**UNIVERSITY OF TORONTO**

**Microbiology & Infectious Diseases Research Days**

Monday, June 3rd, 2019 – Trainee Day (Selected from Abstracts)  
Tuesday, June 4th, 2019 – Invited Lectures & Poster Session

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**Talks in Medical Sciences Building, Room 2170**

**Posters & Lunch in Medical Sciences Building, Room 2171 (C. David Naylor Student Commons)**

Website:  [http://microbeto.ca/mid-2019/](http://microbeto.ca/mid-2019/)

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**Monday, June 3rd, 2019**

**9:30 - 9:40 WELCOME ADDRESS**

**9:45 – 10:00: Avid Mohammadi**  
Characterizing the impact of penile-vaginal sex on HIV-susceptible CD4+ T cell subsets in the female genital tract

**10:05 - 10:20: Erin O. Y. Wong**  
Developing defined microbiota to model inflammation in the mouse gut

**10:25 - 10:40: Nora Mellouk**  
An ATG16L1-dependent pathway promotes plasma membrane repair and limits Listeria monocytogenes cell-to-cell spread

**10:45 - 11:15: COFFEE BREAK**

**11:20 - 11:35: Jean-Paul R. Soucy**  
Joint modelling of resistance to six antimicrobials in urinary *Escherichia coli* isolates in Quebec, Canada

**11:40 – 11:55: Sarah Birstonas**  
EHEC utilizes two-component systems to modulate expression of major flagellar subunit protein, FliC, in response to host intestinal cues

**12:00 - 12:15: Nathaniel Winsor**  
NLRP6 regulates the colonic mucus layer during *Tritrichomonas* infection

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**12:35 – 1:30: LUNCH**

**1:35 - 12:50: Samuel Salamun**  
Epstein-Barr Virus Protein BMRF1 Modulates Cellular SUMO and DNA Damage Response Pathways by Binding the Cellular NuRD Complex

**1:55 - 2:10: Nicola Case**  
Elucidating the mechanism of *Candida albicans* morphogenesis in response to phagocytosis by macrophages

**2:15 - 2:30: Sarah Kronheim**  
A small molecule anti-phage defense mechanism in *Streptomyces*

**2:55 - 3:00: COFFEE BREAK**

**3:05 - 3:20: Alexandra Willis**  
Understanding inherited immunity using a *C. elegans* model of microsporidia infection

**3:25 - 3:40: Genevieve Mailhot**  
Differentiating between protective and pathogenic neutrophil responses during *Neisseria gonorrhoeae* infection

**3:45 – 4:00: Tiffany Fitzpatrick**  
Successes of anti-RSV prophylaxis among infants in Ontario: results from a multi-decade, population-based controlled interrupted time series analysis using health administrative data
Poster Presentations
A Systematic Review of Solid Organ Transplantation in Acute Presentations of Tropical Infectious Diseases

Shveta Bhasker1, Emma Hagopian1, Celine Lecce1, David Harris1, Shareese Clarke1, Priyanka Challa1, Michael A. Klowak1, Eric Shao1, Kimberley Marks - Beaubrun1, Katherine Faith Tan1, Mofe Adeosun1, Osaru Omoruna1, Christian Lecce1, Avinash N. Mukkala1, Rachel Lau2, Andrea K. Boggild1

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Fulminant life-threatening presentations of acute tropical infections such as yellow fever, dengue, malaria, hepatitis E, and leptospirosis, may occur, and the degree of end-organ impairment may qualify patients for solid-organ transplantation (SOT) in centres with such capacity. However, due to a paucity of synthesized data, there is a knowledge gap around indications for and outcomes in SOT for severe acute tropical infectious diseases. We therefore aim to synthesize such knowledge, focusing on patient outcomes in order to inform triage and treatment protocols in centres where acute tropical infectious diseases and SOT capacity may intersect. Five electronic databases were searched (PubMed, Embase, Scopus, Cochrane, and LILACS) using combinations of search terms such as the following: “liver” or “hepatic” “transplant,” “yellow fever” “dengue” and “Plasmodium spp.,” from database inception to March 4, 2019. A total of 6317 articles were retrieved: 2324 articles on PubMed, 3839 on Embase, 244 on Scopus, 43 on Cochrane, and 108 on LILACS. After eliminating duplicates using Mendeley software, a total of 4944 articles remained for title screening. Titles, abstracts, and full-text articles will be systematically double screened by two reviewers with a tertiary arbitrator. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) will be implemented. Data extraction will be performed by two reviewers and the quality of the articles will be critically evaluated using the Grading of Recommendations Assessment, Development, and Evaluation (GRADE) approach. The data will be summarized to systematically map published literature that will illuminate the frequency, indications for, and health outcomes of SOT recipients in the treatment of acute tropical infectious diseases. Where SOT capacity exists alongside the occurrence of endemic or imported tropical infectious diseases, such synthesized information, particularly in the form of a clinical resource, is essential for appropriate resource allocation and informed clinical decision-making.