

# PROGRAM

## 10th Theodor Escherich Symposium

GRAZ AND FRIENDS!

Thursday, 18.1.2024

Time	Title	Speaker	Chairs
08:15-09:00	Registration and setup		
09:00-09:15	Welcome note: 10 years Theodor Escherich Symposium	Caroline Schober	
09:15-09:50	SESSION 1 (Uni Graz): Keynote Talk		Christine Moissl-Eichinger
	Commensal Genotoxins: Microbial Metabolites Damage DNA	Ellen Zechner	
09:50-10:30	SESSION 2 (Med Uni Graz): Microbiome & Infection		Martin Zacharias & Maria Durdevic
	Antigen discovery and spatial microbiome sequencing tools dive deep in the mucosa	Martin Strazar	
	Abstract 1: Virulome analysis of Enterobacteriaceae from colorectal cancer patients at a tertiary hospital in Ghana	Vincent Amarh	
	Abstract 2: Role of Methanogenic Archaea in Gastrointestinal Disorders	Christina Kumpitsch	
10:30-11:15	Coffee break/Industry exhibition		
11:15-12:45	SESSION 3a (TU Graz): Plant/Exposome/Food Axis		Nina Bziuk & Isabella Kögl
	The central role of the soil microbiome in One Health policy	Ahmed Abdelfattah	
	Harnessing the potential of the plant microbiota to control prevalent phytopathogens	Tomislav Cernava	
	Soil and plant microbiomes under changing environment	Magdalena Frac	
	The Agri Microbiomes in a Food Security Context	Lise Korsten	
	Abstract 1: Indigenous seed endophytic bacteria of millets improve seedlings developments and protect from fungal diseases	Satish Kumar Verma	
	Abstract 2: The Ecological Niche of Entomopathogenic Fungi: Global and Local Aspects	Adrian Wolfgang	
12:45-13:45	Lunch break		
13:45-14:20	SESSION 3b (TU Graz): Plant/Exposome/Food Axis		Valeria Castaldi & Matevz Zlatnar
	Plant growth promoting or detrimental: The role of of the flagellar transcriptional regulator flhC of Acidovorax for plant-microbe interactions	Michael Schlöter	
	The edible plant microbiome and its applications to develop medical foods for women in menopause and people with rheumatoid arthritis	Gerardo V Toledo	

18.1.2024

Time	Title	Speaker	Chairs
14:20-15:30	SESSION 4 (VAAM): Innovative Methods in Microbiome research		Birgit Wasserman & Alexander Mahnert
	Expanding the microbiome toolkit in genomics and microscopy	Alexander Probst	
	Exploring links between the human gut microbiota and health using large multi-omics population cohorts	Guillaume Meric	
	Abstract 1: Development of a genome-scale metabolic model for the murine gut microbiome (McMurGut)	Torben Kühnast	
	Abstract 2: Ecological differentiation of organic acid utilizers in the animal gut microbiome	Cameron Strachan	
	Abstract 3: Genome-wide sweeps are fundamental adaptive units in the human gut microbiome	Xiaoqian Yu	
15:30-16:00	Coffee break/Industry exhibition		
16:00-17:20	Session 5 (BioTechMed): Microbiome Dynamics		Christina Kumpitsch & Alexander Mahnert
	Abstract 1: Age-Related Dynamics of Methanogenic Archaea in the Human Gut Microbiome: Implications for Longevity and Health	Rokhsareh Mohammadzadeh	
	Abstract 2: Microbiome research tools beyond 16S rRNA and shotgun sequencing	Christa Nöhammer	
	Abstract 3: Decoding FMT Dynamics in UC: Early Assessment of Functional, Metabolic, and Taxonomic Predictors	Marija Durdevic	
	The intra- and peritumoral microbiome associated with treatment responses in pancreatic and colon cancer	Christoph Stein-Thöringer	
	Parsing and interpreting the various dynamical regimes of the human gut microbiota	Sean Gibbons	
17:20-19:00	Postersession/Industry exhibition		
19:00	Evening event: Mixer: Music, Party for all participants		ÖH BigBand and DJ

19.1.2024

08:15-09:00	Registration and setup			Roksareh Mohammadzadeh & Torben Kühnast
09:00-10:00	Session 6 (ÖGHMP): Microbial Interplay and Vesicles			
	The development of the gut-brain axis in premature neonates vesicles	David Berry		
	Immunoglobulin A coated bacterial membrane vesicles drive pro-inflammatory responses in ulcerative colitis	Himadri B. Thapa		
	Gut bacteria nanovesicles: their potential role in mediating cross-kingdom communication within and beyond the gut	Regis Stentz		
10:00-11:00	Session 7 (CoE Microplanet): We're living on a micro-planet!			Charlotte Neumann & Tejus Shinde
	Next generation chemical imaging of the gut microbiome-drug interaction network	Michael Wagner		
	Understanding emergent phenomena of microbial decomposer communities using individual-based modelling	Christina Kaiser		
	Personalized engraftment prediction with metabolic models of the human gut microbiota	Christian Diener		

Friday, 19.1.2024

Time	Title	Speaker	Chairs
11:00-11:30	Coffee break/Industry exhibition		
11:30-13:00	Session 8 (ÖGGH, ÖGPATh and ÖGIT): Pathogens and Solutions		
	<i>C. difficile</i> : Breaking the Cycle of Spore to Vegetative to Spore in 2024 (online)	Paul Feuerstadt	Carolina Lobato & Jasper Schierstaedt
	The gut-lung microbiome: a new organ to ICU-revive?	Sebastian Imbert	
	Abstract 1: Exploring microbial competition and warfare to therapeutically utilize the microbiome	Lisa Osbelt	
	Abstract 2: Identification of the bacterial metabolite aerugine as potential trigger of human dopaminergic neurodegeneration	Nathalie Christine Wörz	
13:00-14:00	Lunch break		
14:00-16:00	Session 9 (AMICI): Microbiomes and Human Surfaces		
	Abstract 1: Microbiota-associated metabolites: methylphenols and the blood-brain barrier	Lesley Hoyles	Kristina Michl & Adrian Wolfgang
	Abstract 2: Widespread gut commensals of the family Sutterellaceae perform fumarate and nitrate respiration	Nataliia Solntseva	
	Abstract 3: Nanomechanical mechanisms of <i>Borrelia</i> interactions with extracellular matrix	Yoojin Oh	
	Abstract 4: Immediate targeting of host ribosomes by jumbo phage encoded proteins	Milan Gerovac	
	Abstract 5: iNKT cells immunomodulation and mucosal healing by microbiota-derived lactate	Francesco Strati	
	Abstract 6: <i>Methanobrevibacter smithii</i> and <i>Cand. M. intestini</i> - Similar but different	Viktoria Weinberger	
	Taste the difference: cell biology of a multicellular bacterium inhabiting the human mouth	Silvia Bulgheresi	
	T cell regulation by bacterial metabolites	Clarissa Campbell	
	10 years of the human skin archaeome	Alexander Mahnert	
16:00-16:10	Awards and Goodbye		
16:10	Goodbye reception		



ÖGIT • AMICI • ÖGGH • ÖGHMP • VAAM • ÖPATH FWF • Cluster of Excellence: MicroPlanet • Janssen Pharmaceuticals (Bronze Sponsor) • Institut Allergosan (Bronze Sponsor) • Germania Pharmazeutika (Bronze Sponsor) • Qiagen (Bronze Sponsor) • BioTechMed-Graz (Sponsor)



Österreichische Gesellschaft für  
Infektionskrankheiten und Tropenmedizin



BioTechMed<sup>®</sup>  
GRAZ

