, Department of Immunology,
University of Toronto, Toronto, ON, Canada*
- 12:00 – 13:30 Lunch / Dîner (Vistas Dining Room – Sally Borden Bldg.)
- 13:30 CSI Meeting Ends / Fin de la Conférence

*Thank you and have a safe journey
Merci, au revoir et bon voyage de retour*