## **IMCB** Invited Speaker



Speaker: Dr. Thomas Dick

Head, Antibacterial Drug Discovery Laboratory,

Department of Microbiology, National University of Singapore

Date: 19 April 2013 (Friday)

Time: 11:00AM - 12:00PM

Venue: IMCB Seminar Room 3-46, Level 3, Proteos, Biopolis

Host: Prof. Robert Robinson

## Seminar:

## TB drug discovery: Target-based whole cell screens

Multidrug resistant tuberculosis presents a global health threat. New chemotherapeutics - with new mechanisms of action - are urgently needed. The genomics-driven approach using isolated targets to lead finding did not deliver, and the field is moving back to black-box whole cell approaches employed in the middle of last century. Although this approach delivered a few candidates, its efficiency is neither acceptable nor sustainable. Here I will discuss these issues and a way forward based on target-based whole cell screens.

## About the Speaker:

Thomas is heading the Antibacterial Drug Discovery Laboratory in the Department of Microbiology, School of Medicine, National University of Singapore. His research focus is on Tuberculosis and newly emerging mycobacterial pathogens. The goal of his group is to identify new targets and lead compounds for the development of more effective chemotherapies. Chemical genetic and functional genomic approaches are employed to dissect the molecular mechanisms of bacterial persistence and cell death. Thomas is teaching microbiology and drug discovery to undergraduate and graduate students, and is responsible for the School's high containment facility. Prior to his current position as Associate Professor, Thomas worked eight years in the pharmaceutical industry leading Tuberculosis drug development at Novartis, and seven years at the Institute of Molecular and Cell Biology, heading the Mycobacterium Biology Laboratory. Thomas studied biochemistry, genetics and microbiology at the University of Heidelberg where he obtained his PhD in molecular bacteriology.

