

**PROGRAM, MONDAY, SEPTEMBER 12<sup>TH</sup>**

9:00 Registration | MCI I, Universitätsstraße 15, 3rd floor

**10:00 Plenary Session: Opening Remarks** 301/302

301/302

**10:30 - 12:00 Session A1: 3D Cell Culture**

Chair: Eric Kübler (University of Applied Sciences and Arts Northwestern Switzerland)

- 10:30 - 11:00 **Jack Rohrer** (ZHAW Zurich University of Applied Sciences)  
3D skin model with reporter system for quantitative analysis of stress factors
- 11:00 - 11:30 **Michael Außerlechner** (Medical University of Innsbruck)  
3D bioprinted human tissue-on-chip: novel strategies for drug development and precision medicine
- 11:30 - 12:00 **Norbert Ferencik** (Technical University of Kosice)

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**10:30 - 12:00 Session B1: Food Technology**

Chair: Katrin Bach (MCI | The Entrepreneurial School®)

- 10:30 - 11:00 **Hannah Innerbichler** (MCI | The Entrepreneurial School® / University of Vienna)  
Identification of Biomarkers for the Authentication of Alpine Cheeses
- 11:00 - 11:30 **Arash Sadeghi-Mehr** (MCI | The Entrepreneurial School®)  
Rheological properties and structuring of cold-set protein gels
- 11:30 - 12:00 **Nataly Knöpfle** (MCI | The Entrepreneurial School®)  
About the potential of fermentation and distillation of Brassica

**12:00 - 13:30 Lunch** 3rd floor

**13:30 - 15:00 Session A2: Diagnostics**

Chair: Jack Rohrer (ZHAW Zurich University of Applied Sciences)

- 13:30 - 14:00 **Klaus Weinberger** (Metaron Diagnostics GmbH)  
Mass spectrometry-based in vitro diagnostics - from scientific evidence to kit products
- 14:00 - 14:30 **Eric Kübler** (University of Applied Sciences and Arts Northwestern Switzerland)  
miRNA detection for rapid TB diagnostics in body fluids
- 14:30 - 15:00 **Alexander Trockenbacher** (MCI | The Entrepreneurial School®)  
Being prepared for the next pandemic – Development of affordable, Point-Of-Care alternative methods to NAAT Diagnostic Tests

**13:30 - 15:00 Session B2: Food Innovation**

Chair: Arash Sadeghi-Mehr (MCI | The Entrepreneurial School®)

- 13:30 - 14:00 **Rüdiger Maschke** (ZHAW Zurich University of Applied Sciences)  
Plant cell culture-based cellular agriculture (Basics and cell culture chocolate project)
- 14:00 - 14:30 **Cedric Schirmer** (ZHAW Zurich University of Applied Sciences)  
Animal cell culture-based cellular agriculture (Basics and challenges of clean meat production)
- 14:30 - 15:00 **Katrin Bach** (MCI | The Entrepreneurial School®)  
Sustainable Innovations within the Food System

**15:00 - 15:30 Coffee Break** 3rd floor

**15:30 - 17:00 Session A3: Microbiology and Antimicrobials**

Chair: Anna Maria Puglia (University of Palermo)

- 15:30 - 16:00 **Elena Piacenza** (University of Palermo)  
Developing new antimicrobials using bioactive substances and green nanomaterials
- 16:00 - 16:30 **Giuseppe Gallo** (University of Palermo)  
Multi-omics highlighting the molecular mechanisms involved in the plant growth promoting capability of bacterial biofertilizers
- 16:30 - 17:00 **Kristjan Plaetzer** (Paris Lodron University of Salzburg)  
New Horizons for Treatment of Resistant Microorganisms: Application of Photodynamic Inactivation in Plant Protection and Food Safety

**15:30 - 17:00 Session B3: Circular Economy**

Chair: Andreas Walter (MCI | The Entrepreneurial School®)

- 15:30 - 16:00 **Markus Frischhut** (MCI | The Entrepreneurial School®)  
EU law & sustainability
- 16:00 - 16:30 **Flavio Tonelli** (University of Genoa)  
The twin transitions opportunity (and risks) vs. the never normal
- 16:30 - 17:00 **Elke Duwenig** (BASF SE)  
Circular Economy and Biotechnology for a green transformation of the chemical industry: Discover the exciting opportunities and overcome the huge challenges

**17:45 Welcome Reception** 3rd floor



Event Partners



## PROGRAM, TUESDAY, SEPTEMBER 13<sup>TH</sup>

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### 09:00 - 10:30 Session A4: Medical Biotechnology

