

5th Iranian Congress on Progress in Tissue Engineering and Regenerative Medicine

Panel Schedule Tables

Panel 1: Tissue Engineering and Regenerative Medicine in Ophtalmology (Day 1, Hall 1)

Panel chair: Dr. Masood Naseripour Panel Board: Dr. Seyed Hashem Daryabari, Dr. Leila Sattarian, Dr. Hossein Aghamollaei, Dr. Mazaher Gholipourmalekabadi		
Time	Speaker	Title of Presentation
08:00–08:20	Dr. Naseripour	Stem Cell Therapy in Ophthalmology: Current Advances and New Horizons
08:20–08:40	Dr. Daryabari	Limbal stem cell regeneration
08:40–09:00	Dr. Sattarian	Innovative PEG-Based Hydrogel Loaded with Growth Factors for Enhanced Retinal Detachment Repair
09:00–09:20	Dr. Aghamolaei	Updates in tissue engineering and cell therapy for the treatment of corneal disease
09:20–09:40	Dr. Gholipourmalekabadi	Fabrication of a bilayer membrane core-shell electrospun mats by emulsion-based electrospinning of polycarbonate /silk fibroin on the amniotic membrane with anti-inflammatory effects in corneal alkali burn injuries

Panel 2: Biomaterial Applications in Regenerative Medicine (Day 1, Hall 2)

Panel chair: Dr. Hamid Mirzadeh Panel Board: Dr. Hajir Bahrami, Dr. Ali Zamanian, Dr. Afzal Karimi, Dr. Hamid Yeganeh		
Time	Speaker	Title of Presentation
08:00–08:20	Dr. Bahrami	Nanofibers containing plant extracts, an ancient therapy with new applications as restorative biomaterials
08:20–08:40	Dr. Yeganeh	Photothermal-Responsive Non-Isocyanate Polyurethane Wound Dressings with Enhanced Antibacterial Activity
08:40–09:00	Dr. Rajabi	Decellularized ECM-Based Materials and Scaffolds: Advanced Platforms for Soft Tissue Regeneration
09:00–09:20	Dr. Kouhi	Multifunctional 3D-Printed Scaffolds: Combining Osteostimulation and Antibacterial Properties for Bone Regeneration
09:20–09:40	Dr. Maryam Farokhi	Characterization of silk fibroin/ glycosaminoglycan hybrid hydrogel: Cell adhesion and mechanical response

Break

Opening Ceremony

Panel Board: Dr. Akhondzadeh, Dr. Nader Tavakoli, Dr. Majid Safa, Dr. Mohammad Farhadi, Dr. Mohammad Taghi Joghataei Speakers: Dr. Aghdami, Dr. Samadikouchaksaraei	
Time	Speaker
10:10–10:30	Dr. Tavakoli
10:30–10:50	Dr. Akhondzadeh
10:50–11:10	Dr. Safa
11:10–11:30	Dr. Samadikouchaksaraei
11:30–11:50	Dr. Aghdami

12:30-13:30 Lunch Time

Panel 3: Soft Tissue Engineering (1) (Day 1, Hall 1)

Panel chair: Dr. Hossein Salehi Panel Board: Dr. Nasim Vosoughi, Dr. Sara Rajabi, Dr. Naser Amini		
Time	Speaker	Title of Presentation
13:30–13:40	Dr. Salehi	Unveiling the Schwann Cell Plasticity and Reprogramming in Nerve Regeneration
13:40–14:00	Dr. Vosoughi	Stem cell applications in neurodegenerative disorders: challenges and future perspectives
14:00–14:15	Dr. Amini	Regenerative medicine in neurodegenerative diseases and injuries
14:15–14:30	Dr. Ahmadsreza Farmani	Pulsed electric fields in regenerative medicine: fundamentals, opportunities and challenges
14:30–14:45	Dr. Seyed Ali Shirani	A Novel Approach to the Fabrication and Modification of Scaffolds for Lung Tissue Engineering
14:45–15:00	Shayan Khoshtarkib	Neural Differentiation of human dental pulp stem cells (DPSC) cultured in lenticules obtained from Small Incision Lenticule Extraction (SMILE) surgery

Panel 4: Tissue Engineering and Regenerative Medicine in Gynecology (Day 1, Hall 2)

Dr. Soudabeh Kazemi Panel Board: Dr. Mina Ghaemi, Dr. Azadeh Tarafdari, Dr. Masoumeh Majidi, Dr. Darvish – Dr. Farah Farzaneh, Dr. Mina Rashid Poryaei		
Time	Speaker	Title of Presentation
13:30–13:40	Dr. Kazemi, Dr. Ghaemi	Overview of Regenerative Medicine Goals in Women's Health
13:40–14:00	Dr. Azadeh Tarafdari Manshadi	Fundamentals of Biomaterials, Stem Cells, and Organoid Models: Applications in the Uterus, Ovary, and Endometrium
14:00–14:15	Dr. Masoumeh Majidi	Treatment of Asherman's Syndrome Using Biological Scaffolds and Endometrial Organoids

