Department of Biomedical Sciences
Presents Seminar

"HOST-PATHOGEN INTERACTIONS IN TUBERCULOSIS"

By

Dr. Oliver Neyrolles

Research Director at the *Centre National de la Recherche Scientifique* (CNRS)
Head of the Mycobacterial Interactions with Host Cells research team
Head of the Tuberculosis & Infection Biology Department

INSTITUTE of PHARMACOLOGY & STRUCTURAL BIOLOGY
CNRS---University of Toulouse, France

Date: **17 April 2015 (Friday)**

Time: **2:30pm – 4:00pm**

Venue: **B5-210, 5/F, (Lift no 8)**
Blue Zone, Academic 1
City University of Hong Kong

For abstract, please refer to the attachment.

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~ All are Welcome ~

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About the speaker

Dr. O. Neyrolles obtained his Diploma in Agricultural Engineering in 1994 and a PhD in Microbiology in 1997 in Prof. Luc Montagnier's lab at the Pasteur Institute, Paris, France. He was a post-doctoral fellow in Prof. Douglas Young, Imperial College, London, from 1997 to 2000, where he started to work on immunity to mycobacteria. He then returned to France in Prof. Brigitte Gicquel's lab at the Pasteur Institute and became a CNRS Junior Research Associate in 2004 and Senior Research Associate in 2007. In 2008 he moved to the Institute of Pharmacology & Structural Biology (IPBS), Toulouse, France, where he founded his research team « Mycobacterial interactions with host cells ». In 2011, he became a CNRS Research Director and Head of the « Tuberculosis & Infection Biology » Department at IPBS. Since 2015 O. Neyrolles is Deputy Director of IPBS.
In recognition of his work in the field of mycobacteria and tuberculosis, Dr. O. Neyrolles received the CNRS Bronze medal in 2009 and the «Coup d'Elan» Prize from the Bettencourt-Schueller Foundation in 2014. He is involved as a PI or Coordinator in several national and international research programs on tuberculosis, and member of the Scientific Advisory Board of the TB-Vaccine Initiative Foundation.

Abstract

Mycobacterium tuberculosis is a facultative intracellular pathogen that thrives inside host macrophages. A key trait of *M. tuberculosis* is to exploit and manipulate nutrient trafficking inside infected macrophages to ensure survival and replication inside the phagosome. Here, I will discuss recent discoveries about transition metal and amino acid exploitation in the arms race between *M. tuberculosis* and the immune system, and how targeted approaches might complement existing TB chemotherapeutic regimens with novel anti-infective therapies.