

**14th Royan International Congress
on
Stem Cell Biology & Technology**

Scientific Program

August 29 - 31, 2018

August 29, 2018, 8:00-8:30, Main Hall (Joint Session for Two Congresses)

Opening Ceremony

8:00 – 8:05	Holy Quran & Iranian National Anthem
8:05 – 8:10 Marziyeh Shiva (Iran)	19 th Congress Chairperson, Reproductive Biomedicine
8:10-8:15 Sara Pahlevan (Iran)	14 th Congress Chairperson, Stem Cell Biology and Technology
8:15-8:20 Amir Ali Hamidieh (Iran)	Secretary of Development of Stem Cell Sciences and Technologies Council
8:20-8:25 Mohammad Ali Sadighi Gilani (Iran)	President of Iranian Society for Reproductive Medicine (ISRM)

August 29, 2018, 8:40- 10:30, Hall 1 (Joint Session for Two Congresses)

Keynote Lectures (Hall 1)

Chairpersons: H. Gourabi, A.H. Shahverdi, A. Aflatoonian, A.A. Hamidieh, M.A. Sadighi Gilani

8:40- 9:10 Caroline Gargett (Australia)	Towards the clinical translation of a mesenchymal stem cell-based therapy for pelvic organ prolapse
9:15– 9:55 Michele De Luca (Italy)	Skin regeneration with insights
10:00-10:30 Teresa Woodruff (USA)	A microfluidic culture model of the human reproductive tract and 28-day menstrual cycle
10:30-11:00	Coffee Break, Exhibition & Poster session

August 29, 2018, 11:00 – 13:00, Hall 1 (Joint Session for Two Congresses)

Award Ceremony (Hall 1)

<i>19th Royan International Award Ceremony</i>	
13:00-14:00	Lunch Break, Exhibition & Poster session

August 29, 2018, 14:00 – 15:30, Hall 1

Pluripotent Stem Cells (Part I)

Chairpersons: M. Cohen-Tannoudji, R. Kemler, Sh. Moradi, S. N. Hassani

14:00-14:20 Michel Cohen-Tannoudji (France)	Specification and maintenance of cell identities in the early mammalian embryo
14:20-14:40 Pierre Savatier (France)	Revisiting LIF/GP130/JAK/STAT3 signaling in human pluripotent stem cells
14:40-15:00 Rolf Kemler (Germany)	Trimethylation and acetylation of β -catenin at lysine 49 represent a key element in ES cell pluripotency
15:00-15:20 Alessandro Prigione (Germany)	iPSC-based drug discovery of neurological mitochondrial DNA diseases

15:20-15:30 Sharif Moradi (Iran)	Contribution of microRNAs to the regulation of ground state pluripotency
15:30-16:00	Coffee Break, Exhibition & Poster session

August 29, 2018, 16:00 – 17:40, Hall 1

Stem Cells and Regenerative Medicine in Neurodegenerative Diseases (Part I)

Chairpersons: W. Tetzlaff, P. Vanderhaeghen, M. Javan, S. Kiani

16:00-16:20 Wolfram Tetzlaff (Canada)	Myelinogenic Plasticity of Oligodendrocyte Precursor Cells and role of remyelination in Locomotor recovery following contusive spinal cord injury
16:20-16:40 Mohammad Javan (Iran)	In vivo conversion of Astrocytes into Oligodendrocyte Lineage Cells; Promise for Myelin Repair in Multiple Sclerosis
16:40-17:00 Ryoichiro Kageyama (Japan)	Dynamic control of embryonic neural stem cells
17:00-17:20 Pierre Vanderhaeghen (Belgium)	From stem cells to cerebral cortex in a dish: Mechanisms and perspectives for modeling human brain diseases and evolution
17:20-17:40 Saverio Bellusci (Germany)	Two-way conversion between lipogenic and myogenic fibroblastic phenotypes marks the progression and resolution of lung fibrosis <i>19th International Royan Award Winner</i>
17:40-18:00	Concluding remarks and discussion

August 30, 2018, 8:30 – 10:30, Hall 1

Pluripotent Stem Cells (Part II)

Chairpersons: N. Rivron, P. Savatier, S. Taleahmad, V. Khoddami

8:30-8:50 Pierre Savatier (France)	Naïve pluripotency and chimeric competency in rabbits and non-human primates
8:50-9:10 Nicolas Rivron (Netherlands)	Blastocyst-like structures with implantation potential formed solely from stem cells
9:10-9:30 Rolf Kemler (Germany)	β -Catenin regulates Telomerase in stem and cancer cells
9:30-9:50 Saman Hosseinkhani (Iran)	Common biochemical origin for embryonic stem cell death and differentiation
9:50-10:00 Sara Taleahmad (Iran)	BMP4 Signaling Pathway Plays a Critical Role in Self-renewal of Mouse Embryonic Stem Cells
10:00-10:10 Adeleh Taei (Iran)	Two nuclear receptors NR5A2 and RAR γ induce human naïve pluripotent state
10:10-10:30	Concluding remarks and discussion
10:30-11:00	Coffee Break, Exhibition & Poster session

August 30, 2018, 11:00 – 13:00, Hall 1

Stem Cell Technology (Part I)

