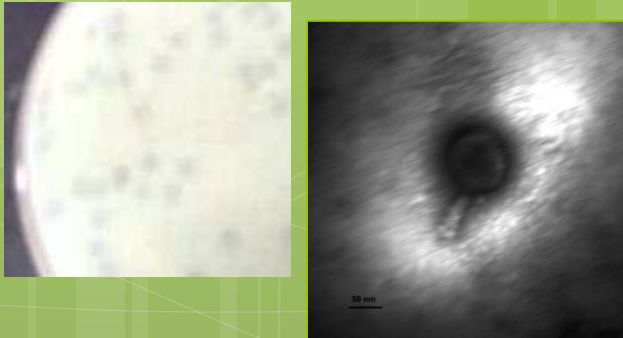
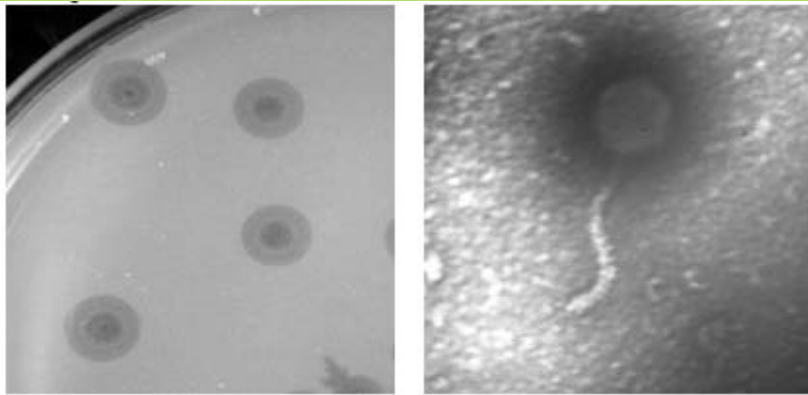




<http://www.pasteur-guadeloupe.fr/tb/projects/NATO/index.html>



## An introduction to Mycobacteria, their phages, and tuberculosis

Introduction by Dr. Vassie Ware

Tuberculosis: A Persistent Threat to Global Health by Dr. John McKinney (iBioseminar)

Mycobacteriophage Genomics by Dr. Graham Hatfull (iBioseminar)

New course theme: Infectious disease and Microbiology applications

Tuberculosis as a global health threat

~2 million deaths per year globally; death rate declining in US (2010)

1/3 of global population infected (latent)

2010: 9 million sick with TB globally

leading cause of death for HIV-infected individuals



Stages of TB from infection through transmission

Mycobacteriophage Genomics: Why?

Howard Hughes Medical Institute-sponsored Science Education Alliance Program:

National Genomics Research Initiative

Lehigh's involvement in the Alliance

iBioseminars.org

seminars by Drs. John McKinney and Graham Hatfull



[www.iBioseminars.org](http://www.iBioseminars.org)

**Required homework:**

- 1) View iBioseminar by Ira Mellman on Cell Biology of the Immune System, Part 1 for background in immunology.
- 2) Complete viewing of iBioseminar by Graham Hatfull, Bacteriophages, what are they? (Part 1) and View Part 3 (Mycobacteriophage Genomics). The latter video discusses the relevance of mycobacteriophage studies to the tuberculosis discussion.