

Microbial:Host Interaction (MHI)
Seminar Series 2022-2026 (Current Funding Cycle)

DATE	SPEAKER	TOPIC
July 14, 2022	Yvonne Latour PI: Keith Wilson, MD	<i>Cell specific role of Talin-1</i>
July 28, 2022	Jenna Petronglo PI: James Cassat, MD, PhD	<i>Defining the roles of Toll-like receptors 2 and 9 in the pathogenesis of Staphylococcus aureus</i>
September 8, 2022	Fang Yan, MD, PhD	<i>A human milk oligosaccharide, 2'-fucosyllactose, protects against intestinal injury and inflammation in adulthood</i>
September 22, 2022	Jeremy Goettel, PhD	<i>Utilizing a reductionist model to study host-microbe interactions in intestinal inflammation</i>
October 20, 2022	Kasey Schalich, PhD PI: Fang Yan, MD, PhD	<i>2'-fucosyllactose (2'-FL) regulation of adult gut microbiota: Identification of pathways and metabolite candidates to prevent epithelial barrier disruption in colitis</i>
October 27, 2022	Jennie Shuman PI: Tim Cover, MD	<i>Helicobacter pylori's backseat driving can send us over the disease cliff</i>
November 3, 2022	Teresa Torres PI: Mariana Byndloss, DMV, PhD	<i>Iron acquisition by a commensal bacterium modifies host nutritional immunity during Salmonella infection</i>
November 17, 2022	Brittany Gimza PI: James Cassat, MD, PhD	<i>Investigating antibiotic failure in Staphylococcus aureus pathogenesis</i>
December 1, 2022	Lydia Wroblewski, PhD PI: Richard Peek, MD	<i>Helicobacter pylori utilizes targeted adaptive immunity to increase expression of the stem cell marker Lrig1</i>
December 15, 2022	Elias West PI: Eric Skaar, PhD, MPH	<i>Clostridioides difficile iron acquisition systems utilized during in vivo competition with gut microbes</i>
January 12, 2023	Alain Gobert, PhD PI: Keith Wilson, MD	<i>The nutraceutical electrophile scavenger 2-hydroxybenzylamine as a chemopreventive and potential treatment for gastrointestinal cancer</i>
February 9, 2023	Rodney E. Infante, MD, PhD	<i>A tale of tumor types: How cancers promote cachexia</i>
February 23, 2023	Harpreet Kaur, PhD PI: Fang Yan, MD, PhD	<i>Structural and functional analysis of a probiotic-derived functional factor for the sustained prevention of colitis</i>
March 9, 2023	Chris Peritore, PhD PI: Borden Lacy, PhD	<i>From toxins to toilet: Decoding the molecular basis of Clostridioides difficile-induced diarrhea</i>

March 23, 2023	Martin Douglass, PhD PI: Eric Skaar, PhD, MPH	<i>Drug efflux and undecaprenyl pyrophosphate activity of Clostridioides difficile when starved of nutrient metals</i>
April 6, 2023	Juan Barraza, PhD PI: Eric Skaar, PhD, MPH	<i>Development of a screen to identify pathogen genes driving mucosal barrier alterations during Clostridioides difficile infection</i>
April 20, 2023	Cedric Shili PI: Carlos Serezani, PhD	<i>Sepsis in gastrointestinal inflammation</i>
May 4, 2023	Holly Algood, PhD	<i>Direct and indirect mechanisms of IL-17 immune modulation during H. pylori infection</i>
May 18, 2023	Shannon Kordus PI: Borden Lacy, PhD	<i>Nanobodies against Clostridioides difficile toxins, TcdA and TcdB, reveal unexpected neutralizing epitopes and provide a toolkit for toxin detection</i>
June 1, 2023	Jennifer Noto, PhD PI: Richard Peek, MD	<i>Targeting hypoxia-inducible factor-1 alpha suppresses Helicobacter pylori-induced gastric injury via attenuation of both microbial virulence and proinflammatory host responses</i>
June 15, 2023	Kara Eichelberger PI: James Cassat, MD, PhD	<i>Nutritional environment modulates Candida-Staphylococcus interactions</i>
July 13, 2023	Kara McNamara PI: Keith Wilson, MD	<i>Spermine oxidase promotes Helicobacter pylori-mediated gastric carcinogenesis through acrolein production</i>
September 7, 2023	Fang Yan, MD, PhD	<i>Regulation of functions of the gut microbiota by intestinal epithelial cell-derived extracellular vesicles</i>
September 21, 2023	Justin Jacobse, PhD PI: Jeremy Goettel, PhD	<i>Interleukin-10 production by innate lymphoid cells restricts intestinal inflammation in mice</i>
October 5, 2023	Kyle Enriquez PI: Eric Skaar, PhD, MPH	<i>Zinc metallochaperone ZNG1 is a critical contributor to host metal homeostasis and response to infection by Staphylococcus aureus</i>
October 19, 2023	Nick Markham, MD, PhD	<i>Inhibition of EGFR/ErbB does not protect against Clostridioides difficile toxin B</i>
November 16, 2023	Brittany Gimza PI: James Cassat, MD, PhD	<i>Investigating antibiotic failure in Staphylococcus aureus infection</i>
November 30, 2023	Nicolas Shealy PI: Mariana Byndloss, DMV, PhD	<i>Diet-driven distinct amino acid profile drives susceptibility to Salmonella typhimurium gastroenteritis</i>
December 14, 2023	Sirena Tran PI: Tim Cover, MD	<i>The Helicobacter pylori cag pathogenicity island as a determinant of gastric cancer risk</i>
January 11, 2024	Alain Gobert, PhD PI: Keith Wilson, MD	<i>The nutraceutical electrophile scavenger 2-hydroxybenzylamine as a chemopreventive and potential treatment for gastrointestinal cancer</i>

