The 13th Royan International Congress on Stem Cell Biology and Technology (2017)
International Invited Speakers

Prof. Khuloud T. Al-Jamal
Chair of Drug Delivery & Nanomedicine,
Drug Delivery Group,
Institute of Pharmaceutical Science,
King's College,
UK

Key Research Areas:
Nanomedicine; theranostic applications; pharmacokinetic studies; live small animal imaging by SPECT/CT and MRI imaging; RNAi; gene delivery; magnetic drug targeting; stem cell research

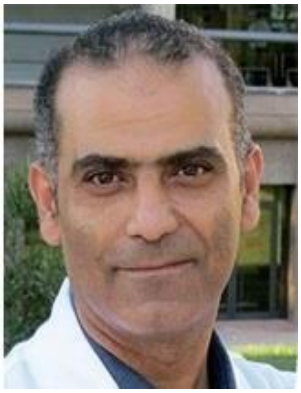
1. A Taster of The Applications of Nanomaterials in Biomedicine
2. Liposomes Encapsulating Alendronic Acid for Γδ T Cell Cancer Immunotherapy

Prof. Marcos J. Araúzo-Bravo

Professor of research in Ikerbasque,
Biodonostia Health Research Institute,
Head of the Computational Biology and Systems,
Biomedicine Research Group,
Calle Doctor Begiristain,
Spain

Key Research Areas:
Computational Biology and Bioinformatics applied to the study of the interaction of –omics networks in the context of regenerative medicine and human diseases

1. Computational Epigenomics Tools to Understand the Cellular Language of Pluripotency and Reprogramming
2. Computational Biology Analysis of Transcriptomics Dynamics Identifies Genes Specific to Primordial Germ Cells



Prof. Maher Atari

Director of UIC Regenerative Medicine Research Institute, Professor of Medical-surgical pathology Department,
International University of Catalunya
Spain

Key Research Areas:
Bone Tissue Engineering, Osteogenic Differentiation
Mesenchymal Stem Cell, Biotechnology, Tissue Engineering, 3D Culture, Regenerative Medicine
Tissue Scaffolds

1. DPPSC as a New Pluripotent-Like Adult Stem Cells
2. DPPSC For Bone Regeneration and Biomaterial Evaluation

Prof. Eva Bober

Department of Cardiac Development and Remodelling for Heart and Lung Research,
W.G. Kerckhoff-Institute,
Max-Planck-Institute,
Germany

Key Research Areas:
Heart and Lung Research

1. Novel Functions of Sirt7 in Securing Genomic Integrity during Cellular Stress Responses

Prof. Thomas Braun
Director of the Department of Cardiac Development & Remodeling, Max Planck Institute for Heart & Lung Research,
Germany

Key Research Areas:
molecular basis of development,
Development of diseases of the heart as well as regeneration and repair processes on the
Hearts, regeneration of heart and heart
Skeletal musculature

1. Epigenetic Regulation of Muscle Stem Cells
2. Molecular Control of Cardiomyocyte Proliferation Remodeling and Regeneration

Dr. Tohid Didar

Assistant Professor
Department of Mechanical Engineering,
School of Biomedical Engineering,
McMaster University,
Canada

Key Research Areas:
development of bio-functional interfaces with simultaneous repellency and targeted binding effective on biomaterials, biosensors and medical coatings

1. Bio-Functional Omniphobic Surfaces for Biomedical Applications
2. Miniaturized Devices for Detection, Sorting and In Vitro Culture of Cells

Dr. Massimo Dominici

Head of Laboratory of Cellular Therapies,
Director of Residency School in Medical Oncology
University - Hospital of Modena & Reggio Emilia
Italy

Key Research Areas:
stem cell biology and his translational applications in oncology hematology and regenerative medicine, focusing on hematopoietic and mesenchymal stromal/stem cells (MSC)

1. Modifying MSC to Target Cancers
2. Dissecting MSC Limitations to Design a More Efficient: Regenerative Medicine for the Skeleton

Prof. Farzin Farzaneh

Professor of Molecular Medicine, King's College
Honorary Consultant in Specialist Medicine,
King's College Hospital NHS Trust, Department of Haematological Medicine, Division of Cancer Studies,
The Rayne Institute
UK

Key Research Areas:
Gene therapy-mediated immune rejection of cancer; cellular differentiation; molecular genetic analysis

1. Therapeutic Cancer Vaccines
2. Cancer Gene Therapy – New Concepts and Novel Strategies

Prof. Anne Grapin-Botton
Professor of Developmental Biology,
DanStem University of Copenhagen,
Denmark

Key Research Areas:
understanding how pancreatic cells differentiate during embryogenesis, and determining what limits the pancreatic cells' regeneration in adults

1. Studying Single-Cell Contribution to Organogenesis, the Pancreas Example
2. Three-Dimensional (3D) Organoid Cultures of the Pancreas as a Mean to Study Pancreas Development and Diseases

