Rhode Island Microbiome Symposium 2020

Promoting Applied Biomedical & Environmental Microbiome Research in Rhode Island & the Northeast

7 Greenhouse Road, Kingston RI WI-FI "URI_Open"

Visit our website



web.uri.edu/riinbre/microbiome-symposium-2020/

Thursday, January 16

4:00 pm - 5:00 pm **Registrants** - First Floor Atrium Upon arrival please check in at the registrant table to pick up a program booklet & name badge

5:00 pm to 8:00 pm - 170 Avedisian Hall

5:00 pm - 5:15 pm Welcoming Remarks

Christopher Hemme, PhD, RI-INBRE Bioinformatics Core Director Bongsup Cho, PhD, RI-INBRE Program Director Paul Larrat, PhD, Dean, College of Pharmacy, University of Rhode Island

5:15 pm - 6:00 pm **Keynote Speaker I –** *De novo mutations in human skin microbiomes* Tami Lieberman, PhD, Assistant Professor, Massachusetts Institute of Technology

6:00 pm - 8:00 pm **Poster Session & Networking Reception** 1st Floor Atrium

Friday January 17

7:00 am - 8:30 am **Registrants** - First Floor Atrium *Upon arrival please check in at the registrant table to pick up a program booklet & name badge*

8:30 am to 12:00 pm - 170 Avedisian Hall

8:30 am - 8:45 am **Overview of Symposium Goals** Christopher Hemme, PhD, RI-INBRE Bioinformatics Core Director

8:45 am - 10:15 am Session I – *Diet & the Microbiome* Peter Belenky, PhD, Brown University *Microbial Translocation & Innate Immune Markers following Moderate Alcohol in Healthy Volunteers* Mollie Monnig, PhD, Brown University

The Effects of Polyunsaturated Fatty Acids on the Gut Microbiome Kanakaraju Kaliannan, M.D. Harvard Medical School, Massachusetts General Hospital

Effects of Complex Polysaccharides on Antibiotic-Induced Gut Dysbiosis Swathi Penumutchu, Brown University

Taxonomic and Functional Profiling of the Microbiome of the Eastern Oyster, Crassotrea virginia Zachary Pimentel, University of Rhode Island

10:15 am - 10:30 am Break

10:30 am - 12:00 pm

Session II – Pathogens, Antibiotics & the Microbiome Kathryn Ramsey, PhD, University of Rhode Island

Impact of Lung Microbes on Tolerance to Influenza A Virus Infection Amanda Jamieson, PhD, Brown University

The Role of Microbial & Host Metabolism in Antibiotic-Induced Dysbiosis Peter Belenky, PhD, Brown University

Mucus Residing Community is Key for Gut Microbiome Stability Kellyanne Duncan, Brown University

An Expedition into the Establishment of the Resistome: Exploring the Collection of Antimicrobial Resistance Genes in the Infant Gut Rebecca Lebeaux, Dartmouth College

12:00 pm - 12:45 pm

Facilities Tours & Lunch

- 3D Facility for Biomedical Sciences 292 Avedisian
- Rhode Island Genomics & Sequencing Center 352 CBLS
- RI-INBRE Central Research Core Facility 405 Avedisian

12:45 pm - 2:00 pm Breakout Sessions

BREAKOUT SESSION A: Bioinformatics Christopher Hemme 105 Avedisian

Aspects of Power for Metagenomic Studies August Guang, PhD, Brown University

Nanopore Sensors for -omics: Combing Through the Microbiome one Molecule at a Time Jason Dwyer, PhD, University of Rhode Island

From genomes to ecosystems: Model-based characterization of omics data Ying Zhang, PhD, University of Rhode Island

Open Discussion

BREAKOUT SESSION B: Student/Postdoc Lightning Talks Matthew Ramsey, PhD 130 Avedisian

Antibiotic Resistance Genes are Ubiquitous Among the Gut Microbiota of Narragansett Bay Fish Species Benjamin Korry, Brown University

Host Hyperglycemia Impacts Antibiotic Efficacy within the Gut Microbiome Jenna Wurster, Brown University

An Unexpected Finding in the Serum of Type II Diabetics Dasith Perera, University of Rhode Island

Metabolic Modeling of a Novel Mycoplasma Identified from Eastern Oyster Microbiome Kayla Russo, University of Rhode Island

Analysis of nitrifying & denitrifying bacteria communities in advanced nitrogen-removal onsite wastewater treatment systems Bianca Ross, University of Rhode Island

Microbial composition of greenhouse gas cycling communities in soils above septic system drainfields Alissa Cox, University of Rhode Island

Microbial Nitrogen Removal in Soils Treating Septic System Wastewater Sarah Wigginton, University of Rhode Island

EUKnique: Single-Cell Transcriptomic Analysis for Marine Microbial Eukaryotes Arianna Krinos, Massachusetts Institute of Technology

Tiny Cells with a Big Impact: An Unexpected Bloom in the Mid-Atlantic Jessica Carney, University of Rhode Island

Microbiome Profiling at the Strain Level Using rRNA Amplicaons Dawn Gratalo, Shoreline Biome

2:00 pm to 6:00 pm – 170 Avedisian Hall

2:00 pm - 2:45 pm

Keynote Speaker II – Birds & Bacteria: Evolution of the Avian Microbiome Sarah Hird, PhD, University of Connecticut

2:45 pm - 4:15 pm Session III – *Healthy States: Commensal Microbiomes* Roxanne Beinart, PhD, University of Rhode Island

Identifying Mechanisms That Dictate Spatial Composition of the Oral Microbiota Matthew Ramsey, PhD, University of Rhode Island

Inter-Individual Variation in the Gut Bacterial Communities of Captive Coppery Titi Monkeys Laura Williams, PhD, Providence College

Effects of Environment & Species Identity on the Gut Microbiomes of Co-occurring Small Mammals in a Savanna Ecosystem Bianca Brown, Brown University

Linking Environmental Variability to Oyster Microbiomes in Narragansett Bay Rebecca Stevick, University of Rhode Island

4:15 pm - 4:30 pm **Break**

4:30 pm - 6:00 pm **Session IV** – *Microbial Ecology* Ying Zhang, PhD, University of Rhode Island

Long-term Coexistence of Cyanobacterial & Viral Communities in Narragansett Bay Marcia Marston, PhD, Roger Williams University

Using the Local Temperate Coral Astrangia poculata to Identify What Drives Stability of Coral-Microbe Interactions Koty Sharp, PhD, Roger Williams University

Microbial Drivers of Nitrogen Metabolism: Searching Tara Oceans Metagenomes Laura Blum, Middlebury College

High-Pressure Shipboard Experiments Provide Insights into the Physiological Dynamics of Chemosynthetic Vent Snail Symbionts Corinna Breusing, PhD, University of Rhode Island

6:00 pm Closing Remarks

WI-FI Guest Access

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Parking

In Fine Arts North (student parking), accessible by Flagg Road.

Note: Visitor Parking passes are not required for this event. Please do not park in faculty/staff lots. Thank you.

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