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

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/

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

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

2.30 - 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

25) An Update on the Role of Imaging in the Care of Patients with Schistosomiasis

Celine Lecce1, Leila Makhani1, Shveta Bhasker1, Christian Lecce1, Jason Kwan1, Michael Klowak1, Priyanka Challa1, Anjola Ogunsina1, Osaru Omoruna1, Kimberley Marks-Beaubrun1, Zachary Corso1, Rachel Lau2, Andrea Boggild1

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"Schistosomiasis leads to significant morbidity and mortality worldwide. Infection with Schistosoma mansoni and S. japonicum can lead to severe hepatic disease including periportal liver fibrosis and portal hypertension. Previous studies recommend the use of abdominal imaging to detect early hepatic changes and improve disease outcome. However, there are no recently published or authoritative resources to guide the use of imaging in the initial diagnosis of schistosomiasis. We searched available literature regarding the role of imaging in the evaluation of patients with schistosomiasis and aim to synthesize clinical recommendations. Eight electronic databases were searched: Ovid Medline, EMBASE, Cochrane Library of Systematic Reviews, Epistemonikos, Global Health, NICE, TRIP and LILACS with the following search terms: [Schistosomiasis OR (Schisto* AND (mansoni OR japonicum))] AND [CT OR (computed AND tomography) OR Ultraso* OR Sonogr* OR MRI OR (Magnetic AND resonance AND Imaging) OR Echo OR Imaging] AND [Liver OR periportal OR peri-portal OR fibrosis OR hepat* OR echogenic* OR (portal AND hypertension)] from database inception to February 28, 2019. A total of 2977 articles were identified: 691 articles on Ovid Medline, 30 Cochrane, 1035 Embase, 10 Epistemonikos, 516 Global Health, 34 NICE, 529 TRIP, and 132 LILACS. A total of 1933 articles remained for title screening after de-duplication. Titles, abstracts and full-texts were systematically double-screened by two reviewers and a tertiary arbitrator. Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) was employed. Two reviewers performed data extraction and quality of the studies was assessed with the Grading of Recommendations Assessment, Development and Evaluation (GRADE). Data were summarized using qualitative and quantitative measures to evaluate the role of imaging in the clinical management of schistosomiasis. Synthesizing the current literature on abdominal imaging in the evaluation of schistosomiasis can translate into clinical recommendations for improved risk stratification and overall management of schistosomiasis.