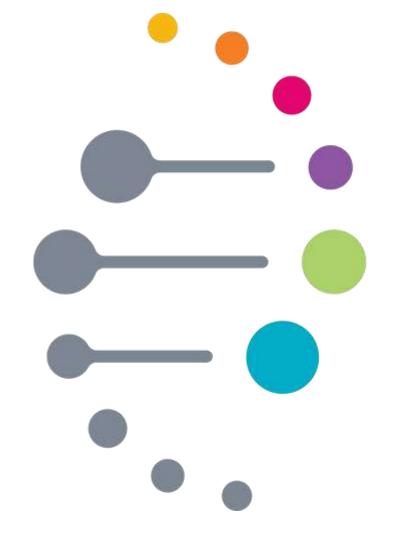


#### XI International Conference

7-10 November 2023, Palma, Spain

# SHAPING THE FUTURE OF VECTOR CONTROL IN EUROPE

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<sup>1</sup>Organització de Congressos Fundació Universitat-Empresa de les Illes Balears







#### PROGRAMME: TUESDAY 07/11

8:00	9:00	Walk in and registration		
9:00	9:30			
		Chair: Miguel Ángel Miranda		
9:30	10:00		Keynote lecture #1	
		Chair: Francis Schaffner		
9:30	10:00	David Dyjack	The isthmus	
10:00	11:00		Session 1: Surveillance and management of invasive mosquito species	
		Chair: Sarah Delacour & Fran	cis Schaffner	
10:00	10:15	Tobias Suter	The potential use of detection dogs for the surveillance of the Asian tiger mosquito	
10:15	10:30	Laura Soresinetti	Introduction and spread of the invasive mosquito Aedes koreicus in Italy: insights from p	opulation genetics
10:30	10:45	Karin Bakran-Lebl	Using wooden mouth spatulas as oviposition support in ovitraps – What do we miss?	
10:45	11:00	Kristopher Nolte	Development of an artificial intelligence-based workflow for the reliable identification of	of mosquito species.
11:00	11:30	Coffee/tea break		
11:30	13:00	Session 1: Surveillance and management of invasive mosquito species		
	Chair: Sarah Delacour & Francis Schaffner		cis Schaffner	
11:30	11:45	Antoine Mignotte	Track the Tiger: unraveling resting site preferences of Aedes albopictus in Occitania, Fra	nce.
11:45	12:00	Felix Sauer	Mosquito species identification with geometric morphometrics and CNNs based on win	g images
12:00	12:15	Helge Kampen	Invasive mosquito species and their (mis)management in Germany	
12:15	12:30	Cedric Marsboom	Evaluating spatial and temporal covariate resolution in surveillance and modelling of modelling	osquitoes
12:30	12:45	Hugo Osório	Remote monitoring of disease vector mosquitoes using smart traps with a novel optical	sensor
12:45	13:00	Isra Deblauwe	Lessons learnt from invasive mosquito species control in Belgium	
13:00	14:00	Lunch		

#### PROGRAMME: TUESDAY 07/11

14:00	15:30	Session 1: Surveillance and management of invasive mosquito species		
		Chair: Carlos Barceló & Elec	onora Flacio	
14:00	14:15	Stefano Vettore	Comparison between different methods to measure the density of Aedes albopictus	
14:15	14:30	Georgia Kirby	Addressing geographic gaps in UK mosquito surveillance: investigating mosquito distributions in Scotland	
14:30	14:45	Vincente Ontiveros	Estimating Asian tiger mosquito dispersal through genetic analyses	
14:45	15:00	Carlos Barceló	Blood-feeding preferences of <i>Aedes albopictus</i> in laboratory conditions	
15:00	15:15	Bianca Modespacher	Swiss national monitoring programme of invasive <i>Aedes</i> mosquitoes: strategy adaption after 10 years	
15:15	15:30	Alessandra Della Torre	Development and validation of a MidInfraRed Spectroscopy approach for <i>Aedes albopictus</i> age grading	
15:30	16:30	Session 2: Best practices for mosquito control and biocide management		
		Chair: Ruben Bueno Marí & Mara Moreno		
15:30	15:45	Adolfo Ibáñez-Justicia	Delaying the establishment of <i>Aedes albopictus</i> : Mosquito foci elimination in private places in the Netherlands	
15:45	16:00	Andrea Drago	The mortality of Aedes albopictus larvae in natural breeding sites	
16:00	16:15	Alessandra Della Torre	First characterisation of knock-down-resistance mutations within the vgsc gene in <i>Culex pipiens</i>	
16:15	16:30	Bram Van De Straat	Behavioural resistance in malaria vectors occurred prior to the scale-up in insecticide-based vector control	
16:30	20:00	Social event: welcome cocktail		

