

World Congress on **APPLIED MICROBIOLOGY**
&
World Congress on **ANTIBIOTICS**

August 13-14, 2018
Rome, Italy



Sanjib Bhakta

University of London, UK

Integrating interdisciplinary approaches to reverse the tide of antimicrobial resistance in global infectious diseases

Tuberculosis (TB) has plagued mankind since ancient history. If left untreated the infection lasts indefinitely, spreading the “superbug”. The resurgence of the infectious disease is due to (a) the lengthy chemotherapy and (b) the emergence of untreatable new drug resistant strains. WHO reported around 1.8 million deaths, and world-wide spread of drug resistant-TB cases in 2017. TB not only carries a direct cost to the health services through disease control, patients and their families have to also bear its social and economic impacts globally. To this end, a concerted research effort in academia, industry and clinical practice

has aimed to tackle antimicrobial resistance through validating novel therapeutics with new means of targeting the resistant “super-bug” and repurposing existing over-the-counter medicines to cure TB. Workshop leads have integrated various assays for screening biological properties of natural or synthetic chemical inhibitors. Interdisciplinary research skills and expertise would enable us to design, discover and develop new anti-infectives and to diagnose resistance profile prior to antibiotic prescription. This will be the basis of the workshop on “Antimicrobial Resistance in Superbugs”.

Biography

Sanjib Bhakta is a reader in Molecular Microbiology and Director of Mycobacteria Research Lab at ISMB, Birkbeck, University of London & UCL. His specialities are : Microbiology, Molecular Biology & Biochemistry, Drug Discovery, Target Identification and validation in *Mycobacterium tuberculosis*, Model & Method development (*in vitro* & *ex vivo*) for whole cell (phenotypic) screening of inhibitors, drug susceptibility testing, repurposing drugs.

s.bhakta@birk.ac.uk

Notes: