

Hot Topics in Microbiology

International Conference for Young Scientists 7. – 10.12. 2022, Bratislava



Scientific Program

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International Conference for Young Scientists, Bratislava, $7^{th} - 10^{th}$ December 2022



PROGRAM

	Wednesday, 7 th of December
14:00	Registration
16:00 - 16:15	Welcome and opening
16:15 - 17:15	Keynote lectures (chaired by Helena Bujdáková)
16:15	Gopala Krishna Mannala (DE)
	Galleria mellonella as an alternative in vivo model to study implant-
	associated infections
16:45	Petra Pjevac (AT)
	What's new with the ATCGs – the newest developments in amplicon and
	(meta)genome sequencing approaches in microbiology
17:15-18:15	Session 1 (chaired by Petra Pjevac)
17:15	Gizem Babuccu (NL)
	Development of diagnostic and antimicrobial triggered release systems for
	wound dressings
17:30	Matúš Štefánek (SK)
	Photodynamic inactivation effectively eradicates Candida albicans and
	Candida auris biofilms despite its interference with efflux and stress response
17:45	genes Goodness Ogechi Osondu-Chuka (AT)
17.43	<i>P. aeruginosa grown in printable cystic fibrosis model biofilms suitable for</i>
	high-throughput screening of antibiotics interactions
18:00	Ana Barbosa (PT)
	Development of a multiplex mRNA PNA-FISH method to assess Legionella
	pneumophila morphological state within multispecies biofilms in water
	systems
18:30	Dinner at the hotel







	Thursday, 8 th of December
8:30 - 9:30	Keynote lectures (chaired by Martijn Riool)
8:30	Maria Luísa Jordão (PT)
	Biofilms, infection and antimicrobials resistance
9:00	Viorica Patrulea (UK)
	Working in synergy to win the battle: a lesson learned from antimicrobial
	agents
9:30 - 10:30	Session 2 (chaired by Petra Olejníková)
9:30	Petra Olejníková (SK)
	It is important to think on adaptive response of fungal cells by enhancing the
0.45	antifungal activity
9:45	Daniel Eliaš (SK) Role of ERG6 gene in Candida glabrata antifungal resistance
10:00	Ján Vígľaš (SK)
10.00	Antifungal compounds cause cell surface remodelling in Neurospora crassa
10:15	Ivana Segéňová (SK)
	Antimicrobial activity of silver complexes
10:30 - 11:00	Coffee & tea break
11:00 - 12:30	Session 3 (chaired by Gopala Krishna Mannala)
11:00	Martijn Riool (NL)
	Novel synthetic antimicrobial and anti-biofilm peptides (SAAPs) - containing coatings to prevent biomaterial-associated infection
11:25	Filipa Campos (PT)
	Antimicrobial peptide-grafted PLGA-PEG nanoparticles to fight bacterial
	wound infections
11:40	Nikitha Vavilthota (NL)
	Rationally designed antimicrobial peptides show antimicrobial activity
	against Gram-negative and Gram-positive bacteria in a 3D human skin
	equivalent model
11:55	Cláudia Monteiro (PT)
	Unravelling the mechanism of action of antimicrobial peptides conjugated to
12:10	nanoparticles
12:10	Klára Cverenkárová (SK) Microplastics and their influence on the development of antibiotic resistance
	Micropiasies and men influence on the development of antibiotic resistance
12:30 - 14:00	Lunch at the hotel



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Keywords: Resistance, Biofilm, Antimicrobial materials