#### PROGRAMME: WEDNESDAY 08/11

9:00	9:30	Keynote lecture #2		
		Chair: Miguel Ángel Miranda		
		Lucia García San Miguel	The coordination of the Spanish National Plan for Prevention, Surveillance and Control of Vector-Borne	Disease
9:30	11:00		Session 3: Vector control in the context of disease outbreaks	
		Chair: Karin Bakran-Lebl & Miguel A	Ángel Miranda	
9:30	9:45	Mikel González	ARBOPREVENT: Moving from reactive to proactive strategies for the prevention of West Nile virus in Sp	ain
9:45	10:00	John Palmer	Human-mosquito biting networks and the dynamics of mosquito-borne diseases	
10:00	10:15	Gwendoline Acerbi	Effects of sublethal doses of insecticide on egg-laying, biting and resistance of <i>Anopheles gambiae</i>	
10:15	10:30	Sara Margarida Martins Afonso	A hybrid model to unveil the role of <i>Culex torrentium</i> in West Nile virus transmission in Europe	
10:30	10:45	Robert Hancock	Epic 2023 rainfall causes mosquito population explosions and impacts West Nile Virus surveillance in Co	olorado
10:45	11:00	Muhammad Mukhtar	Management of major mosquito species, with special emphasis on vectors of dengue and malaria in Pa	kistan
11:00	11:30	Coffee/tea break		
11:30	13:00	Session 4: Citizen science and community involvement for mosquito surveillance and control		
		Chair: Alessandra Della Torre & And	drea Drago	
11:30	11:45	Roger Eritja	Next generation community-based surveillance of mosquitoes: Coupling citizen scientists, experts and	machines
11:45	12:00	Marie Hermy	Overwintering of tiger mosquitoes (Aedes albopictus) in two villages in Belgium	
12:00	12:15	Alessandra Della Torre	Mosquito Alert ITALIA 2020-2022: citizen engagement, achievements and criticisms	
12:15	12:30	Ignacio Gil Torró	Mass trapping for Aedes albopictus control in residential areas: NESCOTIGER, a large-scale field trial	
12:30	12:45	Isis Sanpera-Calbet	Places and times of human-mosquito interaction in urban areas: insights from Barcelona	
12:45	13:00	Aitor Cevidanes	Buzz and croak: microwetland biodiversity links through field, experimental, and citizen science studies	
13:00	14:00		Lunch	

#### PROGRAMME: WEDNESDAY 08/11

14:00	15:30	Poster session & MosquitoAlert session			
14:00	15:30	Poster session: Gaspar Mel	Poster session: Gaspar Melchor de Jovellanos Build. 1 st floor. Hal; see list in JEMCA Supplement		
14:00	15:30	MosquitoAlert session (to b	pe attended by MA members only): Gaspar Melchor de Jovellanos Build. <b>Ground floor. Room AB03</b>		
15:30	16:00		Coffee/tea break		
16:00	17:30	Session 5: One health: challenges and perspectives			
	Chair: Alexandra Chaskopoulou & Ignacio Ruiz-Arrondo		ulou & Ignacio Ruiz-Arrondo		
16:00	16:15	Fabrizio Montarsi	Results of entomological surveillance 2022 for West Nile and Usutu virus in northeastern Italy		
16:15	16:30	Marina Bisia	Investigation of <i>Dirofilaria</i> spp infection in <i>Culex pipiens</i> mosquitoes and dogs across Attica Region		
16:30	16:45	Luis Hernández-Triana	Integrated approaches for mosquitoes blood meal analysis, species identification and virus screening in Spain		
16:45	17:00	Heather Ferguson	Assessing the risk of mosquito-borne diseases in Scotland and their response to environmental change		
17:00	17:15	Magdalena Wehmeyer	Culex pipiens biotype pipiens and Cx. torrentium show opportunistic host-feeding patterns		
17:15	17:30	Tobias Lilja	Evaluation of methods using honey dipped FTA-Filter for detection of mosquito borne viruses		
17:30	19:00	EMCA AGM (to be attended by all EMCA members)			
19:00	20:30	Tasting of local products, offered by INAGEA-UIB			

