

# Fighting Bad Bugs: The Antimicrobial Resistance Landscape in Hong Kong

## Biography



**Dr Siddharth SRIDHAR** is a Clinical Assistant Professor at the Department of Microbiology of The University of Hong Kong (HKU) and Honorary Associate Consultant of the Department of Microbiology, Queen Mary Hospital. He obtained his medical degree from HKU and subsequently specialized in Clinical Microbiology & Infection. He received his Doctor of Medicine (MD) degree from HKU in 2021, for which he was awarded the

Sir Patrick Manson Gold Medal. He has published over 100 studies in the fields of microbiology, clinical virology, One Health, and emerging infectious diseases. In 2022, he was ranked as a top 1% worldwide researcher and has won numerous awards for his research output. He serves on multiple committees of the HKSAR government, the Hong Kong College of Pathologists, and the Hong Kong Medical Association. He is a regular invited speaker on emerging viral infectious diseases to healthcare practitioners and the public.

## Abstract

Antimicrobial resistance (AMR) is one of the leading public health challenges of the 21<sup>st</sup> century. The indolent increase in antimicrobial resistance among various classes of bacteria is a serious concern regionally and globally leading to a large influx of resources at various levels to tackle this challenging problem. The World Health Organization (WHO) has specifically launched global initiatives and awareness campaigns to highlight this issue. Antimicrobial resistance renders management of infectious diseases challenging to clinicians while also increasing side effects, suffering, and costs to patients. This talk will focus on AMR from a global to a local perspective, highlighting specific clinical situations where AMR has required practice change in recent times. Local epidemiological surveillance data on AMR from Center for Health Protection will be emphasized for key takeaways for attendees. The content will mostly focus on situations in outpatient practice. Examples covered will include upper respiratory tract bacterial pathogens (e.g. *Streptococcus pyogenes*), lower respiratory tract pathogens (e.g. *Streptococcus pneumoniae*, *Mycoplasma pneumoniae*), enteric/urinary tract infection pathogens (e.g. *Escherichia coli*), skin and soft tissue infection pathogens (e.g. *Staphylococcus aureus*, dermatophytosis), and sexually transmitted infections (*Neisseria gonorrhoeae*). These examples will illustrate how AMR has affected susceptibility to multiple classes of antibiotics including beta-lactams, macrolides, fluoroquinolones, lincosamides, and others. Finally, steps being taken to address this issue from a systemic perspective including surveillance, antibiotic audit, reduced use in livestock animals, and newer antibiotics in the horizon will be described.