

# PacTB 2025

May 12, 12:00 – 9:00pm & May 13, 9:00am – 3:00pm

Life Science Centre, LSC1002, [2350 Health Sciences Mall, Vancouver, BC V6T 1Z3](#)

## MONDAY, MAY 12

<b>Registration Check In (West Atrium / Outside LSC 2)</b>		12:00pm	1:00pm
<b>Welcoming Remarks – Lindsay Eltis, PhD</b>		1:00pm	1:10pm
<b>Keynote Address – Jim Sun (Moderator)</b>			
Maziar Divangahi, PhD McGill University	Targeting Innate Immunity in Vaccine Development against TB	1:10pm	2:10pm
<b>Break</b>		2:10pm	2:30pm
<b>Session 1 – Elitza Tocheva, Associate Professor</b>			
Hannah Nilsson, UC Berkeley	Elucidating the mechanism of colony morphology switching in <i>Mycobacterium avium</i>	2:30pm	2:50pm
Nicholas Campbell-Kruger, UC Berkeley	A conserved two-gene operon is essential for lipoarabinomannan localization and mycomembrane function in the pathogen <i>M. abscessus</i>	2:50pm	3:10pm
Julia Kleetz, UBC	Mechanistic Insights into N-Acylated Tryptazolone Biosynthesis in <i>Mycobacterium tuberculosis</i> and Related Bacteria	3:10pm	3:30pm
Alex Zilinskas, UC Berkeley	Understanding how <i>M. tuberculosis</i> alters the T helper response via the type 7 secretion system ESX-1 and lipid virulence factor phthiocerol dimycocerosate	3:30pm	3:50pm
<b>Poster session – West Atrium</b>		3:50pm	5:30pm
<b>Dinner Reception</b>	<a href="#">Koerner's Pub, 1758 West Mall, Vancouver, BC V6T 1Z2</a>	6:00pm	9:00pm

## TUESDAY, MAY 13

<b>Breakfast</b>		9:00am	9:30am
<b>Session 2 – Yi Chu Liang, PhD Candidate</b>			
Karolina Maciag, UW & SCRI	Dissecting cell-extrinsic mechanisms of IFN $\gamma$ -mediated macrophage immunity to Mtb in vivo	9:30am	9:50am
Austin M. Haynes, UW	Targeted Deletions in the ESX-5 Locus of <i>Mycobacterium tuberculosis</i> Alter Cytokine Responses in Human Macrophages	9:50am	10:10am
Joshua Ivie, SCRI	Effects of Early Alveolar Macrophage Ferroptosis on <i>Mycobacterium tuberculosis</i> Infection Outcomes	10:10am	10:30am
Ning Sun, UBC	Breath Signatures for Pulmonary Tuberculosis Detection and Treatment Monitoring	10:30am	10:50am
<b>Break</b>		10:50am	11:10am
<b>Session 3 – Julia Kleetz, Postdoctoral fellow</b>			
Miranda Coldren, SCRI	Investigating kinase regulation of <i>Mycobacterium tuberculosis</i> respiration and its impact on survival	11:10am	11:30am
Laarni Kendra Aguila, UW	The role of intrabacterial pH on <i>Mycobacterium tuberculosis</i> antibiotic tolerance	11:30am	11:50am
Leah Rankine-Wilson, UBC	Leveraging macrophage acidification for tuberculosis drug discovery	11:50am	12:10am
<b>Lunch &amp; Poster session – West Atrium</b>		12:10pm	1:45pm
<b>Session 4 – Ginny Pichler, Postdoctoral fellow</b>			
Christine Anterasian, UW	Genome-Wide Association Study Identifies Novel Variant Associated with Susceptibility to Pediatric Tuberculosis	1:45pm	2:05pm
Mina Sadeghi, McGill	Unraveling the Mechanisms of BCG-Induced Early-Life Protection Against Tuberculosis	2:05pm	2:25pm
Brooke Kennedy, UW	Regulation of Local Inflammation And Tissue Disruption Following Controlled Human Mycobacterial Infection	2:25pm	2:45pm
<b>Closing Remarks – Lindsay Eltis, PhD</b>		2:45pm	2:55pm

