

Workshop on Future directions: Mathematical Sciences for GCRF Initiatives

October 19 – 21, 2020

Monday 19th October 2020, 09:30 – 15:30

09.30-11.00 Session 1: Chair: Surajit Ray

09.30-10.00 Welcome and setting the goals of the workshop: Surajit Ray and Carola-Bibiane Schönlieb

10.00-11.00 [Mark Pelling \(Kings College London\)](#), GCRF Challenge Leader, Resilience

11.00-11.15 Break

11.15-13.00 Session 2: Chair: Anotida Madzvamuse

11.15-12.30 Update from research grants (10 minutes each)

12.30-13.00 [Jasmina Panovska-Griffiths \(University College London\)](#)

13.00-14.00 Lunch break

14.00-15.30 Session 3:

14.00-15.30 Discussions: Break-out sessions based on use cases themes

Tuesday 20th October 2020, 09:30 – 15:30 (evening social event at 18.30)

09.30-11.00 Session 1: Chair: Emanuele Giorgi

09.30-10.30 Update from Capacity building grants (10 minutes each)

10.30-11.00 [Marc Henrion \(Liverpool School of Tropical Medicine\)](#), Malawi-Liverpool-Wellcome Trust Clinical Research Programme.

11.00-11.15 Break

11.15-13.00 Session 2: Chair: Carola-Bibiane Schönlieb

11.15-12.05 [Alan Blackwell \(University of Cambridge\)](#), Global Challenges Strategic Research Initiative

12.05-13.00 [Ellie Gilvin \(EPSRC\)](#) Head of International Development

13.00-14.00 Lunch break

14.00-15.30 Session 3:

14.00-15.30 Discussions: Break-out sessions

18.30 Evening social event: featuring cheese tasting

Wednesday 21st October 2020, 09:30 – 15:30

09.30-11.00 Session 1: Chair: Maria Paola Scaparra

09.30-10.00 [Elisa Morgera \(University of Strathclyde\)](#), Director One Ocean Hub

10.00-10.30 [John McCloskey \(University of Edinburgh\)](#), GCRF Multi-hazard Urban Disaster Risk Transitions Hub

10.30-11.00 [Fredolin Tangang \(National University of Malaysia\)](#)

11.00-11.15 Break

11.15-13.00 Session 2: Chair: Caroline Trotter

11.15-11.45 Testing underlying assumptions of global health activities.

[Goylette Chami \(University of Oxford\)](#), Research Group Leader, Big Data Institute

11.45-13.00 Discussions on How to proceed? What to target?

13.00-14.00 Lunch break

14.00-15.30 Session 3: Chair: Surajit Ray

14.00-14.30 Future plans

14.30-15.30 Summary presentation

Update from research grants (Monday 19th October 11.15-12.05) order:

1. Risk prediction for Women's Health and Rights in Tanzania: novel statistical methodology to target effective interventions
2. Modelling Emergency Medical Services in Indonesia
3. Physically-informed probabilistic modelling of air pollution in Kampala using a low cost sensor network
4. RESilient Emergency Preparedness for Natural Disaster Response through Operational Research(RESPOND-OR)
5. Developing statistical downscaling to improve water quality understanding and management in the Ramganga sub-basin
6. Robust and Efficient Analysis Approaches of Remote Imagery for Assessing Population and Forest Health in India
7. Designing a resilient relief supply network for natural disasters in West Java Indonesia using optimisation-via-simulation: Relief-OpS
8. Mathematical tools to inform sustainable interventions against schistosomiasis in Uganda

speakers:

Dryden, Professor IL **University of Nottingham**

Harper, Professor PR **Cardiff University**

Wilkinson, Professor RD **University of Sheffield**

Zografos, Professor K **Lancaster University**

Ray, Dr S **University of Glasgow**

Schoenlieb, Professor C **University of Cambridge**

Onggo, Dr BSS **University of Southampton**

Prada, Dr JM **University of Surrey**

Update from capacity building grants (Tuesday 20th October 09.30-10.30) order:

1. Statistics and Data Science training to build research capacity to address societal problems in Mongolia
2. A capacity-building platform for advancing biostatistics in Ethiopia, Kenya and Malawi
3. UK-Africa Postgraduate Advanced Study Institute in Mathematical Sciences (UK-APASI)
4. Capacity building in Africa via technology-driven research in algebraic and arithmetic geometry
5. Mathematical Modelling for Infectious Disease Dynamics and Control in East Africa (MMIDD-EA)
6. Improving Community Resilience and Sustainability Through Operational Research Capacity Building in Southeast Asia (CREST-OR)

speakers:

Giorgi, Dr E	Lancaster University
Madzvamuse, Professor	University of Sussex
Szendroi, Professor B	University of Oxford
Faraway, Professor JJ	University of Bath
Trotter, Dr CL	University of Cambridge
Scaparra, Professor MP	University of Kent

Possible themes for Day 1 Discussions: Break-out sessions (use case theme)

Possible themes for Day 2 Discussions: Break-out sessions (Country/Continent/methodology)

Balazs:

One particular topic I would be very interested in discussing is the possibility of grants for PhD training, in particular in "sandwich mode". I have quite extensive experience of one such project (supported by SIDA) that runs in East Africa, and I have had a long-standing desire to do something like this in the UK. PhD training of course is not allowed in the present calls. It would need a long-term project of minimum 5-6 years (two to three cohorts), with several universities participating... anyway I am already getting into the discussion (-: so I stop here. But I would be happy to participate in/lead a discussion, perhaps kicking off with a mini-presentation?