



## PROGRAMMA

April 4-5, 2019 - Villa Vigoni, Italy

### Wednesday April 3:

- 19.00 - 19.30 Welcome cocktail  
19.30 - 21.30 Dinner

### Thursday April 4:

- 09.00 - 09.30 Registration  
09.30 - 10.00 Introduction - Roberto Eggenhöfner,  
Luca Giacomelli, Anna Tampieri

### **Session 1A - Chemistry of biomaterials**

*Chair: Roberto Eggenhöfner, Aldo R. Boccaccini*

- 10.10 - 10.40 Andreas Killinger - "Suspension Flame Sprayed Metal Doped Calcium Phosphate Coatings with Antibacterial Properties for Infection Prophylaxis"  
10.40 - 11.10 Steffen EBlinger - "Manufacturing of Bioceramic Scaffolds Using 3D-Printing Technology"  
11.10 - 11.40 Coffee break

### **Session 1B - Chemistry of biomaterials**

*Chair: Aldo R. Boccaccini, Simone Sprio*

- 11.40 - 12.10 Ornella Cavalleri - "Mesoporous oxide growth on transition metals for biomedical applications"  
12.10 - 12.40 Enrica Verné - "Fabrication and characterization of robocast bioactive  $\text{SiO}_2\text{-P}_2\text{O}_5\text{-CaO-MgO-Na}_2\text{O-K}_2\text{O}$  glass scaffolds"  
12.40 - 14.30 Lunch

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## Session 2 - Applied chemistry of biomaterials

Chair: *Julietta Rau, Steffen Eßlinger*

- 14.00 - 14.30 Matthias Blum - "Biologically Derived Hydroxyapatite Coatings for Biomedical Applications"
- 14.30 - 15.00 Anna Tampieri - "Nature inspires smart device for regenerative medicine and nanomedicine"
- 15.00 - 15.30 Simone Sprio - "Bioactive macroporous and injectable apatitic scaffolds for bone regeneration"
- 15.30 - 16.00 Anke Bernstein - "Thin degradable coatings for optimization of osteointegration associated with simultaneous infection prophylaxis"
- 16.00 - 16.30 Christophe Drouet - "Bio-inspired apatite particles in nano-medicine: from hematology to dermatology original applications"
- 16.30 - 17.00 Coffee break

## Session 3 - Bioceramics and dentistry

Chair: *Anna Tampieri, Enrica Vernè*

- 17.00 - 17.30 Julietta V. Rau - "Bioactive doped coatings and cements for medical implants"
- 17.30 - 18.00 Corrado Piconi - "Zirconia Dental Implants: what about Osseointegration?"
- 18.00 - 18.30 Michele Iafisco - "Citrate-stabilized amorphous calcium phosphate doped with fluoride ions: a new biomimetic nanomaterial in dentistry"
- 19.30 - 21.30 Dinner

## Friday April 5

### Session 4 - Frontiers in biomaterials

Chair: *Christophe Drouet, Nicola Bragazzi*

- 09.00 - 09.30 Aldo R. Boccaccini - "Bioactive glasses meet herbal medicine: Combining bioactive glass scaffolds with phytotherapeutics for tissue engineering"
- 09.30 - 10.00 Victor Sivozhelezov - "Ceramics-related data mining uncovers tissue regeneration genes linking hydroxyapatite and tricalcium phosphate to vitamin D"
- 10.00 - 10.30 Rainer Gadow - "Novel Bioceramic Probe Structures for Intelligent Neuroimplantation"
- 10.30 - 11.00 Coffee break

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## Session 5 - Beyond biomaterials

*Chair: Rainer Gadow, Victor Sivozhelezov*

- 11.00 - 11.30 Maurizio Viviani - "Application of AI supercomputing to biological data for patterns generation and tissue engineering models: machine learning and reconstruction algorithms"
- 11.30 - 12.00 Sergio Zanfrini - "Patient status from disequilibrium to: surgery, rehabilitation's follow up, predictive AI medicine"
- 12.00 - 12.30 Nicola Bragazzi - "Big Data-based medicine: towards a precision, predictive stratified medicine"
- 12.30 - 13.00 Conclusions and wrap-up - Aldo R. Boccaccini, Rainer Gadow
- 13.00 - 14.30 Lunch