<i>Chairpersons: J. Mano, S. Kazemnejad, P. Mohammadi, L. Montazeri</i>	
11:00-11:30 Michele De Luca (Italy)	Skin regeneration
11:30-11:50 Joao Mano (Portugal)	Instructive natural-based hydrogels as platforms for stem cell cultures for tissue engineering applications
11:50-12:10 Saeid Amini Nik (Canada)	3D skin printing: in-situ formation of planar tissues
12:10-12:30 Somaieh Kazemnejad (Iran)	In vivo improved wound healing using a bilayer skin substitute based on silk fibroin and amniotic membrane
12:30-12:40 Hossein Ghanian (Iran)	Injectable tough hydrogels for engineering load-bearing soft tissues
12:40-13:00	Concluding remarks and discussion
13:00-14:00	Lunch Break, Exhibition & Poster session

August 30, 2018, 14:00 – 15:30, Hall 1

Recent Advances in Stem Cells and Regenerative Medicine (Part II)

<i>Chairpersons: C. Gargett, A. Baradaran-Rafii, M. Vosough, F. Esfandiari</i>	
14:00-14:20 Caroline Gargett (Australia)	Identification and characterisation of endometrial stem/progenitor cells
14:20-14:40 Michel Cohen-Tannoudji (France)	Consequences of ribosome biogenesis inhibition on normal and pathological intestinal stem/progenitor cells
14:40-15:00 Alireza Baradaran-Rafii (Iran)	Corneal Regeneration
15:00-15:10 Yaser Tahamtani (Iran)	Development of pancreatic organoids within a bio-engineered device
15:10-15:20 Soura Mardpour (Iran)	Hepatoprotective effects of intra-splenic injection of extracellular vesicles generated from human ES-MSCs on chronic liver injury
15:20-15:30	Concluding remarks and discussion
15:30- 16:00	Coffee Break, Exhibition & Poster Reading

August 30, 2018, 16:00 – 17:30, Hall 1

Recent Advances in Stem Cells and Regenerative Medicine (Part I)

<i>Chairpersons: J. Kim, S. Pahlavan, S. Rajabi</i>	
16:00-16:20 Johnny Kim (Germany)	Targeted inactivation of oncogenic drivers of cancer originating in adult stem cells during muscle regeneration.
16:20-16:40 Mohammad Hossein Mohammadi (Canada)	Development of Functional Heart Ventricle Using Human Induced Pluripotent Stem Cell Derived Cardiomyocytes

16:40-17:10 Sarah Rajabi (Iran)	Bioengineering of a humanized heart by seeding of hipsc-derived cardiovascular progenitor cells into growth factor-tethered rat heart matrix <i>19th National Royan Award Winner</i>
17:10-17:20 Sadaf Vahdat (Iran)	Chemically defined culture condition for expansion and maintenance of human pluripotent stem cell-derived early cardiovascular progenitor cells
17:20-17:30	Concluding remarks and discussion

August 31, 2018, 8:30 – 10:30, Hall 1

Stem Cells and Regenerative Medicine in Neurodegenerative Diseases (Part II)

Chairpersons: R. Kageyama, P. Vanderhaeghen, A. Prigione, K. Shahpasand

8:30-8:50 Ryoichiro Kageyama (Japan)	Dynamic control of adult neural stem cells
8:50-9:10 Wolfram Tetzlaff (Canada)	Remyelination failure potentiates axon loss and impairs motor function following cuprizone demyelination
9:10-9:30 Pierre Vanderhaeghen (Belgium)	Using mouse-human chimeric brain to study neuronal development and diseases
9:30-9:50 Alessandro Prigione (Germany)	Modeling Leigh syndrome using patient-derived neural cells
9:50-10:10 Fariba Sharifian (Germany)	Modeling of contextual data processing in the visual cortex
10:10-10:20 Soroosh Shekarchian (Iran)	Adipose Tissue- Derived Mesenchymal Stem Cells In Peritoneal Dialysis Patients
10:20-10:30 Narges Labibzadeh (Iran)	Autologous bone marrow derived mesenchymal stromal cell intraarticular implantation for treatment of rheumatoid arthritis induced knee osteoarthritis
10:30- 11:00	Coffee Break, Exhibition & Poster Reading

August 31, 2018, 11:00 – 13:00, Hall 1

Stem Cell Technology (Part II)

Chairpersons: S. Amini Nik, Sh. Bonakdar, S. Hosseini, M.K Ashtiani

11:00-11:20 Joao Mano (Portugal)	Nanotechnology approaches in the design of hybrid constructs for regenerative medicine
11:20-11:40 Nicolas Rivron (Netherlands)	Platforms for controlling organogenesis in a dish
11:40-12:00 Johnny Kim (Germany)	Harnessing functional genomics to identify mechanisms of stem cell dependent tissue regeneration
12:00-12:20 Saeid Amini Nik (Canada)	Myeloid lineage cell during healing: Friend or Foe?
12:20-12:40	Imprinting cell membrane: Recent progress and future perspective

Shahin Bonakdar (Iran)	
12:40-12:50 Samaneh Hosseini (Iran)	Delivery of 1, 10-Phenanthroline and Cannabidiol Small Molecules Enhances Regeneration of Critical-sized Radial Bone Defects in Rat
12:50-13:00	Concluding remarks and discussion
<i>Closing Ceremony</i>	