

## SIB 2023 Program

### Monday 3 July

- 12:00-14:30 Registration
  - 14:30-15:00 Opening Ceremony (Rector Pettinari, Pharmacy Director Sagratini and SIB President Silvia Farè)
  - 15:00-15:45 **Seminar: Prof. Wim Hennink (Utrecht University), *Biomaterials and the Art of Drug Delivery***
  - 15:45-16:45 **Session 1\_ Biomaterials and Technology Transfer**
    - 15:45-16:15 Invited: **Prof. Luigi Nicolais (MATERIAS), *From research to business: the MATERIAS model***
    - 16:15-16:30 **Manuela Cortese, *MARLIC strategy***
    - 16:30-16:45 **Ilenia Santoni, *From scientific innovation to the generation of value for our society: opportunities and challenges***
    - 16:45-17:00 **Martina Fronduti, *Advanced antimicrobial surface coatings for industrial and biomedical applications***
  - 17:00-17:30 Coffee Break and Poster Session
  - 17:30-18:45 **Session 2\_ Biomaterials for Drug Delivery**
    - 17:30-18:00 Invited: **Prof. Pasquale del Gaudio (University of Salerno & CRS Italian Chapter), *In-situ gelling carbohydrates blend particles as conformable wound dressing***
    - 18:00-18:15 **Roberta Pappalardo, *Hybrid injectable hydrogels based on Schiff-base bonds as promising drug delivery platforms***
    - 18:15-18:30 **Francesca Tivano, *Green nanomedicine and sustainable drug-releasing systems for regenerative medicine***
    - 18:30-18:45 **Saniya Salathia, *Carvacrol-loaded hyaluronic-acid coated PLGA-nanoparticles for anti-inflammatory and antinociceptive activity***
  - 18:45-20:00 Welcome Aperitif
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### Tuesday 4 July

- 8:30-9:00 Registration
- 9:00-10:45 **Session 3\_ Biomaterials and Polysaccharides**
  - 9:00-9:30 Invited: **Prof. Silvia Arpicco (University of Turin & EPNOE), *Polysaccharides in drug delivery: hyaluronic acid as targeting agent***
  - 9:30-9:45 **Pietro Matricardi, *EPNOE: an opportunity for "polysaccharides' community"***
  - 9:45-10:00 **Giulia Crivello, *Polyphenolic lignin-based material enzymatically conjugated with a custom-made polyurethane hydrogel for reducing inflammation in chronic wounds***
  - 10:00-10:15 **Celeste Di Meo, *Novel and sustainable bioinks based on methacrylated gelatin, poly(aspartic) acid and glycosaminoglycans for 3D printed scaffolds useful in tissue engineering and in vitro models***
  - 10:15-10:30 **Lakshmi Sathi Devi, *Exploring cyclodextrin-hyaluronan-based multifunctional delivery systems for anticancer therapy***
  - 10:30-10:45 **Francesco Busto, *Oleuropein-rich Gellan Gum/Alginate films as innovative treatments against photo-induced skin aging***

- 10:45-11:15 Coffee Break and Poster Session
- 11:15-13:00 **Session 4\_ Biomaterials for Nanotechnology**
  - 11:15-11:45 Invited: **Prof. Giuseppe De Rosa** (University of Federico II Napoli & ADRITELF), *Lipid-based nanomedicine for RNA delivery*
  - 11:45-12:00 **Marialucia Rubicondo**, *Design and optimization of nano-formulations for a novel colchicine derivative*
  - 12:00-12:15 **Nora Bloise**, *Anti-CD44 Gold Nanoparticles for Photothermal Therapy of Endometriosis*
  - 12:15-12:30 **Stefan Jackson**, *Roadmap to gene delivery: unlocking new dimensions in chronic neuropathic pain treatment*
  - 12:30-12:45 **Maria A. Ramirez Morales**, *Two-cycle Stöber method for the tailored synthesis of dual-color silica nanosystems and its analysis by super resolution microscopy as potential tool in cancer therapy*
  - 12:45-13:00 **Joice Maria Joseph**, *The art of preparations of PFCE encapsulated PLGA nanoparticles*
- 13:00-14:30 Lunch and Poster Session
- 14:30-16:00 **Session 5\_ Biomaterials for Tissue Engineering**
  - 14:30-15:00 Invited: **Dr. Anna Abbadessa** (University of Santiago de Compostela), *Biomaterials for tissue engineering: integrating different technologies to recapitulate unique tissues*
  - 15:00-15:15 **Ksenia Menshikh**, *Cerium-doped mesoporous bioactive glasses: in vitro cytocompatibility from 2D to 3D*
  - 15:15-15:30 **Maria Laura Gatto**, *Enhanced biomechanical performances of 316L graded scaffolds fabricated by laser powder bed fusion for tissue engineering applications*
  - 15:30-15:45 **Maria Grazia Raucci**, *A theragenerative platform for bone cancer therapy and regeneration*
- 15:45-16:15 Coffe Break and Poster session
- 16:15-17:15 **Young delegates 5 min-pitch competition**
- 17:15-19:00 Camerino tour

### Wednesday 5 July

- 8:30-9:00 Registration
- 9:00-10:45 **Session 6\_ Biomaterials for 3D Printing Technology**
  - 9:00-9:30 Invited: **Prof. Tina Vermonden** (Utrecht University & UMC Utrecht), *Responsive Hydrogels for High Resolution 3D Printing*
  - 9:30-9:45 **Elena Marcello**, *Time-dependent natural polymer-based bioinks for cardiac tissue engineering*
  - 9:45-10:00 **Giovanni Falcone**, *Ready-to-print alginate hydrogels: the effect of different divalent cations*
  - 10:00-10:15 **Farah Daou**, *Tracking down the Transcriptome Profile of Pulsed Electromagnetic Field (PEMF) stimulation in bone regeneration using an in vitro investigation platform based on a perfusion bioreactor and 3D printed bone tissue-like scaffolds*

- 10:15-10:30 Meet our sponsor: **Nordtest s.r.l.**
  - 10:30-11:00 Coffee Break and Poster Session
  - 11:00-12:00 **Evaluation of Posters by Committee**
  - 12:00-13:00 **Session 7\_ Biomaterials for Diseases modeling and healing**
    - 12:00-12:15 **Rebecca Pellegrino**, *Methacrylate hyaluronic acid–silicon doped hydroxyapatite composite scaffolds for bone tissue regeneration*
    - 12:15-12:30 **Andrea Bezze**, *Modelling glioblastoma microenvironment for in vitro assessment of cell-based drug delivery*
    - 12:30-12:45 **Carlotta Mattioda**, *Development of green nanoparticles through solvent-free techniques and of alternative in vitro models for their validation*
    - 12:45-13:00 **Matteo Pitton**, *Visible light photocrosslinkable GelMA/HAMA blends for mimicking breast cancer microenvironment*
  - 13:00-14:30 Lunch and Poster Session
  - 14:30-16:00 **Session 8\_ Biomaterials as Antibacterial Strategy**
    - 14:30-15:00 Invited: **Dr. Serenella Bruschi** (Angelini Pharma & AFI), *Biomaterials as an antibacterial strategy: microbiological stability of drugs*
    - 15:00-15:15 **Ziba Najimi**, *Change surfaces' properties of Ti64Al4V-ELI by nisin functionalization and improve their bone implant application*
    - 15:15-15:30 **Laura Colomina Alfaro**, *HELP-based recombinant biopolymers: versatile platform to produce self-delivery antimicrobial materials*
    - 15:30-15:45 **Agnese D'Agostino**, *Functionalization of AZ31 alloy by sol-gel coating method for biomedical applications*
    - 15:45-16:00 **Stefania Villani**, *Evaluation of the biofilm-detaching activity of bacterial cellulose-based wound care paste in vitro and in vivo in Galleria mellonella model*
    - 16:00-16:15 **Elisa Restivo**, *Low copper doped optically transparent cytocompatible calcium phosphate glasses demonstrated antibacterial and SARS-CoV-2 trapping properties*
  - 16:15-16:45 Coffee Break and Poster session
  - 16:45 **Assemblea SIB**
  - 18:30 – **Tour cantine Maraviglia & Gala Dinner**
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#### Thursday 6 July

- 8:30-9:00 Registration
- 9:00-10:30 **Session 9\_ Composites and Bioceramics**
  - 9:00-9:30 Invited: **Prof. Carlo Santulli** (Università degli Studi di Camerino, School of Science and Technology), *Use of alginates for drug delivery systems*
  - 9:30-9:45 **Matteo Pavarini**, *Effect of ageing on the sintering behaviour of Bioglass powders*
  - 9:45-10:00 **Sara Ferraris**, *New functionalities for titanium and magnesium alloys through functionalization with natural polyphenols*
  - 10:00-10:15 **Diego Romano Perinelli**, *Hydrolyzed keratin as a biomaterial for the formulation of a ketoconazole-loaded topical cream promoting hair regrowth*
- 10:15-10:45 Coffee Break and Poster Session

- 10:45-12:15 **Session 10\_ Bioactive surface and Fibrous Biomaterials**
    - 10:45-11:15 Invited: **Dr. Noemi Fiaschini** (Nanofaber & University of Rome Tor Vergata), *Design, production and characterization of oily extracts-loaded electrospun membranes for wound healing applications*
    - 11:15-11:30 **Camilla Reggio**, *The influence of wettability and surface features on fibrinogen adsorption: from models to surfaces of clinical interest*
    - 11:30-11:45 **Caterina Cristallini**, *Design, production and characterization of new integrated polymeric patches for in vivo engineering of cardiac tissue*
    - 11:45-12:00 **Margherita Musetti**, *Implementation of polymeric patches for in vivo cardiac tissue engineering*
    - 12:00-12:15 **Bitā Mahdavi Firouzabadi**, *Development of hyaluronic-acid-based redox-responsive hydrogels for delivery of protein-based therapeutic agents in the tumour microenvironment*
  - 12:15-12:45 **Awards** (Best oral presentations - Best posters- Young delegates pitch competition)
  - 12:45-14:00 **Aperitiv - End of the Congress**
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