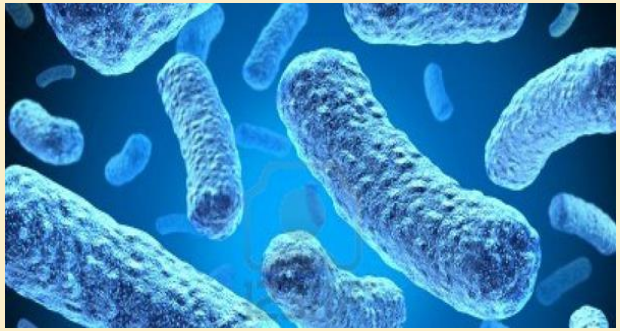
# Accelerating Tuberculosis Drug Discovery by High Throughput Screening

## Department of Biology Seminar



Kriti Arora, Research Scientist,
National Institutes of Health, Allergy and Infectious Disease (NIAID)

Friday, February 19th

Lsci 185 at 3:15p.m.

Host: John Dahl

Coffee and cookies served in the SSB Atrium at 2:30 p.m.

Tuberculosis (TB) continues to be a leading killer of people worldwide infecting an estimated one-third of the world population and causing an 1.5 million deaths in 2014 alone. The current therapeutic regimen for drug-sensitive disease consists of 6-months of chemotherapy with agents that are associated with adverse events and toxicities leading to non-compliance. Additionally HIV-TB co-infection and the spread of drug-resistant TB underscores the need for discovery of new drugs that would shorten the course of chemotherapy. The Tuberculosis Drug Accelerator Program was born out of this urgent need and is a Gates Foundation funded collaborative effort between pharmaceutical companies and academic institutions. As part of this initiative we have conducted the largest global screening effort against*Mycobacterium tuberculosis* at the Tuberculosis Research Section (NIAID, NIH) in partnership with Merck, Bayer, AstraZeneca, EISAI, Pfizer and the University of Dundee. This screening campaign has generated several hit compounds which are currently progressing through our formal hit assessment cascade. The aim of the program is to increase early attrition rates so that only the best compounds move forward into preclinical development with the ultimate goal of declaring a new clinical candidate(s) by 2019 and a new regimen by 2024.