Robert Abramovitch

Associate Professor at Michigan State University

East Lansing, MI, US

Robert Abramovitch is an assistant professor at Michigan State University.

Biography

Mycobacterium tuberculosis causes tuberculosis in humans and is one of the leading causes of death by an infectious disease. A signature feature of M. tuberculosis pathogenesis is that the bacterium survives inside macrophages, a host immune cell that kills many other bacteria. The goals of my research program are to: 1) characterize how M. tuberculosis adapts to life inside a macrophage, and 2) apply these discoveries towards the development of new drugs. To achieve these goals we are utilizing genetic, genomic, and biochemical approaches to characterize new genes and proteins that enable M. tuberculosis to succeed as an intracellular pathogen. These findings are then translated into high throughput screening (HTS) platforms to identify small molecule compounds that interfere with M. tuberculosis adaptation physiology. In summary, the mission of my lab is to make basic research discoveries that jump-start the development of new drugs to treat tuberculosis.

Industry Expertise

Education/Learning, Research

Areas of Expertise

Plant Pathology, Microbiology, Research, Tuberculosis, Antibiotic Resistance

Education

Cornell University
Ph.D. Plant Pathology

University of British Columbia
B.Sc. Microbiology