#### Sunday, 11.09.20016

18:00

Registration

19:00

Welcome party

Sala Lanza, Orto Botanico Palermo

#### Monday, 12.09,2016

09:15

Welcome and Opening remarks

## Microbial Biotechnology

Chairman: A.M. Puglia

09:30 - 10:00

Eric Kubler

Fighting antibiotics resistance

10:00 - 10:30

Fabian Fischer

Antibacterial nano-pillar surface testing with a microbial fuel cell"

10:30

Coffee break

11:00 - 11:30

## Giuseppe Gallo

Improvement of antibiotic production yield in Streptomyces coelicolor by immobilized-cell cultivations by using PCL- and PLA-based membranes

11:30 - 12:00

Claudia Ralser

Production of allergens and vaccines in microalgal systems

12:30

Lunch

14:30 - 15:00

## Luca Dapra

Genetic methods for the identifications of microorganisms

15:00 - 15:30

Roberto Spurio

Shall we share some silica? Diatoms, oligonucleotide probes and glass DNA chips

### ◆ Drug Design and Delivery

Chairman: D. Gygax

15:30 - 16:00

Vito Calderone

X-ray protein crystallography: applications and examples in drug design

16:00 - 16:30

Simona Campora

Nanoparticles for targeted and controlled drug delivery

16:30

coffee break

17:00 - 17:30

Vera Luginbühl

Photodynamic diagnosis and therapy of malignant brain tumors with 5-aminolevulinic acid

17:30 - 18:00

Francesca D'Anna

Imidazolium salts: a journey from ionic liquids to bioactive materials

#### Tuesday, 13.09,2016

# Novel approaches and tools in Biotechnology

Chairman: I.Di Liegro

09:00 - 9:30

Daniel Gygax

Research at the interface to industry in the area of in-vitro diagnostics

09:30 - 10:00

Salvatore Di Girolamo

Development of novel Surtase enzymes for site-specific conjugation in antibody-drug conjugates (ADC) production

10:00 - 10:30

Blanka Bucsella

Application of capillary electrophoresis in biotechnology"

10:30

Coffee break

11:00 - 11:30

Simon Crelier

Adsorption chromatography: there is more to the picture (than meets the eye)

11:30 - 12:00

Harald Schobel

Development and optimization of illumination systems for photobioreactors

12:00

Lunch

## ≪ Cell Biology

Chairman: C.Griesbeck

14:30 - 15:00

Jack Rohrer

Induced pluripotent stem cells: fascinating research and applications

15:00 - 15:30

Italia Di Liegro

Extracellular vescicles: a universal way for cell-to-cell communication

15:30 - 16:00

Hüseyin Birogul

Development of a human in vitro blood vessel to asses effects of vascular intervention devices

16:00

Poster preparation by the students

#### Wednesday, 14.09.2016

# Tissue Engineering

Chairman: J. Rohrer

09:00 - 9:30

Francesco Carfi Pavia

Poly-L-lactic acid based scaffold for tissue engineering applications

09:30 - 10:00

Markus Merk

Innervation of Engineered 3D Skeletal Muscle with Spinal Cord Explants

10:00 - 10:30

Vincenzo Prestigiacomo

Human 3D-liver model for the investigation of hepatic fibrosis

10:30 - 11:00

Coffee break

11:00 - 11:30

Michael Raghunath

Macro Molecular Crowding for Tissue Engineering

11:30 - 12:00

Niña Reichert: The MTB PhD program of the Competence Center Personalized Medicine of the University/ETH Zurich, Switzerland: Molecular and Translational Biomedicine with focus on personalized medicine - from 'bench to be

Silke Schneider: The Competence Center Personalized Medicine of the University/ETH Zurich, Switzerland: Interdisciplinary genomic-based biomedical research at the interface of life science, medicine and technology for patient-tailored therapies

12:00

Poster Exibition and Prize

13:00

**Concluding Remarks** 

# XI Summer School on Advanced Biotechnology

September 11-14, 2016 Sala Lanza, Orto Botanico Palermo





