

Workshop: Unraveling Mosquito Mating Dynamics

23rd-25th June 2025 | Lecture room 6, Building B, Level -2 Department of Medicine and Surgery, University of Perugia, Perugia, Italy

23rd June 2025, Monday

12:15-13:00	Welcome & registration
13:00-14:00	Lunch
	Session 1 - Afternoon - Chair: Roberta Spaccapelo
14:00-14:30	Prof. Joerg Albert - University Oldenburg, Germany
	SYNERGY needed: Deciphering the logic of mosquito acoustic navigation, orientation, copulation, and sensory computation
14:30-15:00	Dr. Chantif Alexandros Alampounti - University College London, United Kingdom
	Distortion Products: A link between the micro- and macro- mosquito ruleset
15:00-15:30	Dr. Marcos Georgiades - University College London, United Kingdom
	Clockwork flagella: an introduction to mosquito SSOs
15:30-16:00	Prof. Florian Muijres - Wageningen University, The Netherlands
	Comparative biofluid mechanics of fly and mosquito flight
16:00-16:30	Coffee break
16:30-17:00	Dr. Antoine Cribellier - Wageningen University, The Netherlands
	Behavioral rules of swarming mosquitoes
17:00-17:30	Dr. Serge Poda - Wageningen University, The Netherlands
	Field, semi-field and lab studies of malaria mosquito swarming in Burkina Faso
17:30-18:00	Dr. Stefania Melillo - CNR, Rome, Italy
	Collective behavior in starling flocks and midges swarms
18:00 onward	Free time
	24 th June 2025, Tuesday
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08:50-09:00	Opening
	Session 2 - Morning - Chair: Stefania Melillo
09:00-09:30	Prof. Roberta Spaccapelo - University of Perugia, Italy
	Swarming Dynamics in Lab Environments and Infrastructure Integration at UNIPG
09:30-10:00	Dr. Leonardo Parisi - CNR, Rome, Italy
	3D tracking for dense and featureless systems
10:00-10:30	Dr. Matthew Peirce - University of Perugia, Italy
	Unraveling Anopheles gambiae swarming using 3D video tracking
10:30-11:00	Coffee break
11:00-11:30	Dr. Marta Andres - Spanish National Research Council, Spain
	Mosquito hearing: from basic neuroscience to disease control
11:30-12:00	Dr. Max Lombardi - CNR, Rome, Italy
	Analysis of mating and swarming behavior in transgenic mosquito lines
12:00-12:30	Dr. Talmo Pereira - Salk Institute for Biological Studies, San Diego, USA
	Quantifying and modeling biological motion using deep learning
12:30-13:00	Dr. Rainer Beutelmann - University Oldenburg, Germany
	Where am I and where will I be heading? Ideas about acoustic tracking of, and directional hearing in, mosquitoes
13:00-14:00	Lunch
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	Session 2 - Afternoon - Chair: Leonardo Parisi
14:00-14:30	Dr. Judi Bagi - University College London, United Kingdom
	Illuminating the role of light in the mating behaviours of disease vectoring mosquitoes
14:30-15:00	Dr. Gloria Iacomelli - University of Perugia, Italy
	Characterization of swarming behavior of invasive Aedes koreicus mosquitoes
15:00-15:30	Celine Alami - University of Perugia, Italy
	Identification of targets to disrupt mating in Culex mosquitoes
15:30-16:00	Melania Ligato - University of Perugia, Italy
	Investigating Desat1-Mediated Pheromone Signaling in Anopheles gambiae
16:00-16:30	Coffee break
16:30-18:00	Networking
18:00~	Free time
20:00-21:30	Social dinner
	25 th June 2025, Wednesday

Opening 08:50-09:00 Session 3 - Morning - Chair: Roberta Spaccapelo Prof. Joerg Albert - University Oldenburg, Germany 09:00-10:30

Filling some gaps: Antennal Hearing, Insect auditory ecology and the toolbox of their study 10:30-11:00 Coffee break

11:00-12:30 Networking Facility and infrastructure visit

13:00-14:00 Lunch

Session 3 - Afternoon - Chairs: Roberta Spaccapelo-Stefania Melillo

Networking 14:00-16:30 16:30-17:00



12:30-13:00

Image credit:

Alicia Wong





Closing remarks

