Thursday, September 20th

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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</thead>
<tbody>
<tr>
<td>7:45 a.m.</td>
<td>Bus departs WUSM</td>
</tr>
<tr>
<td>9:00 a.m.</td>
<td>Registration &amp; Continental Breakfast - Great Room</td>
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<tr>
<td>9:45 a.m.</td>
<td>Welcome/Introduction of New Students - Marquette/Piasa</td>
</tr>
<tr>
<td>10:00 a.m.</td>
<td>Session 1 Talks - Marquette/Piasa</td>
</tr>
<tr>
<td>11:30 a.m.</td>
<td>Lunch Buffet - Great Room</td>
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<tr>
<td>12:30 p.m.</td>
<td>Session 2 Talks - Marquette/Piasa</td>
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<tr>
<td>1:30 p.m.</td>
<td>Poster Session - McAdams and Pontiac</td>
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<tr>
<td>2:45 p.m.</td>
<td>Room Check-In - Front Desk</td>
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<tr>
<td>3:00 p.m.</td>
<td>Group Activity - Great Room</td>
</tr>
<tr>
<td>5:00 p.m.</td>
<td>Free Time</td>
</tr>
<tr>
<td>6:00 p.m.</td>
<td>Keynote Address - Marquette/Piasa</td>
</tr>
<tr>
<td>7:00 p.m.</td>
<td>Dinner - Great Room</td>
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<tr>
<td>8:00 p.m.</td>
<td>Celebration - McAdams/Pontiac</td>
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FRIDAY, September 21st

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>9:00 a.m.</td>
<td>Breakfast Buffet - Great Room</td>
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<tr>
<td></td>
<td>Room Check Out - Front Desk</td>
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<tr>
<td>10:00 a.m.</td>
<td>Session 3 Talks - Marquette and Piasa</td>
</tr>
<tr>
<td>11:20 a.m.</td>
<td>Closing Remarks</td>
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<tr>
<td>12:00 p.m.</td>
<td>Bus departs Pere Marquette</td>
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Keynote Address:

Victoria J. Fraser, MD
Adolphus Busch Professor of Medicine
Chair, Department of Medicine
Washington University School of Medicine

“Diversity, Inclusion and Career Development, Key Elements for Success”

Faculty Coordinators:
Sebla Kutluay & Mario Feldman

Pere Marquette Lodge in Grafton, Illinois
10:00am – 11:30am, (Marquette/Piasa Ballrooms)
**Session One Talks**
- **Ali Ellebedy** (PI, Pathology & Immunology)
  “Catching the Flu? Don’t Stop B-cell-ieving”
- **Joe Vogel** (PI, Molecular Microbiology)
  “Legionella T4SS: Seeing Dots in my sleep”
- **Lisa Funkhouser-Jones** (Sibley Lab, Molecular Microbiology)
  “Stem cell-derived epithelial culture system that supports complete Cryptosporidium development in vitro”

11:30am – 12:30pm (Great Room)
**Lunch**

12:30pm – 1:30pm (Marquette/Piasa)
**Session Two Talks**
- **Gisela DiVenanzio** (Feldman Lab, Molecular Microbiology)
  “Uncovering the uropathogenesis of multi-drug resistant Acinetobacter baumannii”
- **Sandeep Upadhyay** (Philips Lab, IM – Infectious Diseases)
  “Mycobacterium tuberculosis LCP protein CpsA confers protection from reactive oxygen species and LC3-associated phagocytosis”
- **Jennifer Elliott** (Kutluay Lab, Molecular Microbiology)
  “Investigating the integration-independent role of HIV-1 integrase in the viral lifecycle and virion morphogenesis”

1:30pm – 3:00pm (McAdams/Pontiac/Hallway)
**Poster Session**

2:45pm – 3:00pm (Front Desk)
**Room Check-in / Overnight Attendees**

3:00pm – 5:00pm (Great Room)
**Group Activity**
- Petris: the microbes war
- Improv Seminar

5:00pm – 6:00pm
**Free Time**

6:00pm – 7:00pm (Marquette/Piasa)
**Keynote Address**

**Victoria J. Fraser, MD**
Adolphus Busch Professor of Medicine
Chair, Department of Medicine
Washington University School of Medicine

“Diversity, Inclusion and Career Development, Key Elements for Success”

7:00pm – 8:00pm (Great Room)
**Dinner**

8:00pm – Midnight (McAdams/Pontiac)
**Party**
9:00am – 9:50am (Great Room/Front Desk)
Breakfast and Room Check-out

10:00am - 11:40am (Marquette/Piasa)
Session Three Talks

Kavita Agarwal (Lewis Lab, Molecular Microbiology)
“Sialoglycan foraging drives mutualism between Fusobacterium nucleatum and the vaginal microbiota”

Greg Harrison (Stallings Lab, Molecular Microbiology)
“Disarming isoniazid resistance in Mycobacterium tuberculosis”

