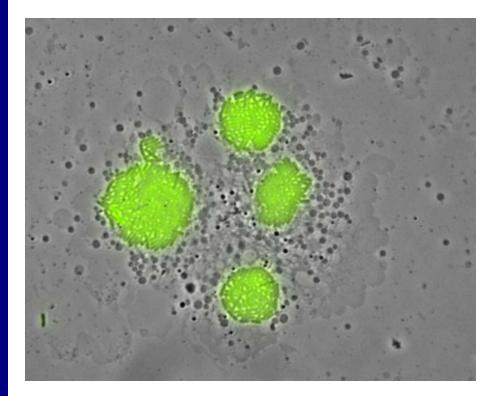




## Legionellae and their diverse hosts



Legionella pneumophila is a gram-negative bacterial species that causes Legionnaires' disease, a severe and often fatal pneumonia. They are "accidental" human pathogens because their true hosts are diverse free-living environmental amoebae. We have been studying the interactions of legionellae with amoebae as a model system to better understand the mechanisms involved in evasion of innate immune defenses in people. Two recent discoveries have enabled this approach. First is the identification of novel amoebae that consume virulent *Legionella pneumophila* rather than serving as hosts for the pathogen. Second is the recent genome sequencing of 38 species of *Legionella* that has identified over 5,000 new potential effector genes.

## Dr. Howard Shuman Professor, Department of Microbiology University of Chicago

Host: Dr. Alex Ensminger

Date: Monday December 5<sup>th</sup>,2016 Time: 4PM Place: Fitzgerald Building Room 103