

CALA Happy Friday Seminar

February 17th, 2023 Time: EST 11:00 am; PST: 8:00 am; Beijing time: 2/18, 12:00 am Zoom: 849 9682 9273 (Password: 654321)

Host-pathogen interactions in Tuberculosis in the Era of Immunometabolism



Bio: Dr. Huang obtained his B.S. in Bioinformatics from Zhejiang University and completed Ph.D. in Immunology at Cornell University, Ithaca. He went on and did his post-doc at Cornell studying the interaction between lung macrophages and *Mycobacterium tuberculosis* (Mtb). In 2020, Dr. Huang joined the Department of Microbiology and Immunology at the University of Arkansas for Medical Sciences (UAMS) in Little Rock, Arkansas as Assistant Professor. The primary research interest of his lab is to understand the ontogeny and immunometabolism of lung macrophages during Mtb infection.

Abstract: Tuberculosis (TB), a disease caused by *Mycobacterium tuberculosis* infection, remains one of the biggest infectious disease threats and a leading cause of death worldwide. The lack of understanding of the nature of protective immunity against TB hinders the development of an effective vaccine. During the infection, various types of phagocytes infiltrate to the lung and harbor Mtb. Such complex interactions can further determine the outcome of the disease. Intriguingly, during Mtb infection, different phagocytes exhibit distinct permissiveness, which is regulated by their origins, heterogeneity and metabolism. In this seminar, Dr. Huang will describe the recent progress in his lab on understanding and harnessing the ontogeny and metabolism of lung phagocytes during Mtb infection.