
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			Poster Session
Coffee Break			
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

JP 12**Disruptions in Acute Respiratory Tract Infection Trends in War-Affected Kharkiv region (Ukraine)**

Tetyana O. Chumachenko¹, D. I. Chumachenko²
¹*Kharkiv National Medical University, Department of Epidemiology, Kharkiv, UKR;* ²*National Aerospace University Kharkiv Aviation Institute, Department of Mathematical Modeling and Artificial Intelligence, Kharkiv, UKR*

The Russian invasion of Ukraine in February 2022 disrupted healthcare, living conditions, and population health in regions like Kharkiv. This study assesses its impact on Acute Respiratory Tract Infection (ARTI) trends, comparing pre- and post-invasion periods to highlight disruptions.

Monthly ARTI incidence data (2013-2023) were analyzed using statistical time-series methods. Baseline trends (2013-2019) were compared to the invasion period (2022-2023), accounting for seasonal variations. Pre-invasion data showed consistent winter peaks driven by healthcare access and epidemics. In March 2022, ARTI cases dropped sharply (3,426 cases) due to healthcare disruptions and displacement. Throughout 2022, cases stayed below pre-war levels, with slight recovery by late 2023. The 2022 average monthly incidence (4,649 cases) was 64% lower than the 2013-2019 average (12,543 cases). While rates improved in 2023, they remained below pre-invasion levels, reflecting ongoing healthcare tension.

The decrease in reported cases suggests underreporting, potentially missing diseases caused by emerging pathogens with high epidemic potential. Unrecognized cases threaten public health, emphasizing the urgency of rebuilding healthcare, enhancing surveillance, and ensuring access to care. The findings underline the vulnerability of conflict-zone health systems and the need for global support. Funded by NRF Ukraine (#2023.03/0197).

JP 13**Stockpiling and provision of unauthorised therapeutics in Germany on the example of ricin antibodies**

Agata Mikolajewska, Michaela Niebank, Christian Herzog
Robert Koch Institute, Strategy and Incident Response (ZBS 7), Berlin, DEU

A deliberate release of ricin with spraying devices - or even improvised explosive device - represents a realistic bioterrorism scenario. Intoxication with small amounts of ricin via inhalation or parenteral route would very likely lead to 100 % lethality, therefore the availability of medical countermeasures is crucial for the survival of intoxicated persons.

As there are no approved drugs for the treatment of ricin intoxication, the possibilities of an experimental therapy with substances that are still under development has been evaluated. The early use of a not yet approved polyclonal antibody against the subunit B of ricin can significantly reduce mortality. However, due to the very narrow therapeutic window for the administration of ricin antibodies as antidote, its timely provision is very challenging. Furthermore, the stockpiling and provision of an unauthorised drug is a complex process.

Based on a decision by the Federal Ministry of Health, a concept was developed for the procurement, stockpiling, distribution and administration of ricin antibodies as experimental therapeutic by the Centre for Biological Threats and Special Pathogens (ZBS) at the Robert Koch Institute. Legal requirements and the narrow therapeutic window were taken into account as well as specific aspects of recognition and clinical management of single patients as well as mass casualties with ricin intoxication.

Clinicians must be able to recognise cases of ricin intoxication in a specific bioterrorism situation and take initial action, including ordering drugs that are not widely available and not approved. To support that, information materials and flowcharts have been developed to guide healthcare professionals through the steps of clinical patient management and the provision of the specific experimental therapy. A first table-top exercise to evaluate the concept was carried out and ricin antibodies can now be provided in a bioterrorism incident to patients in need in a timely manner. The approach developed could be transferred to other scenarios and other experimental therapeutics and thus contributes to improving the general preparedness and response capabilities in Germany for bioterrorism incidents.

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