

XVII Summer School on Advanced Biotechnology
4-6 September 2023 Palermo, Italy
Program

Start	End	Monday 4		Tuesday 5		Wednesday 6				
08:30	09:00	Registration								
09:00	09:20	Welcome and Opening remarks: Salvatore Feo, Thomas Villiger, Jack Rohrer		Chair: Patrizia Cancemi Section: Drug Delivery and Nanotechnology	Speaker: Patrick Shahgaldian, FHNW Title: In Silica Protein Engineering towards Nanobiotechnology and Nanomedicine		Chair: Thomas Villiger Section: Biopharmaceutical Biotechnology			
09:20	09:40	Speaker: Christoph Griesbeck, MCI Title: Microbial solutions to address plastic pollution			Speaker: Patrizia Cancemi, UNIPA Title: Exploring the anticancer activity and the mechanism of action of biogenerated silver nanoparticles			Speaker: Ying Liu, LONZA Title: Cell Line Development for Biomanufacturing – Challenges and potentials		
09:40	10:00	Speaker: Wolfgang Merkle, ZHAW Title: Optimization of ex-situ bimethanation and evaluation of medium components			Speaker: Simona Campora, UNIPA Title: Functionalized nanoparticles as delivery system for solid tumours treatment			Speaker: Otto Maïke, FHNW Title: Development of Theragnostic Nanobody-Polymer-Conjugates Targeting B7H3		
10:00	10:20	Speaker: Simon Crelier, HES-SO Title: Anaerobic digestion of organic waste for biogas production			Speaker: Laura Modica de Mohac, Ri.MED Title: Bio-hybrid cardiac patch to prevent left ventricle pathological remodeling			Speaker: Aline Adler, HES-SO Title: Transgenes characterization in Pichia strains used for bioproduction		
10:20	11:00	Coffee break		Coffee break		Coffee break				
11:00	11:20	Chair: Nicolas Huguenin-Desot Section: Biocatalysis and Biosynthesis	Speaker: Katrin Hecht, ZHAW Title: Biocatalysis - recent advances and future challenges		Chair: Jack Rohrer Section: Drug Development and Drug Delivery	Speaker: Vincenzo Cavaliere, UNIPA Title: Exploring potential therapeutic effects of secretome from mesenchymal stem cells using zebrafish		Chair: Eric Kübler Section: Diagnostic and Analytical Technology		
11:20	11:40		Speaker: Nicolas Huguenin-Desot, ETH Title: Biosynthesis and genetic encoding of phosphonates in E. coli			Speaker: Laurent Cournillon, COTEDAZUR Title: Membranes, transporters and channels from basic science to pharmacology and biotechnology			Speaker: Andrea Bieder, FHNW Title: Organoid-based in vitro pharmacological assays	
11:40	12:00		Speaker: Rosa Alduina, UNIPA Title: Molecular approaches to activate secondary metabolite biosynthesis in Actinomycetes			Speaker: Christoph Borner, FREIBURG Title: How fungi and viruses exploit cell death mechanisms to cause human diseases			Speaker: Alexandre Kuhn, HES-SO Title: Improved molecular diagnostic based on long read DNA sequencing	
12:00	12:20		Speaker: Sven Panke, ETH Title: Directed evolution – from cherry picking to big data			Speaker: Jack Rohrer, ZHAW Title: How do we get drugs into the brain?			Speaker: Eric Kübler, FHNW Title: Antibiotic Resistance – similia similibus examintur	
12:20	12:30	Workshop: Pitching your research or company								
12:30	14:00	Lunch		Lunch		Lunch				
14:00	14:20	Chair: Raffaella Boggia Section: Food Biotechnology	Speaker: Arash Sagehi-Mehr, ZHAW Title: A plant-based alternative to yogurt: Effect of fermentation on pea protein		Chair: Organizing Committee Biotech Corner	Speaker: INFORS Company presentation		Chair: Giuseppe Gallo Section: Diagnostic and Analytical Technology		
14:20	14:40		Speaker: Raffaella Boggia, UNIGE Title: Valorization of fishery unsorted side streams: a case study			Speaker: THERMO FISHER Company presentation			Speaker: Francesco Lo Presti, UNIPA Title: Organ-on-Chip: a potential alternative to traditional animal testing	
14:40	15:00		Speaker: Juan Limon Petersen, ZHAW Title: Estimation of biomass in microalgae cultivations via impedance spectroscopy			Working session: Pitching your research or company			Speaker: Giuseppe Gallo, UNIPA Title: Streptomyces violaceoruber and Kocuria rhizophila showing plant-growth promoting activity on Solanum lycopersicum	
15:00	16:00	Coffee break		Coffee break		Prize Ceremony				
16:00	16:20	Chair: Harald Schoebel Section: Environmental Biotechnology	Speaker: Francesca Demaria, FHNW Title: Analysing microbial community dynamics and pharmaceuticals degradation in lab-scale MBRs under fluctuating micropollutant concentration		Student Presentations					
16:20	16:40		Speaker: Harald Schoebel, MCI Title: Shed light on photosynthetic organisms: Light as a tool in biotechnology							
16:40	17:00		Speaker: Lucia Colleselli, MCI Title: Bling-bling by MOs: Biological Synthesis of nanoscaled metallic particles							
18:00		Welcome Party		Free evening						
						Concludin Remarks				

COTEDAZUR - University of Cote D'Azur, Nice, FR

ETH - Federal Institute of Technology, Zurich, CH

FHNW - University of Applied Sciences, Muttenz, CH

FREIBURG - Albert Ludwigs Universität, Frieberg, DE

HES-SO - Hes-so Valais Wallis, Sion, CH

MCI - The Entrepreneurial School, Innsbruck, AT

Ri.MED - Ri.MED Foundation, Palermo, IT

UNIGE - University of Genova, Genova, IT

UNIPA - University of Palermo, Palermo, IT

UNI ROMA - University of Rome "Tor Vergata", Rome, IT

ZHAW - University of Applied Sciences, Zurich, CH