Microbiology and Infectious Diseases Research Day

Presented by the Emerging and Pandemic Infections Consortium

In collaboration with the Division of Infectious Diseases, Department of Medicine, University of Toronto, the Division of Infectious Diseases at the Hospital for Sick Children, the Institute for Pandemics and U of T’s postgraduate medical and clinical microbiology programs.

EPIC is a collaborative initiative between the University of Toronto and five hospital partners.

June 10
Trainee Day (University College)

June 11
Main program (Medical Sciences Building)
## Microbiology and Infectious Diseases Research Day

**TRAINEE DAY - JUNE 10, 2024**  
**UNIVERSITY COLLEGE, ROOM 140**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>9:00 AM</td>
<td><strong>Registration</strong></td>
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</table>
| 9:20 AM| **Welcome and opening remarks**  
Scott Gray-Owen                                      |
| 9:30 AM| **Characterizing human and viral proteins in the HIV-1 envelope using novel methods in flow virometry**  
Jonathan Burnie (PI: Christina Guzzo) |
| 9:55 AM| **Characterizing vaccination gaps in older adults residing in a complex continuing care hospital**  
Sharon Sukhdeo (PI: Jennie Johnstone) |
| 10:15 AM| **Cracking open the genetic evolution of vaccine seed influenza viruses propagated in embryonated chicken eggs or mammalian cell culture**  
Juliette Blais-Savoie (PIs: Samira Mubareka, Nicole Mideo) |
| 10:35 AM| **Coffee break**                                                                             |
| 11:05 AM| **Assessment of testes histomorphology, spermatogenesis, and Sertoli cell counts in mice exposed to protease inhibitor-based combination antiretroviral therapy in utero**  
Spencer Brooks (PI: Lena Serghides) |
| 11:20 AM| **Using predicted viral epitopes to identify missing mpox-specific T cell responses in current vaccines**  
Aideen Teeling (PI: Mario Ostrowski) |
| 11:40 AM| **Topographical modification of medical gloves to reduce microbial transmission**  
Desmond van den Berg (PI: Benjamin Hatton) |

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<tr>
<th>Time</th>
<th>Session Title</th>
<th>Presenter(s)</th>
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</thead>
<tbody>
<tr>
<td>12:10 PM</td>
<td>Lunch</td>
<td></td>
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<tr>
<td>1:10 PM</td>
<td>Pride in Microbiology Network</td>
<td>Landon Getz</td>
</tr>
<tr>
<td>1:20 PM</td>
<td>Vaginal <em>Lactobacillus crispatus</em> persistence following application of a live biotherapeutic product: colonization phenotypes and genital immune impact</td>
<td>Eric Armstrong (PI: Bryan Coburn, Rupert Kaul)</td>
</tr>
<tr>
<td>1:45 PM</td>
<td>Impact of penile-vaginal sex on the microbiome and immunology of the penile urethra</td>
<td>Marcio Gabriel Amancio de Carvalho (PI: Rupert Kaul)</td>
</tr>
<tr>
<td>2:05 PM</td>
<td>Profiling miRNA changes in Epstein-Barr virus lytic infection identifies a function for BZLF1 in upregulating miRNAs from the DLK1-DIO3 locus”</td>
<td>Ashley Campbell (PI: Lori Frappier)</td>
</tr>
<tr>
<td>2:25 PM</td>
<td>Coffee break</td>
<td></td>
</tr>
<tr>
<td>2:55 PM</td>
<td>Uptake and effectiveness of human papillomavirus vaccine among gay, bisexual and other men who have sex with men</td>
<td>Catherine Chambers (PI: Ann Burchell)</td>
</tr>
<tr>
<td>3:20 PM</td>
<td>Investigating the role of a bacterial heme acquisition system in macrophage persistence</td>
<td>Mahrukh Fatima (PI: Trevor Moraes)</td>
</tr>
<tr>
<td>3:40 PM</td>
<td>Leveraging MNK3 cells to study group 3 innate lymphoid cell responses to infectious challenges</td>
<td>Siu Ling Tai (PI: Arthur Mortha)</td>
</tr>
</tbody>
</table>
8:00 AM  Registration and coffee
David Naylor Student Commons, MSB

8:20 AM  Welcome and opening remarks
Scott Gray-Owen

8:30 AM  Respiratory virus infection in patients with haematological malignancy
Victoria Hall, University Health Network

9:00 AM  Leveraging AI and mathematical modelling for diseases outbreak support
Jude Kong, Dalla Lana School of Public Health, U of T

9:30 AM  Bacterial populations through the single-cell lens
Freeman Lan, Institute of Biomedical Engineering, U of T

10:00 AM  Coffee break

10:30 AM  Biology and control of H5N1 highly pathogenic avian influenza viruses
Shayan Sharif, University of Guelph

11:30 AM  PRECISE: A platform to elevate Canada’s ability to respond to emerging infectious diseases
Jennie Johnstone, Sinai Health
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**Infectious Diseases and Microbiology Research Day**

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<td>11:45 AM</td>
<td><strong>INSPIRE:</strong> Increasing resilience and capacity in Canada’s pandemic response</td>
<td>Mike McKay, University of Windsor</td>
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<tr>
<td>12:00 PM</td>
<td><strong>BioHubNet:</strong> Transformative talent development for biomanufacturing</td>
<td>Gilbert Walker, U of T</td>
</tr>
<tr>
<td>12:15 PM</td>
<td><strong>PREPARED:</strong> Pandemic preparedness engaging primary care and emergency medicine</td>
<td>Andrew Pinto, Unity Health Toronto</td>
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<tr>
<td>12:30 PM</td>
<td><strong>Closing remarks</strong></td>
<td>Scott Gray-Owen</td>
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<tr>
<td>1:00 PM</td>
<td><strong>Poster session A</strong> (Even numbers)</td>
<td>David Naylor Student Commons, MSB</td>
</tr>
<tr>
<td>2:00 PM</td>
<td><strong>Poster session B</strong> (Odd numbers)</td>
<td>David Naylor Student Commons, MSB</td>
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Thank you to our volunteers!

ORGANIZING COMMITTEE

Upton Allen (SickKids ID)
Natasha Christie-Holmes (EPIC)
Scott Gray-Owen (EPIC)
Jennie Johnstone (Division of ID, DoM)
Rasika Kulkarni (EPIC)
Nelson Lee (IfP)

Tony Mazzulli (Clinical/medical microbiology)
Pierre-Philippe Piche-Renaud (SickKids ID)
Jacqueline Watt (EPIC TAC)
Maria Anna Teza (EPIC)
Maxine Ty (EPIC TAC)
Betty Zou (EPIC)

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Wale Ajiboye
Wan Koh
Zi Yan Chen

TALK AND POSTER JUDGES

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