January 25, 2024	Kateryna Nabukhotna PI: Borden Lacy, PhD	<i>Purified CDT toxins and a clean deletion within the CDT locus provide novel insights into the contribution of binary toxin in cellular inflammation and Clostridioides difficile infection</i>
February 8, 2024	Simon M. Gray, MD, PhD	<i>Mouse-adapted human IBD microbiome experimental colitis: A model for mechanisms and environmental triggers of IBD relapse</i>
February 22, 2024	Harpreet Kaur, PhD PI: Fang Yan, MD, PhD	<i>Identification of a functional peptide of a probiotic bacterium-derived protein for the sustained effect on preventing colitis</i>
March 7, 2024	Jennie Shuman PI: Tim Cover, MD	<i>Remodeling of the gastric environment in Helicobacter pylori-induced atrophic gastritis</i>
March 21, 2024	Kacie Traina PI: Eric Skaar, PhD, MPH	<i>Mechanisms of zinc homeostasis in Acinetobacter baumannii</i>
April 4, 2024	Clara Si PI: James Cassat, MD, PhD	<i>Host RANKL signaling dampens monocyte innate immune responses</i>
April 18, 2024	Holly Algood, PhD	<i>IL-17RA in progression of H. pylori induced gastric diseases</i>
May 2, 2024	Brittany Gimza, PI: James Cassat, MD, PhD	<i>Antibiotic resistance in Staphylococcus aureus</i>
May 16, 2024	Shannon Kordus PI: Borden Lacy, PhD	<i>From toxins to capsule to vesicles and back again: understanding how Clostridioides difficile modulates toxin release</i>
May 30, 2024	Kara Eichelberger PI: James Cassat, MD, PhD	<i>Bacterial: fungal interactions that promote disease</i>
June 13, 2024	Eden Faneuff, MS PI: Carlos Serezani, PhD	<i>The inhibitory role of myeloid PTEN on phagocytosis during infection</i>
July 11, 2024	Kara McNamara PI: Keith Wilson	<i>Spermine oxidase promotes Helicobacter pylori-mediated gastric carcinogenesis through acrolein production</i>
September 5, 2024	Fang Yan, MD, PhD	<i>A human milk oligosaccharide prevents intestinal inflammation in adulthood via modulating gut microbial metabolism</i>
September 19, 2024	Summer Bushman PI: Eric Skaar, PhD, MPH	<i>Zinc homeostasis in Clostridioides difficile</i>
October 3, 2024	Logan Treat PI: James Cassat, MD, PhD	<i>Acquisition of essential nutrient lysine by Staphylococcus aureus during invasive infection</i>
October 17, 2024	Nicholas Markham, MD, PhD	<i>Multiomic spatial atlas shows Deleted in Malignant Brain Tumors 1 (DMBT1) glycoprotein is lost in colonic dysplasia</i>

