

BSM Annual Symposium 2024: Milestones in Microbiology

March 8, 2024 – Palace of the Academies, Brussels, Belgium

	08.30-09.00	Registration and poster mounting	
Plenary session: Aud Albert II	09.00-09.05	Welcome address – Eveline Peeters (VUB)	
	09.05-09.50	Opening lecture “In the spotlight” – Chair: Philippe Gabant (Syngulon) Guy-Bart Stan (Imperial College London) Engineering and control of living cells and synthetic communities	
	09.50-10.35	Section A – Host-Microbe Interactions – Chair: Eveline Peeters (VUB) Malcolm White (University of St Andrews) Prokaryotic Adaptive and Innate Immunity: exploring the roots of anti-viral defence	
	10.35-11.00	Coffee break	
Parallel sessions	11.00-12.30	Aud Albert II	Section A – General Microbiology – Chair: Géraldine Laloux (UCL) Dimitrios Sofras Aishwarya Saxena Hanne Hendrix Marie Grandjean Adélie Lannoy Gwennaëlle Louis Giel Vanreppelen Veerke De Kock Acquired amphotericin B resistance and fitness trade-off compensation in <i>Candida auris</i> The second messenger (p)ppGpp regulates cell cycle progression in <i>Caulobacter crescentus</i> by reprogramming transcription A novel regulator of type IV pili assembly, PlzR, induces phage resistance in <i>Pseudomonas aeruginosa</i> Patrx2: a paradoxal thioredoxin implicated in alginate biofilm formation in <i>Pseudomonas aeruginosa</i> A Mla-like lipid transport system contributes towards the virulence of <i>Brucella abortus</i> (flash) Characterization of envelope stress responses in <i>Capnocytophaga canimorsus</i> (flash) A pipeline towards the identification of novel antimicrobial compounds derived from the microbial dark matter (flash) The Lrs14 family of DNA-binding proteins as an archaea-specific class of nucleoid-associated proteins (flash)
	11.00-12.30	Rubenszaal	Section B – Applied and Environmental Microbiology – Chair: Ramon Ganigué (UGent) Myrsini Sakarika Lene Bens Maline Victor Ángel Estévez Jara Saluena Fauve Vergauwe Timothej Patocka Vincent Vandenbroucke The nutritional composition and cell size of microbial biomass for food applications are defined by the growth conditions Phage therapy: a challenging opportunity for HS Synthetic ecology as a tool to study and modulate the vaginal microbiome in health and disease Mixed culture biotechnology for a bio-based circular economy Shedding light on the biofabrication of mycelium materials (flash) Predicting the antibiotic susceptibility of experimentally evolved <i>Pseudomonas aeruginosa</i> biofilms using machine learning algorithms (flash) Intrinsic factors enable resuscitation from the VBNC state in <i>Cupriavidus metallidurans</i> (flash) Towards arbitrary control of co-culture strain ratio in continuous cultures (flash)
	11.00-12.30	Ockeghem-zaal	Section C – Host-Microbe Interactions – Chair: Ahalieyah Anantharajah (UCL) Anke Breine Mart Sillen Fabian Mermans Adam Valcek Maressa Bonfim Isabel Erreygers Margaux Evenepoel Jenny Steinmetz Targeting multidrug-resistant <i>Acinetobacter baumannii</i> to develop next-generation antibiotics Restoring the immune response and inhibiting <i>Candida</i> virulence: The promising role of <i>Saccharomyces cerevisiae</i> in vulvovaginal candidiasis Unlocking the mechanism of action: a cost-effective flow cytometry approach for accelerating antimicrobial drug development The temporal and site-specific in-patient dynamics of a cryptic plasmid of <i>Acinetobacter baumannii</i> The epigenetic modification m6A modulates the amplification of the diabetogenic Coxsackievirus B1 in human pancreatic beta cells (flash) Riboflavin in lactobacilli-dominated vaginal microbial communities (flash) Diagnosis-related differences in oral microbiota and associations with clinical characteristics in autistic versus non-autistic children (flash) Analysis of Group A <i>Streptococcus</i> lytic phage A25 interactions with human serum (flash)
	12.30-13.10	Lunch break	
	13.10-14.30	Poster session	
Plenary session: Aud Albert II	14.30-15.15	Section B – Applied and Environmental Microbiology – Chair: Frank Delvigne (ULiège) Grégory Batt (Institut Pasteur) Adding automation and reactivity to your experiments: motivation, tools and applications	
	15.15-16.00	Section C – General Microbiology – Chair: Jean-Claude Dujardin (ITG) Maryse Lebrun (Université Montpellier) The mystery of rhoptry secretion in apicomplexan parasites	
	16.00-16.45	BSM Honorary Lecture – Chair: Eveline Peeters (VUB) Laurence Van Melderen (Université Libre de Bruxelles) A journey in toxin-antitoxin systems - from toothpicks and colony counting to time-lapse imaging (but still counting colonies)	
	16.45-17.00	Announcement of poster and agar art awards – closing words Chair: Eveline Peeters (VUB)	
	17.00-	Closing Reception	

