2026
University of Toronto Microbiology & Infectious Disease Research Days

AGENDA
Trainee Day, May 27

Room 2170, Medical Sciences Building, 1 King's College Circle

Presented by

UNIVERSITY OF TORONTO | EPIC Emerging & Pandemic Infections Consortium

In collaboration with

U of T's Division of Infectious Diseases, Department of Medicine, and postgraduate medical and clinical microbiology program, the Division of Infectious Diseases at The Hospital for Sick Children and the Institute of Health Emergencies and Pandemics.

With support from BIOMÉRIEUX

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

SickKids | Sinai Health | Lunenfeld-Tanenbaum Research Institute | Sunnybrook Research Institute | UNITY HEALTH TORONTO | UHN Canada's Hospital

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Microbiology and Infectious Diseases Research Days

TRAINEE DAY - MAY 27, 2026
MEDICAL SCIENCES BUILDING, ROOM 2170

9:00 AM	**Registration** David Naylor Student Commons, Medical Sciences Building
9:20 AM	**Welcome and opening remarks** Natasha Christie-Holmes
9:35 AM	**Neisserial type XI secretion system in *Escherichia coli*: A heterologous and versatile platform for secretion of engineered antigens and biologics** Dixon Ng (PI: Trevor Moraes)
10:00 AM	**A sepsis-predicting diagnostic for prioritized patient care in the ICU** Paul Kelly (PI: Keith Pardee)
10:25 AM	***Legionella pneumophila* anti-phage surface defences reveal links between phage resistance and ecology** Elizabeth Chaney (PI: Alexander Ensminger), 2026 EPIC Doctoral Awardee
10:50 AM	**Coffee break**
11:15 AM	**Identifying efficacious dietary additives to improve poultry gut health** Maxine Ty (PI: John Parkinson), 2026 EPIC Future Leader
11:40 AM	**Characterization of canonical and non-canonical antiviral responses in white tailed deer cells infected with host-adapted SARS-CoV-2** Sophie-Marie Aicher (PI: Samira Mubareka), 2024 EPIC Researcher Mobility Awardee
12:05 PM	**The clearance of human cytomegalovirus using CRISPR/Cas9 RNA lipid nanoparticles** Anson Lau (PI: Omar Khan), 2023 EPIC Doctoral Awardee

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12:30 PM	**Lunch**
1:30 PM	**Broad neutralization of viruses with high genetic diversity by antibodies** Krithika Muthuraman (PI: Jean-Philippe Julien), 2026 EPIC Future Leader
1:55 PM	**Trainee Flash Talks** (8 talks, 5 mins each) See next page for talk titles and presenters
2:40 PM	**Coffee break**
3:05 PM	**Mucosal anti-commensal immunity correlates with salivary vaccine responses and breakthrough infection timing in a pediatric cohort** Salma Sheikh-Mohamed (PI: Jennifer Gommerman), 2026 EPIC Future Leader
3:30 PM	**The role of NXPE3 in seasonal coronavirus infection** Michelle Gontcharova (PI: Mike Tyers)
3:55 PM	**From genomes to public health action: Population-level insights from the 2023/2024 influenza A season in Ontario** George Long (PI: Venkata Duvvuri)
4:20 PM	**Closing remarks**

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TRAINEE FLASH TALKS - MAY 27, 2026, 1:55 - 2:40 PM
MEDICAL SCIENCES BUILDING, ROOM 2170

Leprosy in a Canadian-born man with seasonal travel to Florida

Amanda Hempel (PI: Andrea Boggild)

The baseline vaginal immune milieu is an important determinant of the inflammatory response induced by penile-vaginal sex

Jinny Tsang (PI: Rupert Kaul), 2025 EPIC Doctoral Awardee

Role of Zbtb7b in gut mononuclear phagocytes

Zi Yan Chen (PI: Arthur Mortha), 2026 EPIC Doctoral Awardee

Characterizing knowledge user participation in infectious disease transmission modeling

Nancy Tahmo (PI: Sharmistha Mishra), 2025 EPIC Doctoral Awardee

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Structure-guided optimization of small molecules targeting Yck2 as a strategy to combat *Candida albicans*

Bonnie Yiu (PI: Leah Cowen)

Identifying critical control points for zoonotic virus spillover prevention at vital interfaces: Mapping human-wildlife value chains using a One Health approach

Will Zhang (PIs: Samira Mubareka & Cheryl Pritlove)

Ironing out the details: The impact of metals on key vaginal bacteria

Daniella Serrador (PI: William Navarre), 2026 EPIC Doctoral Awardee

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Filters for bioaerosol surveillance and infection control

David Kormos (PI: Jeffrey Seigel), 2025 EPIC Researcher Mobility Awardee

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2026
University of Toronto Microbiology & Infectious Disease Research Days

AGENDA
Main Programming Day, May 28

Room 3154, Medical Sciences Building, 1 King's College Circle

Presented by

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Microbiology and Infectious Diseases Research Days

KEYNOTE & SPOTLIGHT TALKS - MAY 28, 2026
MEDICAL SCIENCES BUILDING, ROOM 3154

8:00 AM	**Registration and coffee** David Naylor Student Commons, MSB
8:45 AM	**Welcome and opening remarks** Natasha Christie-Holmes
9:00 AM	**Quantifying viral dynamics following single and combination immunotherapy for HIV** Alison Hill, Faculty of Arts & Science, U of T
9:25 AM	**From structural snapshots to vaccine immunogens against Epstein-Barr virus and related viruses** Mathew McCallum, Temerty Faculty of Medicine, U of T
9:50 AM	**Data, models and equity: Generating evidence to inform pediatric RSV prevention strategies** Tiffany Fitzpatrick, Dalla Lana School of Public Health & Public Health Ontario
10:15 AM	**Coffee break**
10:45 AM	***Keynote*** **When a muskox dies in the tundra, does anybody hear?: Rethinking wildlife health surveillance in the Arctic** Susan Kutz, Faculty of Veterinary Medicine, University of Calgary

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11:45 AM	**Leveraging single-cell sequencing and human clinical trials to garner insights into tuberculosis immunology and vaccine development** Dylan Kain, Division of Infectious Diseases, University Health Network
12:10 PM	**The microscopic world of indoor environments** Sarah Haines, Faculty of Applied Science & Engineering, U of T
12:35 PM	**Closing remarks** Jennie Johnstone, Sinai Health
12:45 PM	**Lunch** David Naylor Student Commons, MSB
2:00 PM	**Poster session A** (Even numbers) David Naylor Student Commons, MSB
3:00 PM	**Poster session B** (Odd numbers) David Naylor Student Commons, MSB

Thank you to our volunteers!

ORGANIZING COMMITTEE

Upton Allen (SickKids ID)
Vanessa Allen (Clinical/medical microbiology)
Duncan Carruthers-Lay (EPIC TAC)
Natasha Christie-Holmes (EPIC)
Scott Gray-Owen (EPIC)
Jennie Johnstone (Division of ID, DoM)
Rita Kandel (LMP)
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Nelson Lee (IHEP)
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Diana Yang

WE ALSO THANK THE TALK AND POSTER JUDGES!