Chair: Christoph Griesbeck (MCI | The Entrepreneurial School®)

- 09:00 - 09:30 **Markus Haindl** (Roche Diagnostics GmbH)  
The transformative potential of Cell and Gene Therapies - an industry perspective
- 09:30 - 10:00 **Christian Rudolph** (Roche Diagnostics GmbH)  
Biotechnology in Diagnostic Industry
- 10:00 - 10:30 **Laurent Counillon** (University Côte d'Azur)  
From fundamental mechanisms to pharmacological applications: lessons from 50 years of transporter studies

### 10:30 - 11:00 Coffee Break 3rd floor

### 11:00 - 12:30 Session A5: Marine Biotechnology

Chair: Concetta Maria Messina (European Society for Marine Biotechnology)

- 11:00 - 11:30 **Concetta Maria Messina** (European Society for Marine Biotechnology)  
The role of marine biotechnology in meet the challenges of the blue growth and of the 2030 agenda: unlock the potential of the aquatic resources in support of the sustainable development goal 14
- 11:30 - 12:00 **Marco Giovine** (University of Genoa)  
Marine biotechnology and blue economy: state of the art and new perspectives
- 12:00 - 12:30 **Elena Grasselli and Raffaella Boggia** (University of Genoa)  
The unique case of EcoeFISHent H2020 project: Liguria as focal point for the valorization of fish byproduct for development of cosmetic and nutraceutical products

### 12:00 - 13:30 Lunch 3rd floor

### 13:30 - 15:30 Session A6: Molecular & Cell Biology

Chair: Eric Kübler (University of Applied Sciences and Arts Northwestern Switzerland)

- 13:30 - 14:00 **Michael Ragunath** (ZHAW Zurich University of Applied Sciences)  
Sauron's Ring : the forgotten ability of cells to make their own microenvironments in vitro
- 14:00 - 14:30 **Vincenzo Cavalieri** (University of Palermo)  
Preclinical Evaluation of Cell-free Therapy based on Mesenchymal Stem Cell Conditioned Medium in Zebrafish
- 14:30 - 15:00 **Besmira Sabani** (ZHAW Zurich University of Applied Sciences)  
A novel surface functionalization platform to prime extracellular vesicles for targeted therapy and diagnostic imaging
- 15:00 - 15:30 **Simona Campora** (University of Palermo)  
Use of recombinant collagenases in biomedical applications

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### 09:00 - 10:30 Session B4: Pharmacology & Therapy

Chair: Giuseppe Gallo (University of Palermo)

- 09:00 - 09:30 **Fabrice Müller** (University of Applied Sciences and Arts Northwestern Switzerland)  
In vitro and in silico testing strategies for predicting human liver toxicity
- 09:30 - 10:00 **Michaela Caj** (University of Applied Sciences and Arts Northwestern Switzerland)  
In vitro assays to determine efficacy and toxicity of natural products
- 10:00 - 10:30 **Gaia Pucci** (University of Palermo)  
Evaluation of innovative radiotherapy treatments in zebrafish

### 11:00 - 12:30 Session B5: Environmental Technology & Bioenergy

Chair: Werner Stadlmayr (MCI | The Entrepreneurial School®)

- 11:00 - 11:30 **Simon Crelier** (HES-SO Valais Wallis)  
Development and scaling-up of a chromium removal step - a long and winding road
- 11:30 - 12:00 **Thomas Neuner** (MCI | The Entrepreneurial School®)  
Flow visualization in bioreactors using ultrasound and Computational Fluid Dynamics
- 12:00 - 12:30 **Antonio Mineo** (University of Palermo)  
Resource recovery from wastewater: new insights from the case study of Palermo University within Wider-Uptake project

### 13:30 - 15:30 Session B6: Methods in Biotechnology

Chair: Fabian Fischer (HES-SO Valais Wallis)

- 13:30 - 14:00 **Sarah Wegmüller** (HES-SO Valais Wallis)  
Third generation DNA sequencing: Novel applications in biotechnology and diagnostics
- 14:00 - 14:30 **Harald Schöbel** (MCI | The Entrepreneurial School®)  
Physics in Life-Sciences
- 14:30 - 15:00 **Christian Kronseder** (University of Applied Sciences and Arts Northwestern Switzerland)  
Data sciences: applications in biotechnology
- 15:00 - 15:30 **Marco Rupprich and Lorenzo De Benedictis** (Single Use Support GmbH)  
stage hog SINGLE USE ASSEMBLIES? Fighting Cancer!

