
ABSTRACTS



April 8-10, 2025

Munich, Germany



Organizer:

Bundeswehr Institute of Microbiology



Program at a glance (Part I)

Click on session of interest to jump to the corresponding abstracts!

Monday, April 7

Time	Ernst-von-Bergmann barracks
15:00 18:00	Early registration
18:00 21:00	Welcome Reception / Ice Breaker



Tuesday, April 8

Time	Audimax	Garden Hall	Foyer
09:00 10:30	A Opening Ceremony		
	Coffee Break		
11:00 12:30	B Searching for Achilles' Heel - Analysis of Host-Pathogen Interaction	C Responding to Threats: Biosafety and Deployable Labs	Poster Exhibition
	Lunch Break		
13:30 15:30	D Bacteriophages 	E Case reports: Interactive Voting Session 	
	Coffee Break		
16:00 18:00	F Current Trends in Biodefense-related Bacterial Infections	G Medical Countermeasures (MCM)	
18:30 22:00	Conference Dinner at Flugwerft Schleißheim aviation museum		

Program at a glance (Part II)

Click on session of interest to jump to the corresponding abstracts!

Wednesday, April 9

Time	Audimax	Garden Hall	Foyer
09:00 10:30	H Genomics and AI 	I One Health: Surveillance and Tools for the Big Picture	Poster Exhibition
Coffee Break			
11:00 12:30	J Synthetic Biology: Boon and Bane for Medical Bio-defense	K Novel Technologies	Poster Exhibition
Lunch Break			
13:30 15:30	Coffee Break		Poster Session
16:00 18:00	N Tox-Alert: New Insights into Biological Toxins	O German Biosecurity Programme 	Poster Exhibition

Thursday, April 10

Time	Audimax	Garden Hall	Foyer
09:00 11:00	P Vector-Borne Diseases: A Global Health Problem		
11:00 11:30	Q Farewell and Poster Award Ceremony		



Opening Ceremony

Chair: R. Wölfel (DEU)

AO 01  35min

Opening and Welcome Notes

Roman Wölfel

Bundeswehr Institute of Microbiology, Munich, DEU

AO 02  10min

Welcome Notes by Federal Foreign Office

Silke Bellmann

Federal Foreign Office, Division for Biological and Chemical Weapons Disarmament, G7 Global Partnership, German Biosecurity Programme, Berlin, DEU

AO 03  45min

Keynote Lecture: 50 years of the Biological Weapons Convention

Daniel Feakes

BWC Implementation Support Unit, UNODA, Geneva, CHE

IP 09

The dog used as sentinel for the circulation of flaviviruses in the south-east of France in 2023

Samia Bedjaoui¹, Younes Laidoudi¹, Stéphane Priet², Karine Barthelemy², Loic Comtet³, Stéphanie Watier-Grillot⁴, Jean L. Marié⁴, Xavier De Lamballerie², Bernard Davoust¹

¹RITMES (Aix Marseille Univ, AP-HM, SSA), Marseille, France - IHU Méditerranée Infection, Marseille, FRA; ²National Reference Centre for Arboviruses, Unité des virus émergents, Aix Marseille Univ, IRD 190, INSERM 1207, Marseille University Hospitals (AP-HM), Marseille, FRA; ³Innovative Diagnostics, Grabels, FRA; ⁴French military health service, Animal epidemiology expert group, Tours, France - French military center for epidemiology and public health, Marseille, FRA

Flaviviruses like West Nile, Usutu, and Dengue viruses, common in France, are mosquito-borne, their circulation can be influenced by environmental factors like mosquito abundance and migratory birds. Dogs can serve as sentinels for flavivirus activity, with their seroprevalence indicating virus circulation and potential risks. In 2023, this study assessed flavivirus exposure in 708 healthy dogs from southeastern France, comparing high-risk areas (e.g., near the Camargue) with low-risk zones (e.g., Marseille). Using the ID Screen[®] Flavivirus ELISA kit (Innovative Diagnostics, Grabels, France) with positive results confirmed through virus-specific neutralization tests for flaviviruses like West Nile, Usutu, and Dengue viruses. Anti-flavivirus antibodies were detected in 14.7% [95% CI: 12.1-17.3] (104/708) of the healthy dogs, with higher seroprevalence in high-risk areas (16.8%) [95% CI: 13.8-19.8] compared to Marseille (1.9%) [95% CI: 0-4.7]. Prevalence varied across areas: Montpellier (10.1%), Var (11.9%), Gard (18.2%), Istres (27.4%), and Vaucluse (28.4%). Neutralization tests confirmed exposure to West Nile virus (2.7%), Usutu virus (4.8%) but the Dengue virus was less prominent (serotype 1 and 2 were showed in 0.1%, 1.3 % respectively), with 4.9% showing antibodies to unidentified flaviviruses. These findings align with human and equine West Nile virus cases, emphasizing the value of dogs in flavivirus surveillance and the importance of ongoing monitoring to mitigate human infection risks.

