

Summer School on Advanced Biotechnology 2017 - Program

Provisional program

SUNDAY, September 3, 2017

18.00 - Welcome dinner

[Espace Provins](#)

Rue de l'Industrie 22
CH - 1950 Sion

MONDAY, September 4, 2017

- 08.30 – 09.00 : Introduction and Welcome

SESSION 1 – TISSUE ENGINEERING

- 09.00 – 09.30 : **Tissue Engineering - Polymeric scaffolds structure tailoring**
Valerio Brucato, University of Palermo
- 09.30 – 10.00 : **Biocompatible materials**
Efrain Careño-Morelli, University of applied sciences, Sion
- 10.00 – 10.30 : **Macromolecular crowding, a platform technology to make microenvironments in cell culture**
Michael Ragonath, University of applied sciences, Wädenswil
- *10.30 – 11.00 : Coffee break*
- 11.00 - 11.30 : **Drug delivery from the biopolyester poly(3-hydroxybutyrate-co-3-hydroxyvalerate)**
Adolfo Gonzalez, University of applied sciences, Sion
- 11.30 – 12.00 : **Poly(β -L-malic acid): water soluble biopolyester produced by funghi**
Markus Künzi, University of applied sciences, Sion

SESSION 2 - FUNCTIONAL GENOMICS

- 12.00 – 12.30 : **The Echinoid hbox12/pmar1/micro1 multigene family: expression, functions and evolution**
Vincenzo Cavalieri, University of Palermo
- *12.30 – 14.00 : Lunch*

- 14.00 – 14.30 : **Epitranscriptomics in mouse and plants**
Valentina Perrera, University of Padova

SESSION 3 - PRODUCTION OF BIOMOLECULES

- 14.30 – 15.00 : **Hints from differential proteomics for a rational yield improvement of biomolecule production by microbial fermentation**
Giuseppe Gallo, University of Palermo
- 15.00 – 15.30 : **Generation of recombinant collagenases class I & II. A new approach in cell purification for research and clinical applications**
Giulio Gherzi, University of Palermo
- 15.30 – 16.00 : *Coffe Break*
- 16.00 – 16.30 : **Biosimilars from an R&D and business perspective**
Gerrit Hagens, University of applied sciences, Sion
- 16.30 – 17.00 : **P2T Innovation Centre: production of Cobrotoxin B in *E.coli* and *P. pastoris***
Sarah Wegmüller, University of applied sciences, Sion

TUESDAY, September 5, 2017

SESSION 4 - DRUG DISCOVERY

- 08.30 – 09.00 : **Drug screening in soil algae**
Maren Kruus, MCI – The Entrepreneurial School, Innsbruck
- 09.00 – 09.30 : **Antibiotic resistance : the search for the unwanted**
Eric Kübler, University of applied sciences, Wädenswil
- 09.30 – 10.00 : **From plant microbiota to plant probiotics**
Anna Maria Puglia, University of Palermo
- 10.00 – 10.30 : **In vitro bio-impedance measurement for the characterization of biological barriers**
Adrien Roux, University of applied sciences, Geneva
- 10.30 – 11.00 : *Coffee break*
- 11.00 – 11.30 : **Modelling Alzheimer's disease in vitro**
Laura Suter-Dick, University of applied sciences, Muttenz

SESSION 5A - DIAGNOSTICS - POINT-OF-CARE

- 11.30 – 12.00 : **Meeting sustainable development goals : an affordable mobile diagnostic to aid vaccination in the developing world**
Jobie Budd, University College of London
- 12.00 – 12.30 : **“Active” antibiotic monitoring for personalised treatment at the Point-of-Care**
Natascha Kappeler, University of applied sciences, Muttenz
- 12.30 – 14.00 : *Lunch*
- 14.30 : Social Event
- 18.30 : Get-Together Dinner

WEDNESDAY, September 6, 2017

SESSION 5B - DIAGNOSTICS - POINT-OF-CARE

- 08.30 – 09.00 : **Automatized measuring systems with bacterial biosensors**
Martial Geiser, University of applied sciences, Sion
- 09.00 – 09.30 : **Cell based bioactivity assays**
Peter Leitner, MCI – The Entrepreneurial School, Innsbruck
- 09.30 – 10.00 : **Using induced pluripotent stem cells (iPSCs) for cell-based assays**
Jack Rohrer, University of applied sciences, Wädenswil
- 10.00 – 10.30 : **Developments in bioanalytics and diagnostics**
Jean-Manuel Segura, University of applied sciences, Sion
- 10.30 – 11.00 : *Coffee break*

SESSION 6 - APPLIED BIOTECHNOLOGY

- 11.00 – 11.30 : **On-line monitoring and control of a fed-batch wine fermentation**
Michal Dabros, University of applied sciences, Fribourg
- 11.30 – 12.00 : **Efficient production of lactate-based bioplastic in engineered E. coli using fed-batch fermentation**
Yamasaki Takahashi, University of Hokkaido
- 12.00 – 12.30 : **Phosphate recovery with a microbial electrolysis cell and the metagenomic analysis of the co-powering microbiome**
Fabian Fischer, University of applied sciences, Sion

12.30 : Wrap-up

13.00 – 14.30 : *Lunch*

14.30 : End of Summer School