

# John A. Lynch Lecture Series

## INTERROGATING THE GUT MICROBIOME: ESTIMATION OF GROWTH DYNAMICS AND PREDICTION OF BIOSYNTHETIC GENE CLUSTERS

4:15 pm Monday, March 2  
105 Jordan Hall of Science

Reception precedes event at 3:45 pm  
Jordan Hall Reading Room

**Hongzhe Li**, University of Pennsylvania  
Professor of Biostatistics and Statistics  
Vice Chair, Integrative Research  
Director, Center for Statistics in Big Data



The gut microbiome plays an important role in maintenance of human health. High-throughput shotgun metagenomic sequencing of a large set of samples provides an important tool to interrogate the gut microbiome. Li will present several computational and statistical methods for estimating the bacterial growth dynamics, and for predicting Biosynthetic Gene Clusters (BGCs) based on shotgun metagenomic data. He will demonstrate the application of these methods using several ongoing microbiome studies of inflammatory bowel disease.



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