

# Women of the World of Science WOWS Allies and Mentorship Scheme Africa

## The Mentors



### **Professor Melinda Duer – University of Cambridge**

Professor Duer read Natural Sciences at Emmanuel College and completed her PhD thesis on parametric probes of ligand field theory in 1988. Since then she has transferred into the field of solid-state NMR spectroscopy as has been working in it for more than 10 years. She is a Professor in the Department of Chemistry and a fellow of Robinson College. Melinda's current research interests are in NMR studies of biological materials, in particular human and equine bone. She is the author of 'Introduction to Solid-State NMR Spectroscopy', a leading textbook in the field.



#### **Professor Janet Seeley - LSHTM**

Professor Seeley has PhD in social anthropology from the University of Cambridge. Before joining the London School of Hygiene and Tropical Medicine in April 2014 she was Professor of International Development at the University of East Anglia. Professor Seeley worked for the Department for International Development for 13 years, prior to moving to the University of East Anglia in 2000. Janet is interested in the social aspects of health, with particular interest in HIV and AIDS. She has been actively engaged in research on HIV since the late 1980s, including four years with the Medical Research Council in Uganda 1989-1993 where she was responsible for setting up social science research in the Unit, the Programme she returned to Uganda to head in 2008. She is head of the `Social Aspects of Health Across the Life Course Programme' at the Unit. Since 2014, Janet has been supporting social science and ethics research and researchers at the Africa Health Research Institute (formerly Africa Centre) in KwaZulu-Natal, South Africa. She is currently `faculty lead' for Social Science and Research Ethics. She is also faculty lead for public engagement at AHRI.



#### Professor Doreen Cantrell - University of Dundee

Professor Doreen Cantrell is Head of the College of Life Sciences, Vice Principal of the University of Dundee and a Wellcome Trust Principal Research Fellow. She is known internationally for her ground-breaking work on the biological mechanisms controlling T lymphocyte development and activation, which are key to the comprehension and manipulation of immune responses.

Over the years, Doreen has published over 150 research papers as well as managing to balance her career with being a wife and mother-of-three. She was awarded a CBE in the 2014 New Year's Honours list in recognition of her services to Life Sciences.



#### Professor Angelika Gründling – Imperial College London

Angelika Gründling is a Professor in Molecular Microbiology at Imperial College London, where she started her independent research career in 2007. The research focuses on the investigation of fundamental processes that are essential for the growth of Gram-positive bacterial pathogens. She combines genetic, biochemical and in collaborations structural approaches to provide mechanistic insight into cell wall synthesis and nucleotide signalling pathways in Staphylococcus aureus and Listeria monocytogenes. Angelika obtained her Ph.D. in Microbiology from the University of Vienna in 2000. She performed her postdoctoral training at the Harvard Medical School, where she investigated flagallar motility in the bacterial pathogen Listeria monocytogenes and at the University of Chicago, where she initiated her studies on the cell wall of S. aureus. At Imperial College London she continues her work on the bacterial cell wall and more recently on the essential signalling nucleotide c-di-AMP.



#### Professor Dame Caroline Dean - John Innes Centre

Professor Dean grew up in the north of England. After gaining both a BA and a PhD in Biology at the University of York, Caroline moved to California to research molecular biology. She began working at the John Innes Centre in 1988, where she works on the molecular basis of vernalization.

Professor Dean's research has provided several major breakthroughs that have direct impact on our understanding of a fundamental process in biology that is of critical importance to society, namely the molecular mechanism controlling the timing of flowering in higher plants. Her research was focused around two central questions in plant biology: Why do certain plants have to pass through winter before they bloom, and how do they remember that they have been exposed to cold temperatures weeks or months earlier? These are not merely academic problems, because the breeding of different varieties of cereals that either have or do not have this winter requirement has been a major cornerstone for increasing the yield of agricultural crops in temperate climates. Caroline and her students cloned several of the most important genes controlling Arabidopsis flowering time in response to vernalization, the process by which plants recall temperature to regulate flowering in the correct season.



#### **Professor Jean Langhorne – The Francis Crick Institute**

Professor Jean Langhorne is a group leader at the Francis Crick Institute. She obtained her BSc at Bedford College, University of London, and an MSc at the London School of Hygiene and Tropical Medicine. After her PhD at the Medical Research Council (MRC) Clinical Research Centre, London UK, she carried out postdoctoral training in immunology of malaria with Sydney Cohen at Guy's Hospital Medical School, London, and then moved to the Basel institute for Immunology, Switzerland.

She was awarded a Fogarty fellowship to join the National Institute of Allergy and Infectious Diseases/National Institutes of Health in the USA. After four years she moved to the Max Planck Institute in Freiburg, Germany, to establish her own group.

Jean moved to the MRC National Institute for Medical Research (now part of the Francis Crick Institute) in 1998 as a group leader, and her current research interests are in understanding the regulation of protective and pathogenic immune responses in experimental models of malaria and the human infected with Plasmodium falciparum.



#### Dr Mara Lawniczak - Wellcome Sanger Institute

Dr Lawniczak is an evolutionary geneticist interested in understanding what makes some mosquitoes better than others at transmitting malaria, and what makes some parasites better at getting transmitted. She also likes trying out any new technology that enhances our understanding of genomes.

Mara received her PhD from UC Davis working with David Begun on sexual conflict in Drosophila. After two postdocs, Mara was awarded a MRC Career Development Award and started her lab at Imperial College London in 2012 focused on malaria parasite and mosquito interactions. Mara joined the Malaria Programme at the Wellcome Trust Sanger Institute in 2014. Her current work continues to focus on vector parasite interactions and her group uses genomics and transcriptomics to uncover important proteins and pathways involved in successful parasite transmission through the mosquito. The aim is to implement new methods of control, including gene drive and transmission blocking strategies that aim to stop malaria.



#### Professor Sarah Fidler – Imperial College London

Professor Sarah Fidler completed her clinical training in HIV and GUM in the UK and currently runs a specialist clinical service for adolescents growing up with perinatally acquired HIV infection, and people identified with acute HIV infection. Her research interests are in leading clinical trials that explore the strategic use of antiretroviral therapy in acute infection (SPARTAC). More recently she leads a cross university UK collaboration CHERUB, which brings scientists, clinicians and advocates together to research novel approaches to HIV cure. In addition, Sarah is the co-chair of the HPTN 071 (PopART) community randomised trial in Zambia and South Africa. She supervises clinical and academic training, PhD and post-graduate studies and has published over 130 peer reviewed manuscripts. She is on the editorial board of several journals and a member of several trials DSMB and scientific advisory boards, IAS Towards a Cure working group, BHIVA education and scientific committee.