Organizing Secretariat

StudioProgress Snc Via Cattaneo 51 - 25121 Brescia (Italy) Tel. +39(0)30290326 www.studioprogress.it info@studioprogress.it

Registration is free but must be finalized accessing the Organizing Secretariat website www.studioprogress.it NEXT MEETINGS. The Organizing Secretarial will send an acceptance e-mail to confirm registration.

Official scientific language: English

- DPT of Laboratory Medicine
 - School of Dentistry
- DPT of Orthopaedic Surgery
- DPT of Mechanical and Industrial Engineering
 - DPT of Information Engineering Radiological Sciences and Public Health
 - DPT of Medical and Surgical Specialities,
 - DPT of Clinical and Experimental Sciences on behalf of

C. Paganelli, P. Guizzi, C. Almici D. Russo, P. Nicolai, E. Sardini, L. Sartore,

Scientific Secretariat







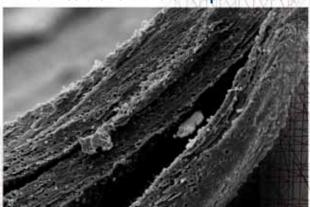


Under the Patronage of:



International Conference Bioengineering and Cell Therapy

21st September 2018 **University of Brescia - School of Medicine** Main Lecture Hall - Viale Europa 11-Brescia





INVITED SPEAKERS

Almici Camillo Laboratory for Stem Cells Manipulation and Cryopreservation, DPT of Laboratory Medicine, ASST Spedali Civili of Brescia, Brescia, Italy.

Castellano Maurizio Unit of Endocrine-Metabolic Medicine and Rare Diseases in the Adult, DPT of Clinical and Experimental Sciences, University of Brescia, Brescia, Italy

Chinello Clizia Clinical Proteomics and Metabolomics Unit, School of Medicine and Surgery, University of Milano-Bicocca, Vedano al Lambro, Italy

Division of Biology and Genetics, DPT of Molecular and Translational Medicine, University of Brescia. Italy De Petro Giuseppina Cellular Fate Reprogramming Unit, DPT of Molecular and Translational Medicine, University of Brescia, Brescia, Italy Dell'Era Patrizia

Doglietto Francesco Neurosurgery Unit, DPT of Medical and Surgical Specialties, Radiological Sciences, and Public Health, University of Brescia, Brescia, Italy

DPT of Mechanical and Industrial Engineering, University of Brescia, Brescia, Italy. Faglia Rodolfo

Guizzi Pierangelo Orthopedics and Traumatology Unit, DPT of Orthopaedic Surgery, ASST Spedali Civili di Brescia, Italy

Mass Spectrometry Imaging, Center for Proteomics & Metabolomics, Leiden University Medical Center, Leiden, The Netherlands Heijs Bram

Le Blanc Katarina DPT of Laboratory Medicine, Karolinska Institutet, Stockholm, Sweden

Laboratory of Immunorheumatology and Tissue Regeneration, Rizzoli Orthopaedic Institute, Bologna, Italy Lisignoli Gina

Magni Fulvio Clinical Proteomics and Metabolomics Unit, School of Medicine and Surgery, University of Milano-Bicocca, Vedano al Lambro, Italy

Mariani Erminia Laboratory of Immunorheumatology and Tissue Regeneration, Rizzoli Orthopaedic Institute, Bologna, Italy

DPT of Medical and Surgical Sciences, Alma Mater Studiorum University of Bologna, Bologna

Martin Ivan DPT of Biomedicine, University Hospital, Basel, Switzerland

Mattavelli Davide Unit of Otorhinolaryngology-Head and Neck Surgery, DPT of Medical and Surgical Specialties, Radiological Sciences, and Public Health, University of Brescia, Brescia, Italy

Missale Maria Cristina Division of Pharmacology, DPT of Molecular and Translational Medicine, University of Brescia, Brescia, Italy

DPT of Molecular and Translational Medicine. University of Brescia. Brescia. Italy Monti Eugenio

