# Monocyte - Macrophage Biology Symposium:

## Cracking the Macrophage Code in Host Defense and Disease

### Research Institute of the McGill University Health Centre

### Monday, November 14, 2016

**Location**: Research Institute of the McGill University Health Centre (RI-MUHC)
Auditorium, ES1.1129
1001 boul Décarie, Montréal, Quebec, H4A 3J1

**RSVP** http://whoozin.com/ADD-TQD-PHW4

**Symposium Overview:**
This symposium will bring together prominent national and international experts in monocyte/ macrophage ontogeny, genomics, immune function to exchange the latest research advances in this field. By integrating the ontogeny/genomic/metabolomics and the role of monocytes/macrophages in host immunity during this symposium, we expect to explore the therapeutic potential of these cells in the treatment of diseases.

**Objectives**

1. To exchange the latest advances in the basic science of monocyte/macrophage biology
2. To identify knowledge gaps in monocyte/macrophage biology in various inflammatory disorders, particularly those affecting the respiratory system
3. To provide an exciting opportunity of learning as well as career development for trainees at the undergraduate, graduate, and postdoctoral levels
4. To lay the groundwork for effective networking of basic and clinical scientists at the local, national and international levels to investigate the therapeutic potential of monocyte/macrophage biology in human disease

**Symposium Planning Committee:**

**Maziar Divangahi, PhD**
Assistant Professor, McGill University
Associate Director, Meakins-Christie Laboratories
Associate Director, Translational Research in Respiratory Disease Program, RI-MUHC

**Basil Petrof, MD**
Professor, Department of Medicine, McGill University
Interim Director, Meakins-Christie Laboratories
Director, Translational Research in Respiratory Diseases Program, RI-MUHC

For more information: www.meakinsmcgill.com/meetings-and-workshops

| Time | Description |
|---|---|
| *08:15* | *Workshop Registration*<br>*Coffee and light breakfast served – outside RI-MUHC Auditorium* |
| 09:00 | **Welcome Remarks: Symposium overview and objectives**<br>Maziar Divangahi and Basil Petrof, McGill University |
| | **KEYNOTE LECTURE: SEYMOUR HEISLER MEMORIAL LECTURE**<br>Session Chair: Maziar Divangahi, McGill University |
| 09:15 | **Paul Kubes**, University of Calgary<br>Recruitment and plasticity of monocytes/macrophages in tissue repair |
| | **SESSION 1: Monocytes/Macrophages in Inflammatory Diseases**<br>Session Chair: Maziar Divangahi, McGill University |
| 10:15 | **Clinton Robbins**, University of Toronto<br>Differential function of embryonic vs bone marrow derived macrophages in inflammatory disease |
| *10:55* | *Health Break – outside RI-MUHC Auditorium* |
| 11:15 | **Basil Petrof**, McGill University<br>Modulation of innate immunity in genetic muscle diseases |
| *11:55* | *Networking Lunch – RI-MUHC Atrium* |
| 13:00 | **Filip Swirski**, Harvard Medical School<br>Macrophages in cardiovascular disease |
| | **SESSION 2: Monocytes/Macrophages in Infectious Diseases**<br>Session Chair: Basil Petrof, McGill University |
| 13:40 | **Maziar Divangahi**, McGill University<br>Macrophages in pulmonary infectious diseases |
| 14:20 | **Joseph Keane**, University of Dublin<br>Metabolism and function of human alveolar macrophages |
| 15:00 | **Luis Barreiro**, University of Montreal<br>Epigenetic modification of monocytes/macrophages in inflammatory diseases |
| *15:40* | *Health Break – outside RI-MUHC Auditorium* |
| | **SESSION 3: Monocytes/Macrophages in Autoimmunity and Tolerance**<br>Session Chair: Maziar Divangahi, McGill University |
| 16:00 | **Claudia Jakubzick**, University of Colorado<br>Double-edged-sword of mononuclear phagocytes in host defense and transplantation |
| 16:40 | **James Martin**, McGill University<br>The role of alveolar macrophages in lung tolerance to injury |
| 17:20 | **DISCUSSION: General discussion on current research knowledge, advances, and gaps, and opportunities for collaborative research** |
| *17:30* | *Symposium Adjourned* |
| **18:00** | **Speaker Dinner (by invitation)** |

**This symposium is generously supported by:**

Centre universitaire de santé McGill
Institut de recherche

McGill University Health Centre
Research Institute

**RI-MUHC Translational Research in Respiratory Diseases Program**

CIHR IRSC
Canadian Institutes of Health Research
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MCGILL - MONTREAL - MUHCRI

*Seymour Heisler, BSc'64, MSc'66, PhD'68*

## Seymour Heisler Memorial Lecture Fund

The Seymour Heisler Memorial Lecture was established in 2015 to commemorate the late Dr. Seymour Heisler and celebrate his life, his tremendous scientific achievements and his preeminent role in cystic fibrosis research. This lecture fund supports creativity and continued innovation by inviting distinguished physicians and scientists to visit McGill and its teaching institutions and share their wisdom and insights. The Seymour Heisler Memorial Lecture features an accomplished scientist in an area related to cystic fibrosis.