

# Program

**Sunday, August 31 2014**

18:00 Registration

19:00 Welcome party

Botanical Garden, Via Lincoln 2, Palermo

## IX Summer School on Advanced Biotechnology

August 31 – September 3 2014  
Sala Lanza, Orto Botanico Palermo



**Monday, September 1 2014**

9:15 Welcome and Opening remarks

 Natural products

Chairman: *A.M. Puglia*

9:30 *Stefano Donadio*: "Natural products research"

10:00 *Margherita Sosio*: "New bioactive compounds from actinobacteria"

10:30 Coffee break

11:00 *Giuseppe Gallo*: "Proteomics as a tool to study metabolic pathways associated with antibiotic production in actinomycetes"

11:30 *Roberta Pozzi*: "What can we learn from peptidoglycan analysis?"

12:00 *Sebastian Perkams*: "Cultivation of terrestrial microalgae and screening for novel compounds"

12:45 – 14:30 Lunch

 Natural products II

15:00 *Drenusha Sadiku, Claudia Ralser and Marc Lechner*: "Expression of recombinant proteins in the microalga *Chlamydomonas reinhardtii*"

15:30 *Rosario Vanella*: "Synthetic Biology for the identification of novel 11 $\beta$ HSD1 inhibitors in yeast"

16:00 Coffee break

16:30 -18:00 Poster preparation by the students

**Tuesday, September 2 2014**

 Novel approaches in health care

Chairman : *Eric Kübler*

9:00 *Daniel Gygax*: "From the individual test kit to the integrated test system "

9:30 *Denis Prim*: "Sample preparation challenges in point-of-care diagnostic systems developments"

10:00 *Martin Wolf*: "Recombinant proteins for diagnosis and therapy of weed pollen allergies"

10:30 Coffee break

11:00 *Lino Reggiani*: "Proteotronics: electronic devices based on proteins"

11:30 *Romina Buchs*: "Infectious Disease cell-models, their use in industry"

12:00 *Alessia Liguori*: "Vaccine Research in the era of genomics"

12.45-14:30 Lunch

 Nanoparticles and Tissue engineering

14:30 *Giulio Gherzi*: "New nano-particles generation by beta irradiation process, their functionalization in addressing target and cargo release process"

15:00 *Ramon Weishaupt*: “Studying the interaction of (poly)peptides and nano fibrillated cellulose”

15:30 *Paolo Netti* “Cell instructive materials to engineering biological tissues in vitro”

16:00 *Valerio Brucato*: “Try to bridge in vivo / in vitro models, vascular bioprosthesis and angiogenized complex scaffolds”

16:30 *Afrouznia-Taleb Sanaz* “Reconstructed human skin models to study wound healing”

17:00 Coffee break

17-18:30 Poster preparation by the students

### Wednesday, September 3 2014

#### Statistics

Chairman : *Jack Rohrer*

9:00 *Beate Sick*: “Correlation, association, and causality”

#### Cell biology

Chairman: *Daniel Gygax*

9:30 *Jack Rohrer*: “Differentiation of macrophages to osteoclasts - Development of a novel cell based assay”

10:00 *Italia Di Liegro*: “Novel routes for brain cell-to-cell communications”

10:30 Coffee break

11:00 *Vincenzo Cavalieri*: “Chromatin insulators - Regulatory mechanisms and prospective application for gene therapy”

#### Catalysis and alternative solvent media

Chairman : *Christoph Griesbeck*

11:30 *Christian Frech*: “New conceptual approach in the design of C-C cross-coupling catalysts. From fundamentals to application”

12:00 *Francesca D’anna*: “Ionic Liquid Binary Mixtures: Promising reaction media for carbohydrate conversion into 5-hydroxymethyl furfural”

12:45- 14:30 Lunch

14:30 *Gabriele Amore*: “Hunting for the Sicilian Wine yeasts’ treasure trove”

15:00 – 18:00 Poster preparation by the students

18:30 Poster exhibition, wine\* and cheese!

\*gift of “Istituto Regionale Vini e Oli”, Palermo