IP 10

Waterborne Disease Risks in Conflict Zones: Analysis of Hepatitis A Dynamics

Tetyana O. Chumachenko¹, Alexander Kirpich², Pavel Skums³, Gerardo Chowell², Alex Zelikovsky⁴, Sergiy V. Yakovlev⁵, Dmytro I. Chumachenko^{6,7}

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The full-scale Russian invasion of Ukraine, which began in February 2022, has severely disrupted water supplies due to damaged infrastructure and power outages, significantly increasing the risk of waterborne disease transmission. This study examines the invasion's impact on hepatitis A virus (HAV) morbidity trends across Ukrainian regions using national data from 2012 to 2023. Between 2012 and 2020, the average annual HAV morbidity was 2,738 cases.

A sharp decline in reported HAV cases occurred in 2022, with only 281 cases, attributed to limited healthcare access and disruptions in surveillance systems. However, cases surged to 1,050 in 2023 due to deteriorating sanitation, population displacement, and compromised water supplies. Vinnytska oblast reported over 245 cases in a concentrated outbreak, while Vinnytska, Zakarpatska, and Kyivska oblasts experienced notable increases linked to displaced populations straining local infrastructure. Conversely, fewer cases were reported in Southern and Eastern regions, likely due to challenges in data collection and reduced healthcare access in active combat zones.

The lack of routine HAV vaccination has further heightened vulnerability. Urgent measures, including restoring water and power infrastructure, improving surveillance, and implementing targeted vaccination campaigns, are critical to controlling HAV outbreaks and preventing further growth of cases.

Briesemeister	CP 13	Ciervo	JP 11	Dmitrovsky	FP 15
	CP 21	Cikaya	OP 20	Dobler	PO 03
Bringboure	PO 02	Clark	JP 03		PP 11
Brinkmann	JP 09	Cochrane	CO 01	Dolias	HO 03
Brisebare	CO 06	Comtet	FP 10	Dornelas-Ribeiro	CP 18
Buchholz	NO 07		IP 09	Dorner, B.	NO 01
Bugert	DO 02		PO 05		NO 02
	DO 06	Conraths	HP 17		NO 04
	DP 07	Consortium	IP 13		NO 05
	DP 08	Coppens	JP 05	Dorner, M.	NO 01
	DP 09	Cordevant	IO 02		NO 02
	DP 12	Corrent	JP 11	Dosmagambet	FP 15
	DP 17	Costa	FO 08	Doszhanova	EP 06
	DP 18	Coulibaly	GP 08	Dresler	JP 11
	DP 20	Cunha	CP 16	Drulis-Kawa	DO 06
	GO 06		IP 11		DP 11
	GP 18		IP 12		DP 12
	IP 13	Daaloul	OP 10		DP 13
	KP 07	Dacheux	CO 06		DP 17
	KP 15		CP 21		IP 13
Bunata	DP 17	Dah	PO 02	Dryselius	EO 01
Burashev	GP 19	Dahal	BO 05	Dubois	GP 08
Burjanadze	FP 14	Dandekar	HP 16	Duesberg	KP 14
Bwire	FP 17	da Silva, D.	FO 07	Duggans	JP 05
Bächler	JP 06	da Silva, N.	IP 16	Duisenova	EP 06
Béjaoui	IP 14	Davies	GO 03		EP 08
	OP 15	Davoust	FP 10	Dunne	DO 04
Bøe	PP 10		IP 09		DO 05
Calin	DP 11		PO 05		DP 19
Campanella	CP 07	De Feo	PP 07	Dupke	FO 01
Canelhas	EO 01	De Lamballerie	IP 09		FO 03
Capela	IP 12		PO 05		IP 15
Cappuccio	CO 06	De Mey	GO 01	Duraffour	CP 13
Capton	DP 11	De Santis	GP 17	Duval	KO 05
Caro	CO 06		GP 22	Dybwad	JP 03
Carvalho	JP 14	De Sany	CO 05		JP 11
Cavaco	FO 08	Debarbieux	DP 17	Dyk	IO 02
Cavalli	JP 11	Debes	FP 17	Döhla	IP 07
Chabot	BO 05	Dekhil	FP 12	Dörre	FO 05
Chaer	KP 11	Delmote	GO 01	Eckert	DO 06
Chambel	IP 12	Dematheis	OO 07		DP 11
Chanturia	OO 05		OP 18	Ehmann	BP 09
Chebanov	OP 19	Dembélé	GP 08		BP 10
Chen	GP 13	Deonísio	JP 10		HP 12
Chibwe	FP 17	Derakshani	NO 05		KO 02
Chilengi	FP 17	Deser	JP 02	Eiden	OO 06
Chimienti	GP 17	Deßloch	GO 04	Elmoussi	OP 16
Chitimia-Dobler	PP 12	Di Spirito	JP 11	Eloualid	OP 16
Chmel	HP 15	Diambar	OO 06	Elschner	KP 08
Chowell	IP 10	Dias, F.	IO 04		OP 10
Chumachenko, D.	IP 10	Dias, R.	CP 16		OP 12
	JP 12		FO 08	Enan	OP 16
Chumachenko, T.	IP 10		IP 11	Engelke	NO 07
	JP 12		JP 14	Engelmann	KO 06
Chumachenko, V.	CP 17		KO 04	Erdenlig Gurbilek	FO 06
Chumakov	CP 17	Dias, V.	CP 18	Ertelt	DO 04
Ciammaruconi	GP 17	Dieng	OP 20		DO 05
	GP 22	Dilthey	HO 01		DP 16