

Norm Pace

Norman Pace Lecture

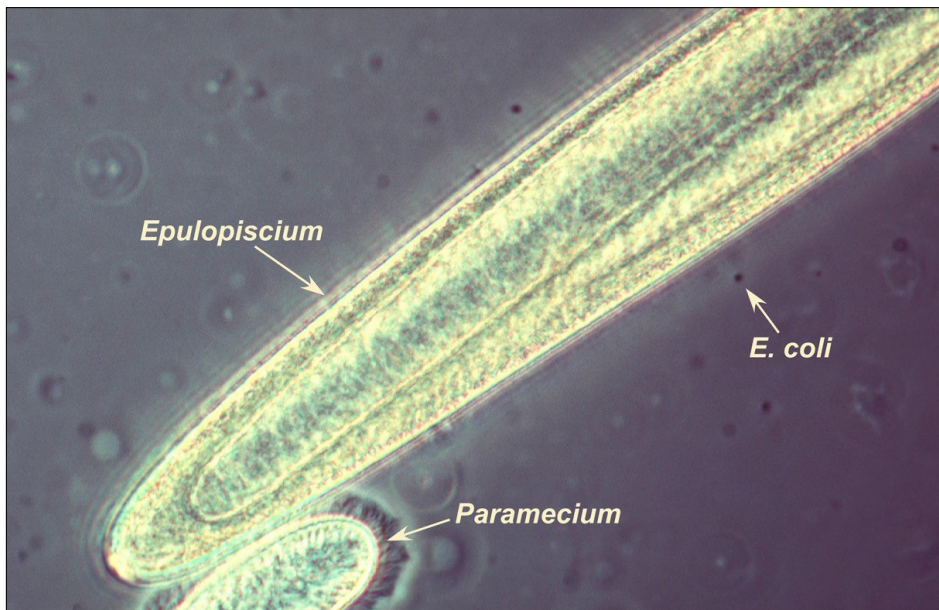
Tue., Feb. 26, 2019 • 4 to 5 pm • Myers Hall 130

Esther Angert, Ph.D.

Professor, Department of Microbiology, Cornell University

Fish tales about giant bacteria

One incredible discovery made in the Pace lab in the early 1990s was that a giant microbe found in the intestinal tract of certain reef-associated marine fish is a bacterium—not a eukaryotic protist as it was originally classified. Using phylogenetic approaches developed to survey the diversity of microorganisms, we confidently placed *Epulopiscium* spp. in the Firmicutes phylum. This seminar will provide an update on how phylogeny-based hypotheses and cultivation-independent approaches have provided insights into the biology and life histories of these giant bacteria.



A portion of a large *Epulopiscium* cell is shown in this phase-contrast micrograph. For comparison, *E. coli* and *Paramecium* cells were mixed with this sample. This bacterium is large enough to be seen with the naked eye; it's about the size of a grain of salt.

Photo credit: Esther Angert

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.