Southampton



Global-NAMRIP network meeting in Accra, Ghana (Global Network for Antimicrobial Resistance and Infection Prevention)

Monday 5th & Tuesday 6th March 2018

Tackling the Global Challenge of Antimicrobial Resistance and Infection Prevention A Global-NAMRIP network meeting at The Tomreik Hotel, Lagos Avenue, Accra

Purpose of the meeting

The O'Neill report states: "by 2050, 10 million lives a year and a cumulative 100 trillion USD of economic output are at risk due to the rise of drug-resistant infections if we do not find proactive solutions now to slow down the rise of drug resistance. Most of the direct and much of the indirect impact of AMR will fall on low and middle-income countries" (LMICs). This is a sentiment echoed by at the Wilton Park meeting in June organised by the Foreign and Commonwealth Office (FCO) to look at the issue of AMR in LMICs, stating: "The relative lack of population data regarding the level, complex spread and patterns of resistance in human, animal and agricultural contexts prevents many countries from recognising the true extent of the problem and also prevents the formulation of evidence-based intervention design and monitoring." This highlights that our proposed Global-NAMRIP research grouping is both timely and needed as we aim to form a multidisciplinary global research team, identify gaps in knowledge, gather missing data and translate scientific evidence into sustainable AMR interventions at a global level.

We formed Global-NAMRIP at the University of Southampton to contribute to the provision of a mitigation for AMR, and to enable advances in the areas of Infection Prevention and Vaccination. Global-NAMRIP followed from the success of its UK-based precursor, NAMRIP (the Network for AntiMicrobial Resistance and Infection Prevention), which brought together engineers, chemists, microbiologists, environmental scientists, veterinary and human medics, clinicians who contribute to international and national antibiotic guidelines for specified conditions, experts in food, ethics and law, crucially networked with economists, geographers, health scientists and experts from other social science disciplines to provide a truly joined up approach to AMR and Infection Prevention.

Our Global-NAMRIP philosophy is:

- To talk to end users to understand both the appropriate problem to tackle and the constraints on end users to implementing proposed solutions;
- To commission and conduct game-changing research;
- To ensure that research outputs that should lead to societal change are translated to do so;
- To engage in a meaningful dialogue with the public and policy makers through our award-winning programmes (which recently were mentioned in the UK parliament for

their innovation and impact).

At present we have a young Network but we need to greatly increase the number of active research collaborations and to supplement our electronic communications by face to face meetings, such as this one, which are critical to establishing trust and generating the enthusiasm needed to cross disciplinary and geographical boundaries. Our aim, as first set out in our recent bid for funding, is to establish AMR hubs in Africa, Asia and South America. We intend to apply for GCRF funding again and we have begun to develop research links with African countries, India, China, and Brazil. We hope that at this first global meeting we can attract a range of people who have an interest in the problem posed by antimicrobial resistance. We need all sectors to be working together so we hope that we have representatives from policy makers and healthcare managers as well as researchers. The meeting is to share research and knowledge, to network and to identify research questions based on the true needs of stakeholders in African countries. We currently have links with Ghana, Malawi, Kenya and Uganda. We hope that this meeting will establish the African Hub and then, following that, by allowing us to build on the work we do at the meeting, draw in other countries.

Day 1 - Monday 5th March

- 09.00 Registration and tea/coffee
- 10.00 Keynote talks
 - $\circ~$ 10.00 Welcome from Professor Tim Leighton: Introduction to Global-NAMRIP and its aims and objectives
 - o 10.20 Professor Osman Sankoh: Executive Director of INDEPTH Network
 - $\circ~$ 10.40 Martha Gyansa-Lutterodt, Chair of the Ghana AMR Alliance on how the Alliance combats AMR in Ghana
- 11.00 Presentations from UK delegates on AMR / Infection Prevention problems they wish to address and ideas for doing so
 - Professor Martyn Hill 'Capture and enrichment of bacteria using acoustic forces'
 - o Dr Collin Sones: 'Laser-direct-write fabrication of paper-based point-of-care diagnostics'
 - Professor Tim Leighton: 'StarHealer'
 - o Professor Hywel Morgan 'Rapid diagnostic solutions for Antimicrobial Resistance'
 - Dr David Voegeli's presentation (given by Prof Leighton)
 - Dr Xunli Zhang: 'Combining engineering and medicine approaches to tackle tuberculosis'
- 12.00 Lunch networking
- 13.20 Presentations from delegates on their AMR related projects
 - Dr Nazarius Mbona Tumwesigye, Makerere University, Uganda
 'Anti-Microbial Resistance in Uganda: Levels and the country's preparedness'
 - o Professor Victor Mwapasa, University of Malawi
 - Dr Beverly Egyir, University of Ghana: 'Antimicrobial Resistance and Molecular Epidemiology of Staphylococcus aureus in Ghana'
 - o Dr Alister Munthali, Centre for Social Research, Malawi
 - o Dr Thomas Anyorigiya, Navrongo Research Centre
 - o Mr Samuel Afari, Kintampo Health Research Centre
- 16.00 Networking and Sign up for Day 2 discussion groups based on the 5 NAMRIP themes (Preventing infection; Behaviour in the wider world; Pharmacology and Therapeutics; Sensing and Diagnostics; Clean water, sewage and waste)
- 17.00 Steering group meeting (steering group members only)
- 19.00 Evening meal with the opportunity to network (All delegates)

Day 2

Tuesday 6th March

- 09.00 Theme groups meet for discussion to start developing: research questions; key problems to tackle and likely solutions, and to investigate and identify new partnerships in order to continue development of research projects. Theme headings:-
 - Infection Prevention and Clean Water, Sewage and Waste
 - Pharmacology and Therapeutics
 - o Behaviour in the Wider World
 - Sensing and Diagnostics
- 12.30 Lunch
- 13.30 Groups report back
- 14.45 Tea
- 15.00 Plenary session Chaired by Professor Tim Leighton: 'Growing Global-NAMRIP ' a discussion to identify extra partners from within each country, new countries and helpful policy contacts.
- 16.00 'Potential sources of funding in the UK and globally': Professor Tim Leighton
- 16.20 'UK and EU funding sources': Dr Clint Styles
- 16.40 Q & A
- 16.45 Closing remarks
- 17.00 Finish