Md Shafiuddin (Boon Lab, IM – Infectious Diseases)
“Evaluation of antiviral efficacy of Favipiravir in a mouse model for Bourbon virus”

Tabbetha Bohac (Wencewicz Lab, Chemistry)
“Siderophore-Mediated Iron Acquisition in Acinetobacter baumannii”

11:20am – 11:30am (Marquette/Piasa)
Closing Remarks

12:00pm
Bus Departs Pere Marquette

Image by the Lodge Lab
1. Kavita Agarwal (Lewis lab)
   “Sialoglycan foraging drives mutualism between Fusobacterium nucleatum and the vaginal microbiota”

2. Mushtaq Ahmed (Khader Lab)
   “Common immune correlates of risk of TB disease in animal models and human TB”

3. Natalia Akopyants (Beverley Lab)
   “Discovery of diverse Endosymbiotic Leishmania RNA viruses promoting virulence through Interferon-Dependent and -Independent processes”

4. Wandy Beatty (Head of Lab)
   “Molecular Microbiology Imaging Facility”

5. Jaya Bhushan (Sibley Lab)
   “Sibley Lab: Interrogating Parasite Biology”

6. Jacco Boon (Head of Lab)
   “Influenza virology and viral pathogenesis”

7. Pallavi Chandra (Philips Lab)
   “Targeting macrophage lipid metabolism as host-directed therapy for Tuberculosis”

8. Gisela Di Venanzio (Feldman Lab)
   “Unraveling the uropathogenesis of Acinetobacter baumannii”

9. George Lye (Beverley Lab)
   “CRISPRing Leishmania”

10. Micah Dunlap (Khader Lab)
    “Early Mtb factors drive innate immune interaction during M tuberculosis infection”

11. Philip Frasse (John Lab)
    “Understanding HAD proteins in Plasmodium metabolism”

12. Steven Grigsby (Philips Lab)
    “Mycobacterium tuberculosis is protected from NADPH oxidase and LC3-associated phagocytosis by the LCP protein CpsA”
13. M. Florencia Haurat (Feldman Lab)
“CpaA, a novel secreted protease of Acinetobacter spp., contains lectin-like domains and targets glycoproteins”

14. Jennie Hazen (Hultgren Lab)
“Pathogenesis of Urinary Tract Infections”

15. James Heffeman (Henderson Lab)
“Youssiniabactin: when is a siderophore not a siderophore?”

16. Bradley Hiller (Lenschow Lab)
“The role of fibroblast growth factor-9 in influenza A virus pathogenesis”

17. Andrew Jezewski (Odom Lab)
“Exploiting mechanisms of glycolytic regulation in malaria parasites”

18. Seongmi Kim (Hultgren Lab)
“Epigenetic changes made in the bladder epithelial stem cells upon chronic cystitis regulate altered bladder immune responses to recurrent infection”

19. Rachel Kinsella (Stallings Lab)
“Investigating the role of ATG5 in controlling neutrophil dominated lung inflammation during Mycobacterium tuberculosis infection”

20. Kathryn Knoop (Newberry Lab)
“Gut Mechanisms of Neonatal Sepsis”

21. Sumit Kumar (Sibley Lab)
“Toxoplasma gondii effector TgIST bocks type I Interferon signaling to promote infection”

22. Shan Liang (Head of Lab)
“IL-15 promotes survival of HIV-infected CD4+ T cells and viral latency”

23. Marianne Ligon (Mysorekar Lab)
“Age-associated Lymphoid Neogenesis in the Urinary Bladder of Mice and Women”

24. Fangqiong Ling (Head of Lab)
“Bacterial communities as biosensors in water infrastructure”

25. Juvenal Lopez (Feldman Lab)
“Multidrug-resistant plasmids repress chromosomally encoded type VI secretion system to enable their dissemination”

26. Jana Markley (Wencewicz Lab)
“Semisynthetic Analogues of Anhydrotetracycline as Inhibitors of Tetracycline Destructase Enzymes”

27. Lisa McLellan (Hunstad Lab)
“Uropathogenic Escherichia coli adhesion and therapeutic intervention during kidney bacterial community formation”

28. Justin Miller (John Lab)
“Prodrug activation in Staphylococci”

29. Ekansh Mittal (Philips Lab)
“Mycobacterium tuberculosis Type VII secretion system effectors differentially impact the ESCRT endomembrane damage response”
30. **S. Celeste Morley** (Head of Lab)
   “Invincibility lies in the defense: probing anti-pneumococcal pneumonia in small animals”

31. **Ana Maria Murta Santi** (Beverley Lab)
   “CRISPR/Cas9 as a tool for the study of promising targets for the treatment of leishmaniasis and Chagas disease”

