

Program

Monday 8 June

Session I

Venue: Uracil

Chair:

- 10:00 - 10:30 Registration and poster mounting**
- 10:30 - 11:00 Welcome and short introductions by course participants**
Olivia Wesula Luande, Umeå University
- 11:00 - 11:45 Mosquito-borne viruses and their diseases**
Magnus Evander, Umeå University, Umeå, Sweden
Biosketch on page 14
- 11:45 - 12:00 Questions and discussion**
- 12:00 - 13:15 Lunch at Hotell Björken**

Session II

Venue: Uracil

Chair:

- 13:15 - 14:00 Teaching on clinical virology and human disease aspects**
Clas Ahlm, Umeå University, Umeå, Sweden
Biosketch on page 15
- 14:00 - 14:15 Questions and discussion**
- 14:15 - 15:00 Vector behavior and chemical ecology studies**
Rickard Ignell, Swedish University of Agricultural Sciences, Uppsala, Sweden
Biosketch on page 16
- 15:00 - 15:15 Questions and discussion**
- 15:15 - 15:30 Coffee**
- 15:30 - 16:15 Modeling disease transmission and climate impact on vectors**
Joacim Rocklöv, Heidelberg University, Heidelberg, Germany
Biosketch on page 17
- 16:15 - 16:30 Questions and discussion**
- 16:30 - 17:15 The mosquito virome and its interaction with arboviruses**
Côme Morel, Umeå University, Umeå, Sweden
Biosketch on page 18
- 17:15 - 17:30 Questions and discussion**
- 17:30 - 18:30 Free time and check-in**
- 18:30 Dinner at Hotell Björken**

Program

Tuesday 9 June

Session III

Venue: Uracil

Chair:

08:30 - 09:15 The vector competence of mosquitoes for emerging and re-emerging arthropod-borne viruses

Olivia Wesula Luande, Umeå University, Umeå, Sweden

Biosketch on page 19

09:15 - 09:30 Questions and discussion

09:30 - 09:45 Coffee

09:45 - 10:45 Poster Presentations

Poster walks in parallel groups

10:45 - 11:30 Mosquito population dynamics, vector competence, African context

Simon Muriu, Pwani University, Kenya

Biosketch on page 20

11:30 - 11:45 Questions and discussion

11:45 - 13:00 Lunch at Hotell Björken

Session IV

Venue: Uracil

Chair:

13:00 - 13:45 Mosquito ecology, vector control measures, field expertise

Joseph Mwangangi, KEMRI Wellcome Trust, Kenya

Biosketch on page 21

13:45 - 14:00 Questions and discussion

14:00 - 14:45 Swedish mosquitoes

Anders Lindström, Swedish Veterinary Agency, Sweden

Biosketch on page 22

14:45 - 15:00 Questions and discussion

15:00 - 15:15 Coffee

15:15 - 16:00 Hands-on lab and field methods in mosquito biology

Disa Eklöf, Swedish Veterinary Agency, Sweden

Biosketch on page 23

16:00 - 16:15 Questions and discussion

Field Trip I

16:15 Attire change for field trip

16:30 Field trip to mosquito trapping and dipping

Anders Lindström, Swedish Veterinary Agency, Sweden

18:30 Dinner outside at the field trip

Program

Wednesday 10 June

Field Trip II

08:00 - 10:00 **Mosquitoes' collection from previous day's sampling**
Anders Lindström, Swedish Veterinary Agency, Sweden

10:00 - 10:15 **Coffee**

10:15 - 12:15 **Trip to Oliver Billker's lab - Laboratory orientation**
Anders Lindström, Swedish Veterinary Agency, Sweden
Disa Eklöf, Swedish Veterinary Agency, Sweden

12:15 - 13:30 **Lunch at Hotell Björken**

Session V

Venue: Red and Green Lab

13:30 - 15:00 **Workshop - Morphological identification of Swedish mosquito using standardized keys**
Anders Lindström, Swedish Veterinary Agency, Sweden
Disa Eklöf, Swedish Veterinary Agency, Sweden

15:00 - 15:15 **Coffee**

15:15 - 17:00 **Mosquito laboratory orientation - Morphological identification of collected mosquitoes using standardized keys**
Anders Lindström, Swedish Veterinary Agency, Sweden

17:00 - 18:00 **Poster Presentations**
Poster walks in parallel groups

18:00 - 18:30 **Free time**

18:30 **Dinner at Hotell Björken**

Program

Thursday 11 June

Session VI

Venue: Uracil

Chair:

- 09:00 - 09:45** **Malaria-focused entomology, vector-parasite interactions**
Martin Kibet Rono, KEMRI Wellcome Trust, Kenya
Biosketch on page 24
- 09:45 - 10:00** **Questions and discussion**
- 10:00 - 10:15** **Coffee**
- 10:15 - 11:00** **Vector entomology and research in Asia**
Hans Jørgen Overgaard, Norwegian University of Life Sciences, Norway
Biosketch on page 25
- 11:00- 11:15** **Questions and discussion**
- 11:15 - 12:00** **Past, present and future projections of arbovirus situation in West Africa**
Diawo Diallo, Institut Pasteur de Dakar, Senegal
Biosketch on page 26
- 12:00 - 12:15** **Questions and discussion**
- 12:15 - 13:30** **Lunch at Hotell Björken**

Session VII

Venue: Uracil

Chair:

- 13:30 - 14:15** **Real-life context of arbovirus transmission, vector competence, and field research in West Africa**
Diawo Diallo, Institut Pasteur de Dakar, Senegal
Biosketch on page 26
- 14:15 - 14:30** **Questions and discussion**
- 14:30 - 15:15** **Identification of mosquitoes through metabarcoding and processing of sequence data**
Tobias Lilja, Swedish Veterinary Agency, Sweden
Biosketch on page 27
- 15:15 - 15:30** **Questions and discussion**
- 15:30 - 15:45** **Coffee**
- 15:45 - 17:00** **Practical demonstration - Processing of mosquito sequencing data**
Tobias Lilja, Swedish Veterinary Agency, Sweden
- 17:00 - 18:30** **Free time**
- 18:30** **Dinner at Rex, Rådhuset i Umeå**

Program

Friday 12 June

Session VIII

Venue: Uracil

Chair:

- 08:30 - 09:15** **Pathogen Identification and Surveillance through Next-Generation Sequencing Platforms: Experiences from Conducting Bioinformatic Training by Africa CDC**
Gilbert Kibet Rono, International Livestock Research Institute, Kenya
Biosketch on page 28
- 09:15 - 09:30** **Questions and discussion**
- 09:30 - 09:45** **Coffee**
- 09:45 - 12:00** **Practical demonstration - Practical application of bioinformatic workflows**
Gilbert Kibet Rono, International Livestock Research Institute, Kenya
Biosketch on page 28
- 12:00 - 13:15** **Lunch**

Session IX

Venue: Uracil

Chair:

- 13:15 - 14:00** **Malaria and scRNAseq**
Lisa Verzier, Umeå University, Sweden
Biosketch on page 29
- 14:00 - 14:15** **Questions and discussion**
- 14:15 - 15:15** **Case studies in groups - Real scenarios from North-South networks with regards to outbreak and pandemic preparedness**
- 15:15 - 15:30** **Coffee**
- 15:30 - 16:30** **Oral presentations of the case studies**
- 16:30 - 17:00** **Concluding remarks, evaluation, course certificates**
Olivia Wesula Luande, Umeå University



- 17:00** **Departure**