

MMI 291 Seminar Series

Current Theme: Interdisciplinary Research
Winter Quarter 2023 – CRN 33382

Friday Seminar at 12:10-1 p.m.
GBSF Auditorium, Room 1005

“The tarantella between *Klebsiella* and the gut:
a dance between host and pathogen”

Research Bio

Dr. Jay Vornhagen is an Assistant Professor of Microbiology and Immunology at the Indiana University School of Medicine in Indianapolis, Indiana. Vornhagen received his B.S. in Microbiology from the University of Michigan and his Ph.D. in Pathobiology from the University of Washington. His research focuses on understanding how bacteria with pathogenic potential can live in the gut, especially in the context of a healthy gut microbiome. He is particularly interested in assessing *Klebsiella pneumoniae* gut colonization in different microbiome backgrounds, and identifying host factors and individual or communities of microbes that reduce *K. pneumoniae* gut fitness or prevent colonization.

Publications

Jay Vornhagen, Emily K. Roberts, Lavinia Unverdorben, Sophia Mason, Alieysa Patel, Ryan Crawford, Caitlyn L. Holmes, Yuang Sun, Alexandra Teodorescu, Evan S. Snitkin, Lili Zhao, Patricia J. Simner, Pranita D. Tamma, Krishna Rao, Keith S. Kaye & Michael A. Bachman. “[Combined comparative genomics and clinical modeling reveals plasmid-encoded genes are independently associated with *Klebsiella* infection](#)”. *Nature Communications* July 2022

Vornhagen J, Bassis CM, Ramakrishnan S, Hein R, Mason S, Bergman Y, et al. (2021) “[A plasmid locus associated with *Klebsiella* clinical infections encodes a microbiome-dependent gut fitness factor](#)”. *PLoS Pathog* April 2021 17(4): e1009537.

February
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Jay C. Vornhagen, Ph.D.
Assistant Professor
Medical Microbiology and Immunology
School of Medicine
Indiana University

February 9, 2024
12:10 – 1 p.m.
GBSF Auditorium
Room 1005

In-person presentation

Medical Microbiology
and Immunology
School of Medicine

Seminar Contact:
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We hope to see you there!