#### PROGRAMME: THURSDAY 09/11

9:00	9:30	Keynote lecture #3		
		Chair: Eleonora Flacio		
9:00	9:30	Alexandra Chaskopoulou	In search of new tools towards improving sand fly control strategies	
9:30	11:00	Session	6: Surveillance and management of black flies, sand flies, ticks, and other	rs
		Chair: Jolyon Medlock & Tatiana	ı Şuleşco	
9:30	9:45	José Risueño	A survey of sand flies across their known northern distribution range limit in Wester	n Europe, summer 2023
9:45	10:00	Francis Schaffner	The Phlebotomine sand fly fauna of Switzerland revisited	
10:00	10:15	Ignacio Ruiz-Arrondo	Black flies (Simuliidae): best practices for a major emerging pest in southern Europe	. Part 1: Surveillance
10:15	10:30	Marcos López-de-Felipe	Black flies: best practices for a major emerging pest in southern Europe. Part 2: Trea	tments and evaluation
10:30	10:45	Gérard Duvallet	Stable fly management at a Donkey Sanctuary in Spain: a new IPM approach	
10:45	11:00	Luis Hernández-Triana	Integrated approaches for surveillance of ticks and tick-borne diseases of livestock in	mportance
11:00	11:30	Coffee/tea break		
11:30	12:00	Session 6: Surveillance and management of black flies, sand flies, ticks, and others		rs
		Chair: Jolyon Medlock & Tatiana Şuleşco		
11:30	11:45	Miguel Ángel Miranda	"Paparra Balear" a citizen science project for the surveillance of ticks in the Balearic	Islands (Spain)
11:45	12:00	Fatima Al-Khayat	Risk evaluation of mosquito species and their effects on human and animal health in	n Qatar

#### PROGRAMME: THURSDAY 09/11

12:00	13:00	Session 7: Mosquito control in the Mediterranean region and wetland conservation		
		Chair: Estella Gonzalez & Hans Jerrentrup		
12:00	12:15	Laura Blanco Sierra	Drivers of the abundance of a local population of Aedes albopictus in Catalonia (Spain	)
12:15	12:30	Jesús Bellver Arnau	Larvicide treatment optimisation at a botanical garden	
12:30	12:45	Cyrille Czeher	Cost-benefit analysis of Aedes albopictus population reduction methods evaluated in	southern France
12:45	13:00	Nikolaos Perros	Achieving operational effectiveness on a regional scale: challenges and solutions of W	/estern Greece's project
13:00	14:00	Lunch		
14:00	14:30	Round table: Best practices for mosquito control in built-up areas		
14:00	14:30	Chair: Florence Fouque	Sandra Gewehr, Andrea Drago, Rubén Bueno-Marí, Spiros Mourelatos	
16:00	18:00	Social events (visits)		
20:00			Gala dinner	

#### PROGRAMME: FRIDAY 10/11

9:00	9:30	Keynote lecture #4	
	Chair: Sandra Gewehr		
9:00	9:30	Florence Fouque	WHO and Vector Control, from the first recommendations to the current evidence-based guidelines
9:30	11:00		Session 8: New technologies and practices in vector control
		Chair: Sandra Gewehr & Andrea	s Rose
9:30	9:45	Evdoxia Kakani	Combining SIT with automation and machine learning to reduce mosquito-borne disease globally
9:45	10:00	Eleonora Flacio	Application of SIT as an integrated control measure for Ae. albopictus in the Canton of Ticino (Switzerland)
10:00	10:15	Kamil Erguler	VEClim - an early warning support system for climate-sensitive vector-borne diseases
10:15	10:30	Leif Rauhöft	A mechanistic model to predict spatial temporal patterns of <i>Culex pipiens</i> s.s./ <i>Cx. torrentium</i> in Germany
10:30	10:45	Agata Negri	MosChito rafts: eco-compatible floating structures for the control of larvae of native and invasive mosquitoes
10:45	11:00	Alejandra Centurión Carrera	Targeting host factors to stop viral replication in Aedes albopictus
11:00	11:30	Coffee/tea break	
11:30	12:30	Session 8: New technologies and practices in vector control	
	Chair: Heather Ferguson & Spiros Mourelatos		s Mourelatos
11:30	11:45	Antonios Michaelakis	Preliminary results on the implementation of a boosted Sterile Insect Technique targeting Aedes albopictus
11:45	12:00	Eva Veronesi	E4Warning: preliminary data on mark release recapture of <i>Culex pipiens</i> in Switzerland
12:00	12:15	Stella Kalaitzopoulou	The value of data collection and processing in mosquito control projects
12:15	13:00	Conference closing, awards, announcements	
12:15	13:00	Chair: Sandra Gewehr	



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# JEMCA SPECIAL ISSUE "SHAPING THE FUTURE OF VECTOR CONTROL IN EUROPE" (EMCA 2023)









#### Submit your EMCA 2023 contribution to our special issue

#### **Reduced APC fees to EMCA 2023 attendees:**

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#### **Guest editors:**

Dr Carlos Barceló (ZAP-UIB. Spain):

**Dr Sarah Delacour Estrella (University of Zaragoza, Spain)**;

**Prof. Miguel Á. Miranda (ZAP-UIB & INAGEA, Spain)**;

Dr Ignacio Ruiz-Arrondo (Center for Biomedical Research of La Rioja, Spain)

- Have access to a wealth of up to date scientific and technical knowledge on mosquito control
- Be early informed and contribute to various activities of the EMCA
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CHAIR SANDRA GEWEHR MEMBERS 23



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