Antimicrobial resistance (AMR) is the ability of a microorganism (bacteria, viruses, parasites and fungi) to resist the effects of antimicrobial drugs which include antibiotics, antivirals, antimalarials and antifungal. Microorganisms resistant to multiple antimicrobial agents are called multidrug resistant (MDR) or superbugs. Resistant microorganisms are increasingly difficult to treat, requiring alternative medications or higher doses which may be more costly or more toxic and poses a fundamental threat to human health, development and security. Antibiotic resistance is now a major threat to public health. A World Health Organization (WHO) report released April 2014 stated this serious threat is no longer a prediction for the future; it is happening right now in every region of the world and has the potential to affect anyone, of any age, in any country. Worldwide antimicrobial resistance is not fully mapped but poorer and developing countries with weak health care systems are more affected. Within the broader context of antimicrobial resistance and the fact that resistance does not recognize political borders, resistance to antibiotics is considered the greatest and most urgent global risk requiring international and national attention. The aim of this workshop is to explore the magnitude of the problem especially in developing countries, to share knowledge and experience and to put strategies and recommendation to strengthen regulation of antimicrobials, improve knowledge and awareness and promote best practices for antimicrobial prescriptions.

Biography
Gamal El Sawaf is a Professor of Microbiology and Immunology Medical Research Institute, Alexandria University, Egypt. He is a nationally recognized leader in infectious diseases. He was graduated from the Faculty of Medicine, Alexandria University in 1979. He has obtained his PhD in 1993 and his Post Doctor training course in the Laboratory of Infectious Diseases (Cattedra Di Clinica Delle Malattie Infettive) University of Rome, Tor Vergata. He was appointed as the Head of Microbiology Department in 2008 and the Director of the Medical Technology Center in 2010 and finally, the Dean of MRI. His main fields of research activities are in the clinical aspects pathogenesis and therapy of HCV, HIV and HHV-8 infection and epidemiology and molecular characterization of hepatitis viruses in Egypt. He has acted as a Referee for a variety of national and international scientific journals and as a Referee of research projects of the Alexandria University and of the STDF projects. He is a Member of the American Society of Microbiology, The Egyptian Society of Microbiology and Egyptian Society of Immunologists. He is a Project Leader of several research programs on HCV, HHV and TB.

gamalsawaf@yahoo.com