#### 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

School 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 immobilizedcell cultivations by using PCL- and PLA-based membranes

11:30 – 12:00 *Claudia Ralser* Production of allergens and vaccines in microalgal systems

12:00 – 12:30 *Verena Looser* Microbial behavior: A science & comic lecture

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 5aminolevulinic acid

17:30 – 18:00 *Francesca D'Anna* Imidazolium salts: a journey from ionic liquids to bioactive materials

### Tuesday, 13.09.2016

ক 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 *Rohrer Jack* 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

Chairman: E.Kubler

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

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



