

CLIMATE CHANGE AND WATERBORNE INFECTIONS

July 2025

Monday 07	Tuesday 08	Wednesday 09	Thursday 10	Friday 11
TU BS - BRICS	TU BS - BRICS	RKI	RKI	RKI
Welcome 09:00 Introduction, Overview <i>Prof. Dr. Michael Steinert</i>	Introduction to BS 09:00 Databases & Bioinformatics <i>Dr. Boyke Bunk</i>	Welcome 08:30 Arrival, Opening Remarks <i>PD Dr. Mohamed Abdelbary</i>	Lectures 09:00 AMR in Wastewater High-Throughput Culturomics <i>Prof. Dr. Mohamed Abdelbary</i>	Nosocomial Infections 09:00 by Gram-negative Bacteria <i>Dr. Martin Fischer</i>
One Health 10:00 Climate Change and Infection <i>Prof. Dr. Michael Steinert</i>	(Meta-) Genomics 10:00 3rd Generation Genomics <i>Dr. Boyke Bunk</i>	Keynote Lectures 09:30 <i>Prof. Dr. Guido Werner</i> <i>Dr. Yvonne Pfeifer</i>	Experimental Setups 10:30 PCR & Digital PCR	<i>K. pneumoniae</i> 09:30 Hypervirulent Strains <i>Anika Wahl</i>
Drinking Water Policies 11:00 Conflicts & Sustainable Development <i>Katharina Zickwolf</i>	Comparative Genomics 11:00 Bioinformatics on <i>Legionella</i> <i>Dr. Ashraf Zayed</i>	Laboratory Overview 10:45 Safety Briefing Introduction to Practical Training <i>Dr. Franziska Layer-Nicolaou</i> <i>PD Dr. Mohamend Abdelbary</i>	Lunch Break 11:30	Review Results 10:15 dPCR: AMR genes <i>Prof. Dr. Mohamed Abdelbary</i>
Lunch Break 12:00	Lunch Break 12:00	Lunch Break 11:30	Laboratory Session 13:00 Agarose Gel Electrophoresis PCR Results Culturomics Platform Experiments	Lunch Break 12:30
Water Contamination 13:00 Pollution of Streams with Wastewater <i>Dr. Ashraf Zayed</i>	BacDive 13:00 <i>Dr. Lorenz Reimer</i>	Laboratory Session 13:00 Guided Tour Bacterial Identification (MALDI-TOF) Antimicrobial Susceptibility Testing	Closing Remarks 17:00 <i>PD Dr. Mohamend Abdelbary</i>	Laboratory Session 13:30 Assess Culturomics Pipeline Results
Pathogen Diagnostics 14:00 Infectious Agents, Palestine <i>Dr. Ashraf Zayed</i>	BRENDA 14:00 <i>Dr. Antje Jäde</i>	Closing Remarks 17:00 <i>PD Dr. Mohamend Abdelbary</i>		Closing Discussion 16:00 Q&A <i>Prof. Dr. Mohamed Abdelbary</i>
Experimental Setups 15:00 Preparing Buffers and Media Splitting Cell Lines	SILVA 15:00 <i>Dr. Maria Chuvochina, remote</i>			
	TYGS/LPSN 16:00 <i>PD Dr. Markus Göker</i>			

WEEK I

CLIMATE CHANGE AND WATERBORNE INFECTIONS

July 2025

Monday	Tuesday	Wednesday	Thursday	Friday
14	15	16	17	18
TU BS - BZ	TU BS - BZ	TU BS - BZ	TU BS - BZ	TU BS - BZ
Legionella Overview 09:00 Legionnaires' Disease <i>Prof. Dr. Michael Steinert</i>	Legionella ProA 09:00 Anti-infective Strategies <i>Dr. Lina Scheithauer</i>	Laboratory Session I 09:00 THP-1 Infection 24 h Sampling Time Point A549 <i>Dr. Lina Scheithauer</i>	Epidemiology 09:00 <i>Prof. Dr. Abdulsalam Khayyat, remote</i>	Laboratory Session 09:00 HEK-Blue hTLR5 Analysis 48 h Sampling Time Point THP-1 Data Analysis <i>Dr. Lina Scheithauer</i>
Experimental Setups 09:30 Seeding A549 and THP-1 Cells <i>Legionella</i> Plates <i>Dr. Lina Scheithauer</i>	Laboratory Session I 09:30 A549 Infection <i>Dr. Lina Scheithauer</i>	Lunch Break 12:00	Laboratory Session I 09:30 Seeding HEK-Blue hTLR5 Cells 24 h Sampling Time Point THP-1 48 h Sampling Time Point A549 <i>Dr. Lina Scheithauer</i>	Lunch Break 12:00
Lunch Break 11:30	Lunch Break 12:00	Laboratory Session II 13:00 2 h Sampling Time Point THP-1 Fluorescence Microscopy <i>Dr. Lina Scheithauer, Aurélie Labrosse</i>	Lunch Break 12:00	Student presentations 13:00 RKI Projects
Clininc Excursion 12:30 SKBS Microbiology & Pathology <i>Prof. Dr. Hamid Hossain</i> <i>Dr. Mathias Sperling</i>	Laboratory Session II 13:00 2 h Sampling Time Point A549 Nematode/Protozoa Infection <i>Dr. Lina Scheithauer, Aurélie Labrosse</i>	Preparation Time 16:30 for Students	Biogeography 13:00 <i>Legionella</i> Ecology & Evolution <i>Dr. Ashraf Zayed</i>	Closing Discussion 15:00 Q&A, Report, 2. Student Presentation
Laboratory Overview 16:00 Introduction to Infection Assays <i>Dr. Lina Scheithauer</i>	Preparation Time 16:30 for Students		Preparation Time 14:00 for Students	
			Laboratory Session II 16:00 HEK-Blue hTLR5 Inoculation <i>Dr. Lina Scheithauer</i>	
				Additional Appointment 29 July 2025, 09:00-10:00

WEEK II