October 31, 2024	Chiamaka Okoye PI: Tim Cover, MD	<i>Molecular interactions required for secretion of Helicobacter pylori CagA</i>
November 14, 2024	Owen Burroughs PI: Eric Skaar, PhD, MPH	<i>Identifying host factors that impact Bacillus anthracis virulence in macrophages</i>
December 12, 2024	Jia Mei PI: James Cassat, MD, PhD	<i>Investigating antibiotic tolerance in Staphylococcus aureus</i>
January 9, 2025	Alain Gobert, PhD PI: Keith Wilson, MD	<i>The role of hypusine in colorectal neoplasia mediated by APC mutation</i>
January 23, 2025	Jesse Pei-Yi Chen PI: Eric Skaar, PhD, MPH	<i>The impact of heme catabolism on Staphylococcus aureus physiology</i>
February 6, 2025	Isabella Sirit PI: Richard Peek, MD	<i>ADP-heptose-driven NF-κB activation mediates STING suppression by Helicobacter pylori</i>
February 20, 2025	Harpreet Kaur, PhD PI: Fang Yan, MD, PhD	<i>How Lactobacillus GG prevents colitis</i>
March 6, 2025	Shannon Kordus PI: Borden Lacy, PhD	<i>Interactions of Clostridioides difficile toxins, TcdA and TcdB, and disease</i>
March 20, 2025	Kaeli Bryant PI: Tim Cover, MD	<i>Species-specific components of the Helicobacter pylori Cag type IV secretion system</i>
April 3, 2025	Chris Corcoran PI: Eric Skaar, PhD, MPH	<i>Subcellular compartmentalization of sulfur metabolism in Acinetobacter baumannii</i>
April 17, 2025	Andrew Beaudoin PI: James Cassat, MD, PhD	<i>Contributions of the stringent response to antibiotic tolerance during Staphylococcus aureus infection</i>
May 15, 2025	Lori Coburn, MD	<i>Epithelial CCL11 plays a key role in inflammatory and sporadic colon carcinogenesis</i>
May 29, 2025	Andrew Pahnke PI: Jeremy Goettel, PhD	<i>Can intercellular mitochondrial transfer regulate T cell function?</i>
June 12, 2025	Carlan Romney PI: Keith Wilson, MD	<i>The role of NRF2 in Helicobacter pylori-induced gastric inflammation</i>
July 10, 2025	Shane Carey PI: Keith Wilson, MD	<i>The dual roles of NRG2 induction by electrophilic stress in colitis</i>
July 24, 2025	Kirti Karunakaran PI: Carlos Serezani, PhD	<i>Exploring the impact of dysmetabolism on MRSA-infected macrophages</i>
October 2, 2025	Itidal Reslane, PhD PI: Eric Skaar, PhD, MPH	<i>Regulatory dynamics of arginine metabolism in Staphylococcus aureus</i>

October 16, 2025	William Ball PI: Nick Markham, MD, PhD	<i>The effect of chronic exposure of Clostridioides difficile toxins on the colonic epithelium</i>
October 30, 2025	Logan Treat PI: James Cassat, MD, PhD	<i>Amino acid import and regulation by Staphylococcus aureus</i>
January 8, 2026	Fang Yan, MD, PhD	<i>A unique human milk oligosaccharide: Mechanisms, effects, and applications in early life and adulthood</i>
January 22, 2025	Annie Doyle PI: Eric Skaar, PhD, MPH	<i>A Zur-independent zinc metallochaperone is required for antibiotic resistance in Acinetobacter baumannii</i>
March 5, 2026	Isabella Sirit PI: Richard Peek, MD	<i>ADP-heptose driven NFkB activation mediates STING suppression by Helicobacter pylori</i>
March 19, 2026	Holly Algood, PhD	<i>Decoding the cag T4SS conundrum: Unraveling its role in H. pylori infection across models</i>
April 2, 2026	Georgia Caso PI: Tim Cover, MD	<i>Helicobacter pylori VacA alters cholesterol homeostasis in gastric epithelial cells</i>
April 16, 2026	Andrew Beaudoin PI: Jim Cassat, MD, PhD	<i>The staphylococcal stringent response contributes to antibiotic failure during osteomyelitis</i>
May 14, 2026	Carlan Romney PI: Keith Wilson, MD	<i>The role of NRF2 in Helicobacter pylori-induced gastric inflammation and carcinogenesis</i>
June 11, 2026	MaKayla Lowe PI: Richard Peek, MD	<i>Commensal microbial secretomes influence Helicobacter pylori pathogenesis</i>
July 9, 2026	Shane Carey PI: Keith Wislon, MD	<i>The dual roles of NRF2 induction by electrophilic stress in colitis</i>