



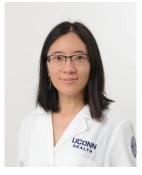
181 Longwood Avenue Boston, Massachusetts 02115-5804 **Department of Medicine** *Channing Division of Network Medicine* 

## **Channing Microbiome Seminar**

Dec 17, 2021, 11AM (ET)

Zoom link: https://us02web.zoom.us/j/579497999?pwd=cHNIWHMzWUIFUUVJTG1EeVJmY05aQT09

Meeting ID: 579 497 999 Passcode: 844168



Yanjiao Zhou, MD, PhD Assistant Professor

Department of Medicine UConn Health, Connecticut

## The airway fungal and bacterial microbiome and loss of asthma control in asthmatic children

The airway microbiome has an important role in asthma pathophysiology. However, little is known on the relationships between the airway bacteria and fungi of asthmatic children, loss of asthma control, and severe exacerbations. By analyzing the whole microbiome of over 200 asthmatic children within a year, we identified specific bacteria strains and fungal species that were associated with asthma exacerbation. Integration of the microbiome and clinical factors achieved high accuracy in predicting future treatment by oral corticosteroid. Using animal models, we confirmed detrimental role of airway pathogens in asthma and identified bacteria that are potentially protective.

**Bio:** Dr. Yanjiao Zhou is an Assistant Professor at UConn Health and an adjunct faculty at The Jackson Laboratory. She has a background in medicine, microbiology, immunology and bioinformatics. She was the lead analyst for the first and second phase of The Humane Microbiome Project. She published nearly 60 microbiome related papers in a variety of journals including NEJM, JAMA, Nature, Cell metabolism. Using both experimental and computational approaches, her lab studies the role of the microbiome in MS, aging, asthma and addiction.

Hosted by Yang-Yu Liu