## PROGRAM, TUESDAY, SEPTEMBER 13<sup>TH</sup>

15:30 - 16:00 Coffee Break 3rd floor

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### 16:00 - 17:30 Session A7: Molecular Biotechnology

Chair: Alexander Trockenbacher (MCI | The Entrepreneurial School®)

- 16:00 - 16:30 **Gabriela Baerlocher** (University of Bern)  
Telomer Biology: Live at the end of the chromosomes
- 16:30 - 17:00 **Julia Koidl and Bianca Werndle** (MCI | The Entrepreneurial School®)  
Development of a CRISPR based diagnostics platform - recombinant protein expression of Polymerase BstI and M-MLV reverse transcriptase in *Pichia pastoris*
- 17:00 - 17:15 **Sefora Marino** (University of Palermo)  
Antisense oligonucleotide strategy to promote ENO-1 alternative translation and MBP-1 expression
- 17:15 - 17:30 **Cesare D'Amico** (University of Palermo)  
Exploring the MBP-1 role in breast cancer using a Tet-On System for Doxycycline-inducible gene expression

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### 16:00 - 17:30 Session B7: Renewables

Chair: Angela Hofmann (MCI | The Entrepreneurial School®)

- 16:00 - 16:30 **Wolfgang Riedl** (University of Applied Sciences and Arts Northwestern Switzerland)  
Microalgae - a new feedstock for feed-, food- & CHC products, CCS and circular economy- or just another Hype? An insight from engineering and business case point of views
- 16:30 - 17:00 **Sabrina Dumfort** (MCI | The Entrepreneurial School®)  
The reduction of dry matter losses during the storage of wood chips for bioenergy production
- 17:00 - 17:30 **Dominik Bosch and David Gurtner** (MCI | The Entrepreneurial School®)  
Production of Black Gold out of Waste Wood - Gasification, Activation, Wastewater Treatment

## PROGRAM, WEDNESDAY, SEPTEMBER 14<sup>TH</sup>

09:00 - 12:30 Career Workshop | Room 301/302

- 09:00 - 10:00 **Christoph Griesbeck / Companies**
- 10:00 - 11:00 **World Café (Part 1) | MCI II, 051,052**

11:00 - 11:30 Coffee Break 3rd floor

- 11:30 - 12:30 **World Café (Part 2) | MCI II, 051,052**

12:30 - 13:30 Lunch 3rd floor

- 14:00 - 17:00 **Excursion MCI I**
- 19:30 **Students' party tba**



## THURSDAY, SEPTEMBER 15<sup>TH</sup>

| 09:00 - 11:00 Session A8: Biotechnology with Plants & Fungi |  | 301/302 |
|---|--|---------|
| 09:00 - 09:30   | <b>Hanspeter Schöb</b> (University of Zurich)<br><i>The Power of Plants</i>  |         |
| 09:30 - 10:00   | <b>Akshay Joshi</b> (ZHAW Zurich University of Applied Sciences)<br><i>Biotechnological Research on Anaerobic Fungi</i>  |         |
| 10:00 - 10:30   | <b>Pamela Vrabl</b> (University of Innsbruck)<br><i>Biotechnology meets Fungal Photophysiology: the underestimated crosstalk between light and fungal primary and secondary metabolism</i> |         |
| 10:30 - 11:00   | <b>Bianka Siewert</b> (University of Innsbruck)<br><i>Medicinal Photochemistry of Fungal Pigments – How Light Potentiates the Versatile Pharmaceutical Effects of Fungi</i>                |         |
| <b>11:00 - 11:30 Closing Remarks</b> 301/302                |  |         |

  

| 09:00 - 11:00 Session B8 : Microbiology     |   | 305 |
|---|---|-----|
| Chair: Simon Crelier (HES-SO Valais Wallis) |   |     |
| 09:00 - 09:30                               | <b>Wolfgang Merkle</b> (ZHAW Zurich University of Applied Sciences)<br><i>Development of an enzymatic CO<sub>2</sub>-capture strategy for an optimized microbiological methanation</i>              |     |
| 09:30 - 10:00                               | <b>Fabian Fischer</b> (HES-SO Valais Wallis)<br><i>Microbial diversity changes during biofilm repair in microbial fuel cell stack</i>   |     |
| 10:00 - 10:30                               | <b>Anika Hoffmann</b> (HES-SO Valais Wallis)<br><i>Quantification of endotoxins in bacterial bioreactor samples and correlation of the endotoxin content to optical density and dry cell weight</i> |     |
| 10:30 - 11:00                               | <b>Valeria Aluina</b> (University of Palermo)<br><i>Epigenetics as a mechanism of control on biosynthetic processes in Actinobacteria for industrial purposes</i>                                   |     |

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