

**XV Summer School on Advanced Biotechnology 2021**  
**13-15 September 2021 Palermo, Italy**  
**Program**

	Monday 13	Tuesday 14	Wednesday 15
08:30	Registration		
09:00	<p style="text-align: center;"><b>Welcome and Opening remarks</b></p>	<p><i>Wolfgang Merkle</i> Characterization and optimisation of ex-situ biological methanian process</p>	<p><i>Mariagrazia Pizza</i> Structure-based antigen design</p>
09:30	<p><i>Jack Rohrer</i> Developing an in vitro model system for the human blood brain barrier</p>	<p><i>Alessandro Presentato</i> Microbial processing of metal(loid)s</p>	<p><i>Thomas Villiger</i> Development of a Rapid Test to Detect Antibodies Directed Against an Extended RBD of SARS-CoV-2 Spike Protein</p>
10:00	<p><i>Floriana Burgio</i> Models for Blood Brain Barrier: How to determine passage of compounds into the brain</p>	<p><i>Elena Piacenza</i> Application of biogenic nanomaterials: a biotechnological perspective</p>	<p><i>Federica Bernardini</i> Editing population genetics for malaria vector control</p>
10:30	Coffee break	Coffee break	Coffee break
11:00	<p><i>Laura Suter-Dick</i> MicroRNA as biomarkers of toxicity in vitro</p>	<p><i>Fabian Fischer</i> Microbial fuel cell scale-up</p>	<p><i>Steffen Hinz</i> Bispecific antibodies: Challenges in Generation and Production</p>
11:30	<p><i>Laura Lentini</i> Targeting Nonsense: Rescue of CFTR Expression and Functionality in Cystic Fibrosis Cell Model Systems by TRIDs</p>	<p><i>Maria Vittoria Salvo</i> Hydrogen production by Chlamydomonas reinhardtii coupled with dye-sensitized solar cells</p>	<p><i>Patrick Shahgaldian</i> Protein Supramolecular Engineering: From Virus Recognition to Biocatalysis and Nanomedicine</p>
12:00	<p><i>Ruggero La Rosa</i> Pseudomonas aeruginosa adaptation and evolution in patients with cystic fibrosis</p>	<p><i>Simon Crelier</i> Enzymes for the degradation of micropollutants</p>	<p><i>Gottfried Dasen</i> Bacteriophages as substitutes for pathogenic viruses like COVID-19 in antiviral activity testing procedures</p>
12:30	Lunch	Lunch	Lunch
14:30	<p><i>Nägele Hans Joachim</i> The role of biomass in future energy systems And System services through Anaerobic Digestion</p>	<p><i>Harald Schöbel</i> Using LED technology for life-science applications</p>	<p><i>Francesca D'Anna</i> Organic Salts: Playing the Game of the Structure to Tune the Applications</p>
15:00	<p><i>Nathanaël Junod</i> Development of a biosorption process for the removal of micropollutants</p>	<p><i>Simona Campora</i> Nanoparticles in Biomedicine: a world to discover</p>	<p><i>Georg Lipps</i> Drug Delivery to the Colon</p>
15:30	<p><i>Mira Mutschlechner</i> Emerging molecular tools to integrate microbial ecology into biotechnology</p>	<p><i>Claudia Oliviero</i> Generation of a MAR-rich Landing Pad Platform for recombinant protein production</p>	<p><i>Valeria Vetri</i> Peptide-membrane interactions monitored by quantitative fluorescence microscopy</p>
16:00	<p><i>Christoph Griesbeck</i> Screening of secondary metabolites from soil algae extracts</p>	<p><i>Philippe Corvini</i> Bacteria feeding on antibiotics - Eating the poisonous</p>	<p><i>Matthias Rüd</i> PAT in biopharmaceutical DSP</p>
16:30	<p><i>Giorgio Mannina</i> Advances in water resource recovery from wastewater treatment: roadmapping the transition to circular economy</p>	<p><i>Alexandre Kuhn</i> Next-generation DNA sequencing: applications in biotechnology and medical diagnostics</p>	<p style="text-align: center;"><b>Concluding remarks</b></p>
17:00	Welcome Party	Free evening	