Posters	
1. Adam Abdirahman Hassan, UBC	Characterization of TrzA reveals determinants of oxazalone diversity in <i>Mycobacterium tuberculosis</i>
2. Adriana Ibtisam, UBC	Generating a fluorescent reporter gene system to characterize the spatiotemporal dynamics of cholesterol catabolism in <i>Mycobacteria</i>
3. Angela Zhou, UW	Development of an in vitro model of early tuberculosis granuloma development using human tonsils and peripheral blood
4. Antao Gao, UBC	Sputum Volatiles Differentiate <i>M. avium</i> Complex and <i>M. abscessus</i> Species Infections in People with Cystic Fibrosis
5. Anthony Reynolds, UW	Quantitative Mass Spectrometry in Defining the M. tb Induced Phosphoproteome in Primary Human Macrophages
6. Braden Carroll, SCRI	Using kinome regression to identify novel host pathways that impact <i>Mycobacterium tuberculosis</i> infection outcome.
7. Carmen Chung, UBC	Determining the role of steroid catabolism in <i>Mycobacterium abscessus</i> pathogenesis
8. Cassandra Winter, UW	T cells specific for mycobacterial lipids express anti-bacterial effector functions via bystander signals
9. Eleanor Lamont, UW	Transcript-Capture sequencing and its application to tuberculosis sputum samples
10. Elya Shamskhov, UW/SCRI	<i>Mycobacterium tuberculosis</i> alters the lymph node myeloid landscape to blunt T cell activation and provide a pathogenic niche
11. Erick Tieu, UW	Investigating the role of protein kinase D in modulating drug response in <i>Mycobacterium tuberculosis</i>
12. Gregory Nikas, UBC	De novo biogenesis of the mycomembrane
13. Holly Barrett, SCRI	CD4 and CD8 T cells mediate distinct aspects of vaccine-induced immunity against <i>Mycobacterium tuberculosis</i>
14. Jake Felker, UBC	MX2 mediates control of <i>Mycobacterium tuberculosis</i> in macrophages
15. Jane Hill, UBC	Pushing the Frontiers of Breath: Tuberculosis Detection, Progression, and Treatment Response in Macaques
16. Joseph Chao, UBC	A Shiny Approach to High Content Screening Data Analysis
17. Joshua Ivie, SCRI	Effects of Early Alveolar Macrophage Ferroptosis on <i>Mycobacterium tuberculosis</i> Infection Outcomes
18. Kathryn McLean, SCRI	Analysis of Antibiotic Interactions Against <i>Mycobacterium abscessus</i> to Identify Drug Synergy
19. Kim Dill-McFarland, UW	Genome-wide association study in Brazil identifies genetic susceptibility to pulmonary tuberculosis with cell-specific gene expression effects
20. Kim Foster, SCRI	CD4 T and lung epithelial cell crosstalk regulates Mtb lesion formation
21. Kristine Tandoc, UW	Characterizing an atypical phosphodiesterase Rv1339 in <i>Mycobacterium tuberculosis</i>
22. Lauren Cross, SCRI	Investigating the structure of <i>Mycobacterium tuberculosis</i> lung lesions seeded by aerosol vs. hematogenous routes
23. Leah Rankine-Wilson, UBC	Seeking correlation: phagosome acidification for <i>Mycobacterium tuberculosis</i> drug discovery
24. Lillian Shallow, UC Berkeley	Establishing a model of murine lung function and tissue remodeling during M.tb infection and treatment
25. Marian Fairgrieve, UC Berkeley	Does the innate immune system control Mtb?
26. Matthew Christofferson, UBC	Parkinson's Disease-related genes in macrophage immunity during <i>Mycobacterium tuberculosis</i> infection
27. Megan Files, UW	Multimodal study of airway innate immunity among <i>M. tuberculosis</i> 'resisters'
28. Molly Kanagy, UW/SCRI	CXCR2 inhibition as a host directed tuberculosis therapy to reduce neutrophil-driven pulmonary disease

29. Peng Xu, UBC	Genome-wide screen for critical genes involved in maturation of <i>Mycobacterium tuberculosis</i> -containing phagosomes
30. Quang Thong, UW	Minor variations in lipid chain length modulate T cell recognition of a mycobacterial glycolipid
31. Renee Newby, UW	Index case whole blood transcriptional signature associated with cough aerosolization of <i>Mycobacterium tuberculosis</i>
32. Riley Zielinski, SCRI	Highly Localized CD200 Shapes Early <i>Mycobacterium tuberculosis</i> Infection in Alveolar Macrophages
33. Sara Cohen, SCRI	Assessing the efficacy of novel mRNA lipid nanoparticle vaccines in the ultra-low dose mouse model of tuberculosis
34. Shweta Parmar, UBC	Characterization of the Type 7 Secretion System in <i>Mycobacterium abscesses</i>
35. Sydnee T Gould, UC Berkeley	Identification of Host & Bacterial Factors that Mediate Progression to Tuberculosis Meningitis
36. Talia Himmelfarb, UW	Maternal Mycobacterial-Specific T-cell Signatures and Infant Risk of <i>Mycobacterium tuberculosis</i> Infection
37. Virginia Pichler, UBC	Unveiling the diversity of clinical <i>Mycobacterium abscessus</i> infections: morphological spectrum, glycopeptidolipids and infection dynamics in macrophages
38. Yichu Liang, UBC	Exploiting apoptosis for host-directed tuberculosis therapy
39. Ashiru Zainulabidin, SR University India	TBD

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