

## **Applications now open: Vaccinology in Africa 2019** **Master's Level Course**

**Applications are now open for the next Vaccinology in Africa Course, 29th April – 3rd May 2019, at the [MRC Unit in Fajara](#), Banjul, The Gambia.**

The course is specifically aimed at students, researchers and professionals resident in Africa and cover the main aspects of vaccinology, the vaccine development process, biomanufacturing, regulatory and ethical issues.

The course has an exceptional faculty of academic and industrial speakers, and resonates with the 'One Health' agenda by highlighting human and veterinary links and synergies between the two fields from scientific, technological and regulatory perspectives. Participants are selected on the basis of their direct involvement with vaccine development, and their excellence in professional and academic achievement. The course is fully funded for successful applicants and also covers air travel within the African region, accommodation and meals. 20 places are available to residents of The Gambia and Senegal, and a further 20 places to residents of the other regional countries listed below.

*The 2019 course is open to residents of the following countries: Algeria, Benin, Burkina Faso, Cameroon, Central African Republic, Congo, Côte d'Ivoire, Equatorial Guinea, Gabon, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Mauritania, Morocco, Niger, Nigeria, Senegal, Sierra Leone, Tchad, The Gambia, Togo, Tunisia, Western Sahara.*

The course alternates between African regions and previous courses have been held at the Noguchi Memorial Institute for Medical Research in Accra, Ghana (2013), at the International Livestock Research Institute in Nairobi, Kenya (2014), the Malaria Research and Training Centre & Centre d'Infectiologie Charles Mérieux in Bamako, Mali (2015) and the Makerere University/ UVRI Centre of Excellence in Infection and Immunity Research and Training in Entebbe, Uganda (2017).

To submit an application for a scholarship to attend the course, kindly complete the [application form](#) and send this by Thursday 28th February at 17:00 GMT to: [jenner-applications@ndm.ox.ac.uk](mailto:jenner-applications@ndm.ox.ac.uk).

### **Draft Programme:**

#### **Day 1: Principles of Vaccinology**

- Introduction to Vaccinology
- Vaccine Immunology
- Veterinary vaccine development: some major needs
- Poxvirus diseases of livestock
- HPV vaccines
- Polio immunization and eradication strategies today: successes and set backs
- African swine fever vaccines

- Developing a field trial site
- Nutrition and vaccine responses

### **Day 2: Vaccine technologies & their development**

- Maternal immunisation
- Vaccine technologies: Proteins, adjuvants, vectors and VLPs
- Progress with pneumococcal vaccines
- Foot and mouth disease vaccines
- African swine fever vaccines
- Non-specific effects of vaccines
- How to value vaccines?
- Immunomonitoring in endemic areas – tutorial session

### **Day 3: Major Vaccine Targets**

- HIV vaccines
- Malaria vaccines
- Tuberculosis vaccines
- Progress with meningococcal vaccines
- Vaccines for enteric pathogens
- Influenza vaccines
- Ebola, Lassa and outbreak pathogen vaccines
- Workshop on vaccine design

### **Day 4: Vaccine Development and Clinical Trials**

- New vaccine vectors and VLPs
- Rift Valley Fever and MERS vaccines
- Vaccine manufacturing
- Vaccine development in Africa: preclinical to field trials
- Vaccination against East Coast Fever and CBPP
- Dengue and Zika vaccines
- Undertaking field trials of new vaccines
- An industrial perspective on vaccine development, especially for neglected diseases
- Laboratory and field site visit

### **Day 5: Vaccine Development in Developing Countries**

- Vaccine trial design and Controlled Human Malaria Infection studies in Africa
- Yellow fever and other vaccine R&D at Institut Pasteur, Dakar
- Livestock vaccines for Africa: a manufacturing perspective

- Public health and vaccines: a WHO perspective
- Statistical analysis of vaccine trials
- Veterinary vaccine development at ILRI, Nairobi
- Accelerating vaccine research in Africa
- Practical, regulatory and ethical issues in vaccine development & deployment in African settings

## Confirmed speakers:

Adrian Hill, Jenner Institute, University of Oxford

Amadou Sall, Institut Pasteur, Dakar

Andrew Prentice, MRC Unit The Gambia

Baptiste Dingu, MCI Santé Animale, Morocco

Beate Kampmann, MRC Unit The Gambia

Bryan Charleston, Pirbright Institute

Carla Cerami, MRC Unit The Gambia

Ed Clark, MRC Unit The Gambia

Frédéric Tangy, Institut Pasteur, Paris

George Warimwe, KEMRI, Nairobi/Jenner Institute, University of Oxford

Helen Fletcher, London School of Hygiene & Tropical Medicine

Jayne Sutherland, MRC Unit The Gambia

Sarah Gilbert, Jenner Institute, University of Oxford

Umberto d'Alessandro, MRC Unit The Gambia

Vish Nene, ILRI, Nairobi