

MMI 291 Seminar Series

Current Theme: Interdisciplinary Research
Spring Quarter 2025 – CRN 47397

Friday Seminar at 12:10-1 p.m.

Genome and Biomedical Sciences Facility, Room 1005

“Exploring the interface between the host and microbiota with a One Health focus”

Research Bio

The Hannah Savage lab studies interactions between pathogens, the microbiota, and host. In particular, she currently focuses on how the microbiota promotes a healthy colonocyte immunometabolism and how this interaction is altered during disease, putting the host at risk of infection with pathogens and pathobionts. Her overall research goal is to understand the basis behind these host-microbiota interactions during health so that host health can be supported with therapeutics during microbial disruption to prevent a loss of colonization resistance.

Publications

Savage HP*, Bays DJ*, Tiffany CR*, Gonzalez MAF, Bejarano EJ, Carvalho TP, Luo Z, Masson HLP, Nguyen H, Santos RL, Reagan KL, Thompson GR, Bäumlner AJ. “Epithelial hypoxia maintains colonization resistance against *Candida albicans*”. *Cell Host Microbe*. 2024. Epub 20240601. doi: 10.1016/j.chom.2024.05.008. PubMed PMID: 38838675.

Cevallos SA, Lee JY, Velazquez EM, Foegeding NJ, Shelton CD, Tiffany CR, Parry BH, Stull-Lane AR, Olsan EE, **Savage HP**, Nguyen H, Ghanaat SS, Byndloss AJ, Agu IO, Tsois RM, Byndloss MX, Bäumlner AJ. “5-Aminosalicylic Acid Ameliorates Colitis and Checks Dysbiotic *Escherichia coli* Expansion by Activating PPAR- γ Signaling in the Intestinal Epithelium”. *mBio*. 2021 Jan 19;12(1) PubMed Central PMCID: PMC7845635.

English BC, **Savage HP**, Mahan SP, Diaz-Ochoa VE, Young BM, Abuaita BH, Sule G, Knight JS, O’Riordan MX, Bäumlner AJ, Tsois RM. “The IRE1 α -XBP1 Signaling Axis Promotes Glycolytic Reprogramming in Response to Inflammatory Stimuli”. *mBio*. 2023 Feb 28;14(1):e0306822. doi: 10.1128/mbio.03068-22. Epub 2022 Dec 8. PubMed PMID: 36475773; PubMed Central PMCID: PMC9973330.

May
23



Hannah Savage
Assistant Professor
Department of Pathology,
Microbiology and
Immunology
University of California, Davis

May 23, 2025
12:10 – 1 p.m.

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**Genome and
Biomedical Sciences
Facility, Room 1005**

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In-person presentation

**Medical Microbiology and
Immunology
School of Medicine**

Seminar Contact:
Lena Doan
ltdoan@ucdavis.edu

We hope to see you there!