

XIX Summer School on Advanced Biotechnology									
1-4 September 2025 Palermo, Italy									
Program									
Start	End		Monday 1		Tuesday 2		Wednesday 3		Thursday 4
08:00	08:45		Registration						
08:45	09:00		Welcome and Opening Remarks						
09:00	09:30	Chair: Christoph Griesbeck Session: Organs-on-chip & 3D Models	Speaker: Laura Suter-Dick, FHNW  Title: Organ on a Chip for multitissue experiments	Chair: Jack Rohrer Session: Protein design & analytical biotechnology	Speaker: Georg Lipps, FHNW  Title: A _____ to Protein Language Models and Protein Design	Chair: Nicolas Huguenin-Dezot Session: Bioprocesses	Speaker: Harald Schobel, MCI  Title: SpotLIGHT on Biotechnology: Using light as a tool in bioprocesses	Chair: Patrick Shalgaldian	Student Session I  5 groups, 15 min/group
09:30	10:00		Speaker: Riccardo Barrile, UniCincinnati  Title: From Cells to Systems: Building Human Organs-on-Chips for Drug Discovery		Speaker: Dominik Meinel, FHNW  Title: Harnessing focal morphology for affinity and concentration measurements of proteins in complex matrices		Speaker: Alexandre Kuhn, HES-SO  Title: Towards automated development of bacterial strains for industrial bioproduction		
10:00	10:30		Speaker: Giovanni Zito, ISMETT  Title: From 2D to 3D models: new tools to study liver diseases		Speaker: Simon Crelier, HES-SO  Title: Enzymes and organic solvents: old tricks and recent developments		Speaker: Caspar Demuth, ZHAW  Title: Advanced sensor technology to enhance bioprocess understanding		
10:30	11:00		Coffee break		Coffee break		Coffee break		Coffee break
11:00	11:30	Chair: Eric Kubler Session: Advanced therapies	Speaker: Jack Rohrer, ZHAW  Title: Development of a CAR-NK killing assay	Chair: Laura Suter-Dick Session: Nanomedicine & cancer therapy	Speaker: Oya Tagir, FHNW  Title: Translating cancer immunotherapy nanomedicines from lab to clinic	Chair: Gottfried Dassen Session: Molecular & applied biotechnology	Speaker: Gaspare La Rocca, UniPA  Title: microRNA-mediated gene regulation in physiology and disease	Chair: Patrick Shalgaldian	Student Session II  5 groups, 15 min/group
11:30	12:00		Speaker: Vincenzo Cavallieri, UniPA  Title: Cell-free therapy with the secretome of stem cells		Speaker: Simona Campora, UniPA  Title: 3D tumor models for cancer research		Speaker: Nicolas Huguenin-Dezot, ETH  Title: Towards developing a plasmid-based orthogonal replication system E. coli: Findings and challenges		
12:00	12:30		Speaker: Tereza Mullerova, FHNW  Title: Twin-Column Continuous Chromatography for Viral Vector Gene Therapies		Speaker: Patrick Shahgaldian, FHNW  Title: Functional Nanomedicine Through Enzyme Supramolecular Engineering		Speaker: Giuseppe Gallo, UniPA  Title: Streptomyete extracellular membrane vesicles affect growth and differentiation of either bacterial strains and tomato plants		
12:30	14:00		Lunch		Lunch		Lunch		Prize Ceremony and Concluding Remarks
14:00	14:30	Chair: Georg Lipps Session: Insights from industry	Speaker: Wolfgang Minas, Biotech Concepts  Title: Biotechnology – going scale-up: Early on considerations and pitfalls	Chair: Vincenzo Cavallieri Session: Insights from industry	Speaker: Eric Kubler, STERA Scientific AG  Title: Modern Swine Diagnostics: A Dual Focus on Efficiency and Well-being	Chair: Alexandre Kuhn Session: Insights from industry	Speaker: Maurizio Bettiga, Italbiotech  Title: Dead ideas walking: rescuing them from the valley of death		Student Working Session in groups
14:30	15:00		Speaker: Gabriele Steiner, Spiegtec  Title: to be defined		Speaker: Lauriane Pillet, Lonza  Title: Bioconjugates: from industrial manufacturing at Lonza to therapeutic applications				
15:00	15:30		Coffee break		Coffee break				
15:30	16:00	Chair: Simon Crelier Session: Synthetic Biology & Biobanking	Speaker: Wolfgang Merkle, ZHAW  Title: Insights and Progress from a Swiss Micro Biogas Research Plant	Chair: Giuseppe Gallo Session: Invisible threats and beneficial microbes	Speaker: Marco Rupprich, FHNW  Title: Are PFAS be the new asbestos, and what can we learn from the past?		Coffee break		Student Working Session in groups
16:00	16:30		Speaker: Malke Otto, FHNW  Title: Future Innovators Wanted: The Journey of the FHNW iGEM Team 2025		Speaker: Christoph Bormer, UniFreiburg  Title: Herpes Simplex Virus (HSV) - how does it survive in the body of so many humans?				
16:30	17:00		Speaker: Gottfried Dassen, ZHAW  Title: Biobanking for Biotech		Speaker: Valeria Villanova, UniPA  Title: to be defined				
18:00			Welcome Party		Free evening		Free evening		

ETH - Federal Institute of Technology, Zurich, CH

FHNW - University of Applied Sciences, Muttentz, CH

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

ISMETT - Istituto Mediterraneo per i Trapianti e Terapie ad Alta Specializzazione, Palermo, IT

MCI - The Entrepreneurial School, Innsbruck, AT

UniCincinnati - University of Cincinnati, Cincinnati, US

UniFreiburg - Albert Ludwigs Universität, Freiburg, DE

UniPA - University of Palermo, Palermo, IT

ZHAW - University of Applied Sciences, Zurich, CH