32. **Ayse Ozanturk** (Shan Lab)
   “Anti-SIRPa antibody immunotherapy enhances macrophage-mediated phagocytosis of HIV-infected cells”

33. **Alexandra Paharik** (Hultgren Lab)
   “Defining the gut-bladder axis: the Urinary Tract Infection Microbiome Study”

34. **Daniel Paiva Agustinho** (Doering Lab)
   “Natural Genomic Variants that Influence Cryptococcal Pathogenicity”

35. **Gloria Polanco** (Beverley Lab)
   “Differential Proteomic Analysis of *Leishmania* WT and Fucosyltransferase 1 null Mutant”

36. **Jerome Prusa** (Stallings Lab)
   “Domains within RbpA serve specific functional roles that regulate the expression of distinct mycobacterial gene subsets”

37. **Julia Reuwsaat** (Doering Lab)
   “Overview of the research in the Doering lab”

38. **Hamid Salimi** (Klein Lab)
   “IFNAR and Cav-1 crosstalk regulates alphavirus transcytosis at the blood-brain barrier”

39. **Updhyay Sandeep** (Philips Lab)
   “*Mycobacterium tuberculosis* is protected from NADPH oxidase and LC3-associated phagocytosis by the LCP protein CpsA.”

40. **Luis Sandoval** (Wang Lab)
   “The Dietary Restriction Like (drl-1) Gene, a Putative Serine/Threonine Kinase, Is Essential for Orsay virus Infection in *C. elegans*”
41. Md Shafiuddin (Boon Lab)
   “Evaluation of Antiviral efficacy of Favipiravir in a mouse model for Bourbon virus”

42. Christian Shema Mugisha (Kutluay Lab)
   “Molecular Biology of HIV-1-Host Interactions”

43. Michael Vahey (Head of Lab)
   “Reverse engineering influenza virus assembly and transmission”

44. Alissa Young (Lenschow lab)
   “CHIKV-Cre as a tool to study chronic chikungunya virus infection”

45. Dennis Zhu (Stallings Lab)
   “CarD contributes to diverse gene expression outcomes in Mycobacterium tuberculosis”
An expert in infectious disease and antibiotic resistance, Dr. Fraser currently focuses her research on preventing and controlling hospital-acquired infections, adverse events and medical errors. Healthcare-associated infections affect almost 2 million people in the US. By analyzing administrative data and electronic health records in an integrated health care system, Dr. Fraser has identified risk factors for these infections, determined their morbidity, mortality and costs, and applied interventions in real-world settings to successfully reduce their occurrence.

Her clinical interests include the care of underserved patients, specifically patients with HIV/AIDS, and acute chronic infections. She has experience developing and implementing interventions to improve healthcare outcomes in multiple clinical settings.

Many organizations have funded Dr. Fraser’s research, including the Centers for Disease Control and Prevention and the National Institutes of Health. She is the principal investigator of a CDC Prevention Epicenters Program grant. In addition, she is PI for the Doris Duke Fund to Retain Clinical Scientists at WU. She currently serves as a grant reviewer for the Department of Defense Peer Reviewed Medical Research Program, and has served on the NIAID Microbiology and Infectious Diseases study section in addition to several NIH special emphasis review panels.

Dr. Fraser has mentored numerous trainees who have gone on to careers in academic medicine and has developed specific coursework for trainees beginning clinical research careers. At the School of Medicine, she has received the Neville Grant Award, Distinguished Service Teaching Awards and the Academic Women’s Network Mentoring Award. She received the Society for Healthcare Epidemiology of America (SHEA) Lectureship, the SHEA Mentor Scholar Award and the SHEA Investigator Award, and has served as SHEA president. She was the 2013 Presidential Lecturer at the annual meeting of the Infectious Diseases Society for Obstetrics and Gynecology and the Maxwell Finland Lecturer at the 2013 IDWeek, the annual scientific meeting of infectious disease professionals.

Dr. Fraser received the Washington University in St. Louis Alumni Association Distinguished Faculty Award in 2014, and the University of Missouri-Columbia School of Medicine Alumni Citation of Merit Award in 2016. In 2017, she received the St. Louis Business Journal Most Influential Business Woman Award, the Human Rights Campaign Foundation Ally for Equality Award, and she was elected as a member of the Infectious Diseases Society of America Board of Directors. She received the WUSM Academic Women’s Network Pillar of Support Award in 2018.

Dr. Fraser received her doctorate in medicine from the University of Missouri and was an internal medicine resident and chief resident at the University of Colorado. She completed a fellowship in Infectious Diseases at Washington University School of Medicine and Barnes-Jewish Hospital.

Dr. Fraser lives with her husband, Dr. Steve Miller, in Richmond Heights. They are the parents of three adult children, Jake, Becky and Hallie.
Special THANKS to our sponsors:

Washington University School of Medicine

Department of Molecular Microbiology

Division of Biology & Biomedical Sciences