

Entomology Summer Course

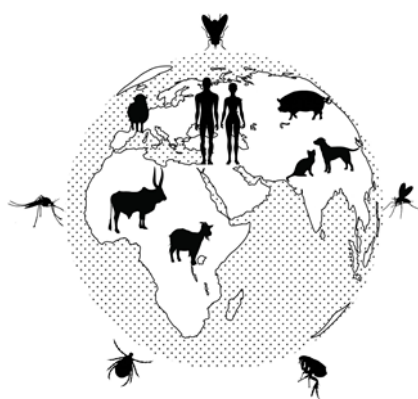
*'Hands on' Course on Arthropods
of Medical and Veterinary Significance:
A global perspective, from theory to practice*

4 - 8 July, 2022

Detailed programme

National Veterinary School of Toulouse, France

Continuing education in Medical and Veterinary Entomology



SPONSORSHIP



List of lecturers

Richard Wall, B.Sc., M.B.A., Ph.D.

University of Bristol, United Kingdom

Carla Maia, DVM, M.Sc., Ph.D, Dip. EVPC

EBVS® European Veterinary Specialist in Parasitology

Institute of hygiene and and tropical medicine, Lisbon, Portugal

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Laboratory of Insect and Diagnostic (LDI)
IHU Méditerranée Infection, UMR Vecteurs – VITROME, Marseille, France

Gérard Duvallet, M.Sc., Ph.D.
University of Montpellier, France

Lorenza Beati, M.D., Ph.D.
Georgia Southern University,
The US National Tick Collection, USA

Richard Birtles, B.Sc, Ph.D.
University of Salford, Manchester, United Kingdom

Vincenzo Lorusso, DVM, Ph.D., Dip. EVPC, Dip. ACVM
EBVS® and ACVM® European and American Specialist in Veterinary Parasitology
European Commission, DG Research and Innovation
University of Salford, Manchester, United Kingdom
African Institute of One Health Research and Diagnostics, Nigeria

Preparatory work and final examination

The attendees will receive a selection of papers covering the topics that will be developed during the course at least 15 days prior to the beginning of the summer school. The final examination will be made of 10 multiple choice questions and/or short answering questions.

A course feedback questionnaire will be given at the beginning of the course to each participant and will be collected at the end of the course.

Detailed program

NB: Please note that depending on the sanitary situation some lectures coming from overseas might present online, or be replaced by another expert.

Monday 4th of July 2022

08h00: Welcome coffee

08h30-12h30: Lectures

08h30-10h15: Introduction to medical and veterinary entomology, Prof Richard Wall

10h15-10h30: Coffee break

10h30-11h30: Bio-ecology and pathogenic role of *Culicoides* spp., Dr Claire Garros

11h30-12h30: Bio-ecology and pathogenic role of sandflies, Dr Carla Maia

12h30-14h00: Lunch break

14h00-18h00: Practical work

14h00 - 16h00: Principles of morphological identification of sandflies and dissection of female sandflies, Dr Jorian Prudhomme

16h00-16h30: Coffee break

16h30- 18h00: Principles of morphological identification of *Culicoides* spp., and of trapping (How to set up a trap for *Culicoides* in the vet school facilities (large animal hospital)),

Dr Claire Garros

19h00: Guided visit of Toulouse

20h00: Diner altogether in Toulouse downtown

Tuesday 5th of July 2022

08h15-12h30: Lectures

08h15-10h00: Mosquitoes: taxonomy, bioecology, and *Dirofilaria immitis*, heartworm interactions, Prof Tanja McKey

10h00-10h30: Coffee break

10h30-11h30: Mosquito control and public health, Dr Fabrice Chandre

11h30-12h30: Mechanisms of insecticide resistance in mosquitoes, Dr Sylvie Cornélie

12h30-14h00: Lunch break

14h00-17h00: Practical work

14h00-17h00: Principles of morphological identification of mosquitoes, Nil Rahola

Training on the recognition of the main European mosquito species of medical and veterinary significance.

Participants need to bring their laptop with them so as to install the software "MoskeyTool", and will be taught how to use it.

Principles of mosquito mounting will also be addressed.

19h00: Welcome speech by a council member and visit of the Toulouse Capitol (to be confirmed)

20h00: Dinner all together in Toulouse downtown

Wednesday 6th of July 2022

08h15-12h30: Lectures

08h15-10h00: Bio-ecology of *Glossina* spp. and African trypanosomiasis, Prof Steve Torr

10h00-10h30: Coffee break

10h30-11h30: Bio-ecology and pathogenic roles of stable flies, Dr Emmanuel Liénard

11h30-12h30: Principle of alternative control tools against stable flies and tabanids, Prof Philippe Jacquet and Dr Marc Desquesnes

12h30-13h30: Lunch break

13h30-18h30: Field work

13h30: Presentation of the field work objectives and the context of the pig farm visit

14h00: Departure

Field work in a pig farm in the vicinity of Toulouse or on the site at the veterinary school to learn the principles of trappings of stable flies and tabanids

18h30/19h00: Back to Toulouse

Free evening

Thursday 7th of July 2022

08h15-12h30: Lectures and practical work

08h15-09h15: Fleas and flea-borne pathogens, Dr Emilie Bouhsira

09h15-10h15: Sarcoptidae: bio-ecology and pathogenic roles in human and animals, Prof Jacques Guillot (*online*)

10h15-10h30: Coffee break

10h30-11h30: Bio-ecology and pathogenic role of bedbugs, Jean-Michel Bérenger

11h30-12h30: Demonstration of bedbugs detection by dogs – *Eco-Flair company (to be confirmed)*

12h30-14h00: Lunch break

14h00-17h00: Practical work

14h00-17h00: Principles of morphological identification of stable flies and tabanids, Prof Gérard Duvallet

19h00-20h00: Guided visit of Natural Museum History of Toulouse

Free evening

Friday 8th of July 2022

08h15-12h30: Lectures

08h15-10h00: Ticks: Biology, Ecology and Phylogeny, Prof Lorenza Beati

10h00-10h30: Coffee break

10h30-11h30: Zoonotic tick-borne diseases: Lyme Disease and Bartonellosis, Prof Richard Birtles

11h30-12h30: Ticks and tick-borne diseases in companion animals, Dr Magalie René-Martellet

12h30-14h00: Lunch break

14h00-17h00: Practical work

14h00-16h45: Principles of tick morphological identification, Prof Lorenza Beati

16h45-17h00: Coffee break

17h00-17h30: Short final examination

17h30-18h00: Awarding Ceremony

Opening: The role of international cooperation in science, Dr Vincenzo Lorusso (*to be confirmed*)

Hand over of course certificates of attendance and Young Scientist Award

20h30: Gala dinner in Toulouse downtown