

2025 ASM InterMountain Branch Meeting

All events are held in the ISU Pond Student Union Building (PSUB) unless otherwise indicated. Free parking is available in the large parking lot adjacent to the PSUB (see maps.isu.edu). Meeting check-in & registration is located on the PSUB 2nd floor, adjacent to the Quad entrance and near the ballroom (follow the signs). Use the QR code to access talk and poster abstracts, or go to https://qr.link/1ZJokM

A huge THANK YOU to our 2025 sponsors!

- ISU Office for Research
- ISU College of Science & Engineering
- ISU Graduate School
- ISU Microbiology Club
- HHMI Science Education Alliance (HHMI SEA)
- American Society of Microbiology



Meeting Schedule

Friday, April 25

6 pm – 8 pm: Poster setup opportunity – Ballroom (2nd floor)

7 pm – 9 pm: ISU **Late Nights with the Graduate School**, a student networking opportunity at Goody's Deli & Pizzeria (905 S. 5th Ave, Pocatello, ID 83201), about 2 blocks from the PSUB (the ISU Grad School is graciously providing food and soft drinks; Goody's also has a nice selection of non-soft drinks for purchase)

Saturday, April 26

7:30 am – Registration opens (PSUB 2nd floor, adjacent to the Quad entrance)

7:30 am – Poster setup opportunity – Ballroom (2nd floor)

8:00 am – Continental breakfast – Wood River (2nd floor)

8:30 am – Plenary session – Wood River (2nd floor)

- ASM Intermountain Branch President, Dr. Javier Ochoa-Reparaz (BSU) (5min)
- ISU Welcome by Dr. Martin Blair, Vice President for Research (5min)
- Keynote address: Dr. Garth Ehlrich, "What can large-Scale Comparative Genomics Teach Us: The Use of Machine-Learning to Identify Bacterial Virulence and Tropism Genes" (50 min)
- Dr. Joel Griffitts, "High-throughput discovery of compact antimicrobial peptides" (25 min)
- Dr. Tim Hanley, "Differential Contributions of Classical Monocyte-derived Macrophages and Non-classical/Intermediate Monocyte-derived Macrophages During HIV-1 Infection and Pathogenesis" (25 min)



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10:30 am – Poster Session 1, odd-numbered posters – Ballroom (2nd floor)

11:30 am – Lunch (lunch boxes distributed in Wood River)

- General seating for networking & socializing in PSUB and outdoors
- Careers in microbiology panel, hosted by ISU Microbiology Club Wood River
 - Martell Winters, Director of Technical Business Development, Nelson Laboratories, Salt Lake City
 - o Amanda Burgess, microbiologist, Amy's Kitchen, Pocatello
 - o tba
 - o tba
- HHMI breakout lunch meeting for current & prospective SEA faculty Heritage Room (2nd floor)

1:00 pm – Poster session 2, even-numbered posters – Ballroom (2nd floor)

2:00 pm – Concurrent talk sessions: Short faculty talks &/or grad student lightning talks – Salmon River Suites (3rd floor). Faculty talks: 25 min plus 5 min for questions; Lightning talks: 12 min plus 3 min for questions

North: Environmental & industrial microbiology - moderator: Dr. Anirban Chakraborty

- Dr. Caryn Evilia, "Life at the Extreme: The Organisms in the Great Salt Lake" (Faculty Talk)
- Allondra Woods, "Capacity of microbial strains and communities to degrade wastewater fats, oils, and grease (FOG)" (<u>Lightning Talk</u>)
- Ella Bunde, "Improving archaeal organism identification in the Great Salt Lake: A
 Metagenomic Study of the Three Domains of Life in a Hypersaline Environment"
 (<u>Lightning Talk</u>)
- Brownwyn Ellis, "Ecophysiology of thermophilic endospores in marine sediments impacted by crustal fluid discharges" (Lightning Talk)
- Abrianna Paez, "Redox and Ripening: Shaping Microbial Succession in Cheddar Cheese" (Lightning Talk)

Middle: Molecular microbiology – moderator: Bailey Bresee

- Kyson Jensen, "Identification and Characterization of a Transcriptional Regulator Associated with Nickel Tolerance" (<u>Lightning Talk</u>)
- Krystal Sosa, "Plasma: A Novel Application for Viral Inactivation" (Lightning Talk)
- Ashley Williams, "Photoinducible Carbon Nitride Complexes Containing
 [Na9(α-β-BiW9O33)] Catalyst Exert Antimicrobial Effects Through Formation of
 Reactive Hypohalous Acids" (Lightning Talk)
- Abigail Cheever, "Chimeric autoantibody receptor (CAAR) T cells eliminate autoreactive B cells in Graves' Disease without harming healthy B cells" (<u>Lightning Talk</u>)
- Mason Park, "Examining a Novel Infection Mechanism in Bacteriophage Targeting Salmonella Typhi" (<u>Lightning Talk</u>)
- Tyler Brown, "Determining environmental nutrients that directly influence cell wall stability in *Staphylococcus aureus*" (<u>Lightning Talk</u>)

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South: Clinical & epidemiological microbiology - moderator: Sara Sadeghi

- William Doyle, "Sex-dependent colonic microbiome and host's transcriptomics profiles in an MS animal model" (<u>Lightning Talk</u>)
- Nathan D'Antuono, "Testing holistic medicine for antimalarial properties" (<u>Lightning Talk</u>)
- Travis Hudok, "Ex Vivo Inactivation of P. aeurginosa in Chronic Wounds Using Cold Atmospheric Pressure Plasma" (<u>Lightning Talk</u>)
- Charlie Chou, "Integrative RNA-seq analysis with various enrichment results: a
 case study of the effects of electronic cigarette inhalation on the development of
 Preeclampsia" (<u>Lightning Talk</u>)
- Marissa Madsen, "Exploring Host Specificity and Receptor Candidates in Two Phages that Infect Salmonella enterica" (<u>Lightning Talk</u>)
- Stephanie Rood, "Cold Atmospheric-Pressure Plasma: A Novel Approach to Microbial Pathogen Inactivation" (<u>Lightning Talk</u>)

3:30 pm – Awards & networking reception (with snacks) – Wood River (2nd floor) 4:00 pm – Adjourn