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14:00 - 15:30	Session 4 (chaired by Maria Luísa Jordão)
14:00	Katarína Šoltys (SK)
	Gut microbiome and biofilm associated microorganisms in health and
	disease.
14:25	Michal Andrezál (SK)
	Whole genome analysis of bacteria from clinical samples and food industry
14:40	Zhile Xiong (DE)
	Combination of molecular analysis and imaging of the microbiome:
	visualization and spatial distribution of microorganisms in infectious disease
14:55	Samuel Kendra (SK)
	Farnesol down-regulates the expression of genes involved in resistance to
	fluconazole in Candida auris
15:10	Jakub Ondrej Mihale (SK)
	Setting treatment by using hepatitis C virus genotyping for a narrow group of
	prison inmates
15:30 – 16:00	Coffee & tea break
16:00 - 17:30	Session 5 (chaired by Juraj Bujdák)
16:00	Dušan Galusek (SK)
	FunGlass centre: where research of glass is fun
16:30	Deeksha Rajkumar (NL)
	Bioactive glass S53P4 as a non-antibiotic antimicrobial strategy to treat
	biomaterial associated infections
16:45	Marek Pribus (SK)
	Preparation of antimicrobial polyurethane films
17:00	Katarína Bilská (SK)
	Eradication of staphylococcal biofilms manifesting up-regulation of the NorA
	gene on newly designed photoactive material
17:15 - 18:15	Poster Session
18:30	Dinner at the hotel



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	Friday, 9 th of December
8:30 - 9:30	Keynote lectures (chaired by Annette Moter)
8:30	Holger Daims (AT)
	Chemical imaging tools for studying in situ microbial physiology
9:00	Soňa Kucharíková (SK)
	Efficiency of anidulafungin and tigecycline against Candida albicans –
	Staphylococcus aureus polymicrobial biofilms
9:30 - 10:30	Session 6 (chaired by Hana Drahovská)
9:30	Aneta Bugalová (SK)
	Analysis of Streptococcus agalactiae prophages
9:45	Marek Straka (SK)
	<i>Efficiency of phage preparation STAFAL® to carrier and clinical strains of</i>
	Staphylococcus aureus
10:00	Dominika Kleknerová (CZ)
	Testing of antimicrobial effect of hydrogel matrix based on Gum Karaya resin
	supplemented by the phage preparation on methicillin-resistant
	Staphylococcus aureus strains on animal model
10:15	Kristýna Brodíková (CZ)
	Prevalence and characterization of Staphylococcus aureus in medical
	students during their studies
10:30 - 11:00	Coffee & tea break
11:00 - 12:30	Session 7 (chaired by Soňa Kucharíková)
11:00	Sebastian Zaat (NL)
	Persisters and intracellular survivors: As if biofilms were not enough trouble
11:25	Jarmila Czucz Varga (SK)
	Optimization of photodynamic inactivation on biofilms formed by Candida
	albicans and Staphylococcus aureus
11:40	Tomislav Ivanković (HR)
	Biofilm mediated migration across the non-nutritive solid surface
11:55	Bruna Costa (PT)
	Microfluidic fabrication of Dhvar5-chitosan nanogels: A way to fight
	orthopedic device-related infections
12:10	Monika Krahulcová (SK)
	Occurrence of resistance coliform bacteria, enterococci and their resistant
	genes in surface water and sediment originating from Slovakia
12:30 - 14:00	Lunch at the hotel





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14:00 - 15:30	Session 8 (chaired by Sebastian Zaat)
14:00	Annette Moter (DE)
	How dead is dead in biofilm-associated infections? Investigation by
	fluorescence in situ hybridization (FISH)
14:25	Laure van Hofwegen (NL)
	The antimicrobial activity of Graphene Quantum Dots
14:40	Kurosh Sarbandi (DE)
	How to study biofilms of fastidious organisms?
14:55	Kamila Melnikov (SK)
	MRSA infection in elderly patients from nursing homes
15:10	Leona Hofmeisterová (CZ)
	In vitro activity of avocado oil extracts against planktonic cells and biofilm
	formation of Arcobacter-like species
15:30 - 16:00	Coffee & tea break
16:30	Social event and dinner in the city
	Saturday, 10 th of December
00.00 10.00	Dura 14-11 of CEMDO To an and on former and interact
09:00 - 10:00	Round table of CEMBO Team and conference participants
10:15 - 10:30 10:20 - 12:20	Closing notes
10:30 - 12:30	Social event – Devín castle