

BIOSKETCH
Professor Sabiha Essack
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Professor Sabiha Essack is the South African Research Chair (SARChI) in Antibiotic Resistance and One Health and Professor in Pharmaceutical Sciences at the University of KwaZulu-Natal (UKZN).

Professor Essack is Vice Chair of the WHO Strategic and Technical Advisory Group for Antimicrobial Resistance (STAG-AMR), Senior Implementation Research Advisor at the International Centre for Antimicrobial Resistance Solutions (ICARS) in Denmark and member of the International Pharmacy Federation (FIP) AMR Commission. She further serves as expert consultant on antimicrobial resistance (AMR) and antimicrobial stewardship (AMS) to the WHO. Professor Essack is chairperson of the Global Respiratory Infection Partnership (GRIP), serves on the Advisory Board of the Combating Antibiotic Resistant Bacteria Biopharmaceutical Accelerator (CARB-X) in the US, the Fleming Fund Expert Advisory Group in the UK, the Market Analysis Expert Advisory Group of the Global AMR Research and Development Hub in Germany and is a member of the Wellcome Trust Surveillance and Epidemiology of Drug Resistant Infections Consortium (SEDRIC). She served as Vice Chairperson of the South African Ministerial Advisory Committee on AMR at its inception, the International Pharmacy Federation Working Group on AMR, the South African Chapter of the Global Antibiotic Resistance Partnership (GARP) and the South African Antibiotic Stewardship Programme (SAASP).

Professor Essack's current research interests include:

- Evidence-informed strategies for the prevention and containment of antibiotic resistance based on the
 - One Health surveillance of antibiotic use and resistance,
 - Risk factors for the infection/colonization by antibiotic resistant bacteria, and,
 - Infection prevention and control, water sanitation and hygiene (WASH), animal husbandry and biosecurity.
- Molecular epidemiology, pathogenomics and metagenomics of antibiotic resistance using whole genome sequencing and bioinformatics analysis for the characterization of antibiotic resistance and virulence genes, their associated mobile genetic elements and genomic environments, clonality and phylogeny.
- Health policy and health systems strengthening to optimize the management of infections in the context of antibiotic resistance and stewardship.