

Scientific Program



11th International Conference on
**Tissue Engineering &
Regenerative Medicine**
&

4th International Conference on
**Synthetic Biology and
Tissue Engineering**

October 18-20, 2018 | Rome, Italy

UK: Conference Series LLC Ltd
47 Churchfield Road, London, W3 6AY
Toll Free: +0-800-014-8923

DAY-1

October 18, 2018

Meeting Hall: **Olimpica 2**

09:00-09:30 Registrations

Opening Ceremony **09:30-09:50**

KEYNOTE FORUM

09:50-10:00 Introduction

10:00-10:40 **Title: Synthetic biology and programmable organoids**
Katherine Kiwimagi, Massachusetts Institute of Technology, USA

10:40-11:20 **Title: Reconstruction of urinary organs using tissue engineering constructs with mesenchymal stem cells**
Natalia Yuditceva, Russian Academy of Sciences, Russia

GROUP PHOTO

Networking & Refreshments 11:20-11:35 @ Foyer

Workshop: Thermal and electrohydrodynamic processes for Tissue Engineering Applications

INTRODUCTION

11:35-12:15 **Title: Electrospun nanostructured scaffolds for tissue engineering applications**
Dimitrios Lamprou, Queen's University Belfast, UK

12:15-12:55 **Title: Electrospinning & 3D Printing in tissue engineering: Challenges and recent advances**
Dimitrios Lamprou, Queen's University Belfast, UK

Lunch Break 12:55-13:55 @ Hotel Restaurant

Sessions: Tissue Regeneration | Bone and Cartilage Tissue Engineering | Novel Approaches in Guided Tissue Regeneration | Tissue Engineering and 3D Printing | Materials and Designs for Tissue Engineering | Scaffolds | Systems Biology | Synthetic Biology

Chair: Katherine Kiwimagi, Massachusetts Institute of Technology, USA

Chair: Nataliya Yuditceva, Russian Academy of Sciences, Russia

INTRODUCTION

13:55-14:20 **Title: Branched nerve regeneration using non-tubular artificial nerve sheets**
Yoshihisa Suzuki, Kitano Hospital, Japan

14:20-14:45 **Title: The cell-cell communication tool box: The synthetic design and implementation of short and long range mammalian cell to cell communication systems**
Katherine Kiwimagi, Massachusetts Institute of Technology, USA

14:45-15:10 **Title: Poly(L,L-lactide)/collagen/calcium glycerylphosphate composite scaffold seeded with mesenchymal bone marrow stromal cells for bone tissue regeneration**
Yuliya Nashchekina, Russian Academy of Sciences, Russia

15:10-15:35 **Title: Laser-induced differentiation of adipose stem cells to functional neuronal cells**
Sajan George, University of Johannesburg, South Africa

Networking & Refreshments 15:35-15:50 @ Foyer

Panel Discussion

DAY-2

October 19, 2018

Meeting Hall: Olimpica 2

KEYNOTE FORUM

09:50-10:00 Introduction

10:00-10:40 **Title: Initial results of a pilot trial of tissue engineered myringoplasties in Western Australia**
Harvey Coates, The University of Western Australia, Australia

10:40-11:20 **Title: The use of bioinformatics to discover the hidden world of the Twin arginine transport (Tat) system's signal peptides**
Sharon Mendel Williams, Coventry University, UK

Networking & Refreshments 11:20-11:35 @ Foyer

Sessions: Tissue Regeneration | Bone and Cartilage Tissue Engineering| Novel Approaches in Guided Tissue Regeneration | Tissue Engineering and 3D Printing | Materials and Designs for Tissue Engineering | Scaffolds | Systems Biology | Synthetic Biology

Chair: Harvey Coates, The University of Western Australia, Australia

INTRODUCTION

11:35-12:00 **Title: Exploring unique compounds from lignin degradation using Mutated DyP-type peroxidase enzymes.**
Sharon Mendel Williams, Coventry University, UK

12:00-12:25 **Title: Role of endothelial biomarkers in patients with coronary artery diseases**
Naglaa K Idriss, Assuit University Egypt

12:25-12:50 **Title: Stem Cells and Regenerative Medicine in Cardiovascular Engineering**
Mohammad Reza Hashemzadeh, Royesh Stem Cell Biotechnology Institute, Iran

Lunch Break 12:50-13:50 @ Hotel Restaurant

POSTER PRESENTATIONS 13:50–14:50 @ FOYER

Poster Judge: Sharon Mendel Williams, Coventry University, UK

- P: 01** **Title: The therapeutic effect of rat olfactory ensheathing cell transplantation on posttraumatic cysts of the spinal cord**
Olga Stepanova, V Serbsky National Medical Research Center for Psychiatry and Narcology, Russia
- P: 02** **Title: The therapeutic effects of catechol-functionalized hyaluronic acid patch combined with mesenchymal stem cells in diabetic wound**
Hyo Jin Kang, Seoul National University Bundang Hospital, South Korea
- P: 03** **Title: Regenerative Medicine: Gene and stem cell therapy for lung injury**
Cheng-Wen Wu, National Yang-Ming University, Taiwan
- P: 04** **Title: Development and optimisation of complex liver models by 3D bio-printing**
Marie Cuvellier, Research Institute for Environmental and Occupational Health, France
- P: 05** **Title: Development of a bioprinted 3D model of aortic valve leaflet seeded with human valvular interstitial and endothelial cells**
Elena Butoi, Institute of Cellular Biology and Pathology, Romania
- P: 06** **Title: Jurkat T cells activity under co-cultivation with MMSCs and three-dimensional calcium phosphate matrix.**
Egor Shunkin, Immanuel Kant Baltic Federal University, Russia
- P: 07** **Title: The effect of activation processes on Jurkat T cells under co-cultivation with MMSCs and three-dimensional calcium phosphate matrix**
Vladimir Malashchenko, Immanuel Kant Baltic Federal University, Russia
- P: 08** **Title: Fabrication of Enriched Scaffold by Extracellular Matrix of Mesenchymal Stem Cells in 3D Culture**
Zahra Khodabandeh Jahromi, Shiraz University of Medical Sciences, Iran
- P: 09** **Title: The Impact of Gene Polymorphisms -899G/C and certain indices on hepatic fibrosis**
Naglaa K Idriss, Assuit University Egypt
- P: 10** **Title: Beneficial Effects of Adipose-Derived-Mesenchymal Stem Cells (AD-MSCs) versus Anti-Parkinson drug in a rat model of Parkinson's disease: Relationship to the molecular genetic expressions, ultrastructural and physiological responses**
Naglaa K Idriss, Assuit University Egypt

Networking & Refreshments 14:50-15:05 @ Foyer

PANEL DISCUSSION

DAY-3

October 20, 2018

Networking and Lunch @ Hotel Restaurant

Awards & Closing Ceremony