Prof. Patrick J. Hanley,

Laboratory Facility Director,
Cellular Therapy and Stem Cell Processing
The George Washington University
USA

Key Research Areas:
Cell therapy, Stem cell transplant, Good manufacturing practices

1. Treating Patients with Naïve T Cell-Derived Antiviral T Cells
2. Requirements for A Cellular Therapy Facility: Expecting the Unexpected

Prof. Shin-ichi Hisanaga
Head of Laboratory of Molecular Neuroscience,
Department of Biological Sciences, Tokyo Metropolitan University,
Japan

Key Research Areas:
functions and regulation of Cdk5 in neurons to elucidate the molecular mechanisms underlying the complicated neuronal activities

1. Cyclin-Dependent Kinase 5, its Role in Neuronal Differentiation, Synaptic Activity and Neurodegeneration
2. Axon and Dendrite Formation, the Molecular Mechanism Viewed from Membrane Trafficking

Dr. Erdal Karaoz

Head of the Department of Histology, Embryology, and Stem Cell,
Center for Regenerative and Stem Cell Research and Manufacturing (LivMedCell),
Istinye University,
Turkey

Key Research Areas:
Cellular treatment, Stem Cells, Cancer Stem Cells, Tissue/organ engineering, Gene Therapy, Tailor-made treatment, Oncogram

1. Muscular Dystrophies: How Could Stem Cells Help?
2. Cellular and Acellular Therapies in Neurodegenerative Diseases

Dr. Kiarash Khosrotehrani

Associate Professor, NHMRC Career, Development Fellow, Diamantina Institute Faculty of Medicine, The University of Queensland,
Australia

Key Research Areas:
Tissue regeneration, Endogenous response to injury. Vascular and Epithelial repair in response to ischemia or wounding. Hair follicle biology, cycling and regeneration. Skin cancer. Factors determining melanoma survival.

1. Molecular and Functional Characterisation of Vessel Resident Human Endothelial Progenitor Cells
2. Functional Definition of Endothelial Hierarchy from Progenitor to Mature Endothelial Cells in Adult Vasculature

Prof. Jenneke Klein-Nulend

Professor of Oral Cell Biology,
Department of Oral Cell Biology,
ACTA-University of Amsterdam & Vrije University,
The Netherlands

Key Research Areas:
Molecular Biology, Cell Biology, Biomedical Engineering Cell Culture, Tissue Engineering, Stem Cell Culture

1. Cytokines TNF-alpha, IL-6, IL-17F, and IL-4 Differentially Affect Osteogenic Differentiation of Human Adipose Stem Cells

Dr. Sabah Mozafari

Paris School of Neurosciences (ENP) Sorbonne University– University of Pierre and Marie Curie (Paris VI), Brain and Spinal Cord Institute (ICM) Pitié-Salpêtrière Hospital,
France

Key Research Areas:
Multiple Sclerosis, iPSC, Neurodegenerative Diseases, Immunohistochemistry, Brain Culture, Adult Neurogenesis,

1. Re-Myelination and Functional Integration of Ips-Derived Neural Precursors following Transplantation in the Developing and Adult Demyelinated White Matter

Dr. Mustapha Najimi

Principal Investigator,
Laboratory of Pediatric Hepatology & Cell Therapy,
Institute of Experimental & Clinical Research (IREC),
Université Catholique de Louvain,
Belgium

Key Research Areas:
Hepatocytes, Cell Therapy, Stem Cell Biology, Liver Regeneration, Cell Transplantation

1. Application of Mesenchymal Stem Cells in Liver Diseases: Current Landscape And Future Trends
2. Liver Mesenchymal Stem Cells for Liver Fibrosis

Prof. Andras Nagy

Shawn Kimel Research Scientist,
Lunenfeld-Tanenbaum Research Institute,
Sinai Health System,
Canada

Key Research Areas:
stem cells, tissue engineering and regenerative medicine, Discovered a new method to create pluripotent stem cells

1. Pluripotency in the Artificial Cell Space
2. A Solution for Cell Therapy Safety

Dr. Amir Sanati Nezhad

Assistant Professor,
Department of Mechanical and Manufacturing Engineering, Principal Investigator of BioMEMS and Bioinspired Microfluidic Laboratory, Calgary Centre for Innovative Technology (CCIT),
University Of Calgary,
Canada

Key Research Areas:
BioMEMS, Microfluidics, Tissue Engineering, Micro and Nano Technology, and Lab-on-Chip

1. Enhanced Cell-Substrate Impedance Sensing for Neuronal Differentiation Monitoring
2. Nanoscale Optoregulation of Neural Stem Cell Differentiation by Intracellular Alteration of Redox Balance

Prof. Jörn Walter
Head of the Department of Genetics & Epigenetics,
Saarland University,
Campus Saarbrücken,
Germany

Key Research Areas:
Epigenetics, Epigenomics, DNA-methylation, basic research on preimplantation development, stem cell bioloy, genomic imprinting

1. DNA Methylation Maintenance in Mouse Preimplantation Development
2. Epigenomics