Unit of Otorhinolaryngology-Head and Neck Surgery, DPT of Medical and Surgical Specialties, Radiological Sciences, and Public Health, University of Brescia, Brescia, Italy Nicolai Piero

DPT of Molecular and Translational Medicine, University of Brescia, Brescia, Italy Pizzi Marina Radeghieri Annalisa DPT of Molecular and Translational Medicine, University of Brescia, Brescia, Italy

Unit of Blood Diseases and Stem Cell Transplantation, DPT of Clinical and Experimental Sciences, University of Brescia, Brescia, Italy Re Federica Russo Domenico Unit of Blood Diseases and Stem Cell Transplantation, DPT of Clinical and Experimental Sciences, University of Brescia, Brescia, Italy

Sanchez Manuel S. Division of Biomedical Engineering, School of Engineering, University of Glasgow, UK

Sardini Emilio DPT of Information Engineering, University of Brescia, Brescia, Italy

Sartore Luciana Science and Technology of Materials Laboratory, DPT of Mechanical and Industrial Engineering, University of Brescia, Brescia, Italy

DPT of Information Engineering, University of Brescia, Brescia, Italy Serpelloni Mauro

DPT of Molecular and Translational Medicine, University of Brescia, Brescia, Italy Sozzani Silvano

Tonello Sarah DPT of Information Engineering, University of Brescia, Brescia, Italy

SCIENTIFIC PROGRAM

Registration

9:00 Welcome of the Authorities

> - Rector of the University of Brescia Prof. M. Tira - Director General of ASST Spedali Civili di Brescia Dott. E. Belleri - Director General of the Italian National Transplant Centre (CNT) Dott. A. Nanni Costa

- President of Fondazione Comunità Bresciana

Welcome on behalf of GITMO and SIES and Introduction

D. Russo

First Session

Chairman: F. Magni, M. Pizzi, E. Mariani

Scaffold Universe – Engineering the cellular microenvironment with materials and growth factors M.S. Sanchez K. Le Blanc 10:00 The potential of MSCs in regenerative medicine B.P.A.M. Heiis 10:30 Lab-on-a-tissue: Using Mass Spectrometry Imaging in clinical research 11:00 Re-engineering developmental process for cartilage and bone regeneration I. Martin

11:30 -12:00 Coffee break

Second Session

Chairman: M. Castellano, R. Faglia, D. Russo

12:00 High performance Gelatin/Chitosan-based Hydrogels as Scaffolds for Tissue Engineering Applications L. Sartore C. Almici 12:20 Human Platelet Lysate production for h-MSCs expansion

12:40 Hydrogel Polymeric Scaffolds (HyPSs) bioengineered with Human Mesenchymal Stem Cells (hMSCs)

for regenerative medicine employment: a pilot study F. Re 13:00 Development of artificial cartilage on chitosan-based scaffolds: critical points and preliminary data

G. Lisianoli 13:20 The role of proteomics for molecular and cellular characterization of human platelet lysate and scaffolds C. Chinello

13:45 -14:30 Light Lunch

Third session

Chairman: P. Guizzi, E. Sardini, P. Nicolai

14:30 Skull base reconstructions after expanded endoscopic approaches: state of the art

14:50 3-D printing of biocompatible engineered polymers for personalized skull base reconstruction in endoscopic skull base surgery: preliminary results and future directions. the e-Bones Project

15:10 Sensing scaffolds for cell monitoring in tissue engineering

15:30 Research Activities in the Tissue Engineering Laboratory at the University of Brescia

Fourth session

Chairman: G. De Petro, S. Sozzani, E. Monti

15:50 A multidisciplinary approach to build an engineered heart tissue

16:10 iPS-derived dopaminergic neurons: a new tool to model neurodegenerative disorders

16:30 Extracellular vesicles in regenerative medicine

P. Dell'Era M.C. Missale

F. Doglietto

D. Mattavelli S. Tonello

M. Serpelloni

Dott. P. L. Streparava

A. Radeghieri