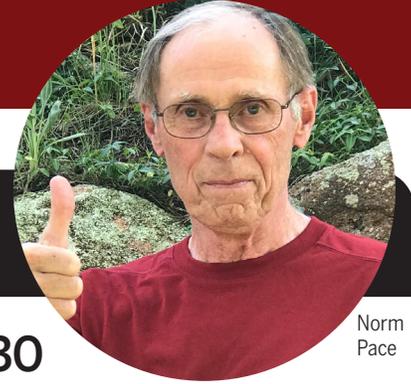




Department of Biology

The College of Arts + Sciences | Indiana University Bloomington



Norm Pace

Norman Pace Lecture

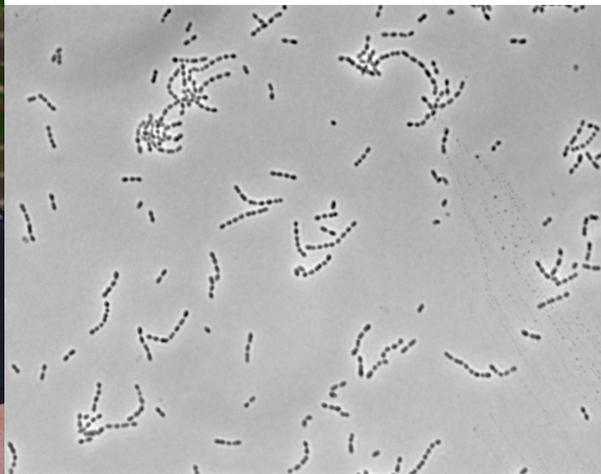
Tue., March 3, 2020 • 4 to 5 pm • Myers Hall 130

Thomas Schmidt Ph.D.

Professor, Department of Internal Medicine, Ecology & Evolutionary Biology, University of Michigan

Ecological Engineering of the Human Gut Microbiome

Tom Schmidt is a microbial physiologist and ecologist who has studied microbes and microbial communities in multiple environments. As a postdoctoral fellow in Norman Pace's lab, he helped pioneer approaches that are now used commonly to investigate complex microbial communities. Tom spent much of his career studying the ecology of microbes that are responsible for the exchange of greenhouse gases between agricultural soils and the atmosphere. Several years ago, he brought his broad expertise in microbiology to study the human gut microbiome. Today's presentation will highlight his group's effort to understand the human gut microbiome and engineer it for increased production of butyric acid – a fermentation product that is essential for human health. The presentation includes recent results on the role that molecular hydrogen plays in regulating fermentation pathways and interactions between gut microbes and epithelial cells that modulate concentrations of oxygen in the GI tract.



Lecture hosted by Clay Fuqua,
Professor of Biology

Refreshments served prior to
seminar

The **Pace lecture series** (established in 2018) honors IU alumnus (BA '64 Bacteriology, with honors) and former Professor and Distinguished Professor of Biology (1984 to 1996) Norman R. Pace, one of the world's most influential biologists. Pace revolutionized microbial ecology in ways that allowed the "unseen 99 percent" to be revealed. He is known for his groundbreaking research in biochemistry and in microbial ecology and evolution. He has been a pioneer and leader in two very different fields: (1) he co-discovered catalytic RNAs, and (2) he was a pioneer in developing the methods and philosophy of sequence-based studies of microbes in their natural environments, ushering in the age of metagenomics and microbiome research.