

## The role of the gut and tumor microbiomes in cancer treatment



**Abstract:** His talk will focus on the lab's work exploring the tumor microbiome, especially through RNAseq-based analyses. This will include ongoing efforts to better understand how microbes get into tumors and other tissues, what effects they have, and how they might be modulated.

**About the Speaker:** Dan Spakowicz, PhD, MS, is an assistant professor in the Division of Medical Oncology. His lab focuses on the role of the microbiome in cancer, particularly in modifying response to treatment with immune checkpoint blockade. His ongoing studies include how to use the microbiome (including gut, tumor, and others) as a biomarker of cancer treatment responses and as a therapeutic target to improve treatment outcomes. His lab supports microbiome collection in clinical trials at the OSUCCC and nationally, leads trials that seek to modify the microbiome through dietary or other interventions, and tests for causality using preclinical models. His work emphasizes computational methods including tool and algorithm development.

The lab is supported by the National Cancer Institute, Lung Cancer Research Foundation, and internal awards including Pelotonia, Foods for Health, and a BMI pilot award.

Dr. Spakowicz earned his PhD in biophysics in 2013 at Yale University and was a postdoc with George Weinstock at the Jackson Laboratory for Genomic Medicine and Mark Gerstein at Yale University in the microbiome and computational biology, respectively. He was a National Library of Medicine Postdoctoral Fellow in Biomedical informatics from 2015-18 and began his lab at OSU in 2018

**Daniel Spakowicz, PhD**  
**Friday, March 26<sup>th</sup>, 11:00am-12:00pm**  
**Carmen Zoom**