

Chemical Biology Seminar



Professor Pamela Chang

Department of Microbiology and Immunology
Cornell University

Deconvoluting host-gut microbiota co-metabolism

Despite the abundance and prevalence of the gut microbiota, little is known regarding the pathways and mechanisms by which these microbes affect host health. Emerging evidence suggests that many small-molecule metabolites that are produced by the gut microbiota have the ability to modulate host defense mechanisms in various inflammatory diseases. We describe several amino acid-derived metabolites produced by the gut microbiota that improve morbidity in mouse models of inflammatory bowel disease (IBD) and gastrointestinal infection. In complementary work, we have also developed chemical approaches for probing the metabolic activities of biosynthetic enzymes expressed by the gut microbiota that are responsible for producing important classes of small-molecule metabolites whose metabolism is dysregulated in IBD.

Tuesday, April 19, 2022 | 4:00pm | Zoom

Questions: maynardadmin@chem.ucla.edu