14:15–14:30	Dr. Soudabeh Darvish – Dr. Farah Farzaneh	Biological Scaffolds for Cervical Dysplasia and Cervical Insufficiency
14:30–14:45	Dr. Rashid Poryaei	Pathways for Human and Animal Clinical Trials, Current Regulations of the Ministry of Health, and Ethical Compliance

15:00-15:30 Break

Panel 5: Cell & Cell Extracts: From Bench to Bedside (1) (Day 1, Hall 1)

Panel chair: Dr. Mohammad Ali Shokrgozar Panel Board: Dr. Mehdi Farrokhi, Dr. Zohreh Bagher, Dr. Haramshahi, Dr. Mehdi Talebi		
Time	Speaker	Title of Presentation
15:30–15:50	Dr. Roya Karimi	Biofabrication of a 3D Patient-Derived Inflammatory Bowel Disease (IBD) Organoid Model Using Organoid Culture Technology
15:50–16:10	Dr. Talebi	T-cell Exhaustion Affects in Immunotherapies and Protection Strategies
16:10–16:30	Dr. Rezakhani	Exosome-based therapies in the cardiovascular system
16:30–16:50	Dr. Mazloumi	Combining NK Cell Immunotherapy and Mitochondrial Targeting as a Reliable Approach for the Treatment of Triple Negative Breast Cancer
16:50–17:10	Dr. Zolfaghari	The role of Toll-like receptors (TLRs) activation on anti-inflammatory and immunomodulatory effects of mesenchymal stem cells in in a rheumatoid arthritis rat model

Panel 6: Musculoskeletal System Regeneration (Day 1, Hall 2)

Panel chair: Dr. Mehdi Moghtadaei Panel Board: Dr. Mahmoud Azami, Dr. Mohsen Setayeshmehr, Dr. Behnaz Bakhshandeh		
Time	Speaker	Title of Presentation
15:30–15:50	Dr. Azami	Bioceramics-based 3D printed scaffolds for bone tissue engineering
15:50–16:10	Dr. Setayeshmehr	3D printing and Bioprinting Approaches in Cartilage Tissue Engineering Applications
16:10–16:30	Dr. Shahrbanoo Jahangir	3D Bioprinted Osteochondral Tissue- on- Chip: A Biomimetic Platform for Drug Discovery and Precision Medicine in Arthritis
16:30–16:50	Dr. Bakhshandeh	Electrical Stimulation as an Effective Approach to Bone Tissue Engineering
16:50–17:10	Dr. Kangari	Mesenchymal stem cell therapy in bone defect regeneration

Day 2

Panel 7: New Approaches and Technologies in Tissue Engineering (Day 2, Hall 1)

Panel chair: Dr. Nooshin Haghighipour		
Panel Board: Dr. Behnaz Ashtari, Dr. Zeinab Barzegar, Dr. Maryam Saadatmand		
Time	Speaker	Title of Presentation
08:30–08:50	Dr. Ashtari	Hightroughput bioprinting for tissue engineering
08:50–09:10	Dr. Barzegar	Predictive AI in Personalized Tissue Therapies: From Cell Data to Clinical Outcomes
09:10–09:30	Dr. Mollapour	Patient-Derived Organoids: A Game-Changer in Personalized Cancer Medicine
09:30–09:50	Dr. Aliyari	The promise and challenges of cell therapy in solid tumors
09:50–10:10	Dr. Leila Gholami	Evaluation and preparation of neural stem cell loaded with chitosan nanoparticle containing super magnetic iron oxide and doxorubicin for targeted treatment of glioblastoma
10:10–10:30	Dr. Hossein Ghasemi	Paclitaxel-Loaded Dual Modified PLGA Nanoparticles for Glioma Chemo-Immunotherapy

Panel 8: Skin Regeneration and Repair (1) (Day 2, Hall 2)

Panel chair: Dr. Mohammad Reza Nourani		
Panel Board: Dr. Mohamad Pezeshki-Modaress, Dr. Arash Goodarzi, Dr. Shiva Asadpour, Dr. Simin Nazarnezhad		
Time	Speaker	Title of Presentation
08:30–08:50	Dr. Noorani	Development and investigation of the properties of a biological wound dressing based on bacterial cellulose containing bioactive glass nanoparticles
08:50–09:10	Dr. Asadpour	Tissue engineering constructs for repair and regeneration of skin injuries
09:10–09:30	Dr. Arash Goodarzi	Gelatin-based hydrogel functionalized with taurine moieties for in vivo skin tissue regeneration
09:30–09:50	Dr. Pezeshki	Skin regeneration using advanced biopolymer-based composite structures
09:50–10:10	Dr. Nazarnezhad	Functional bilayer scaffolds for wound healing applications

Break

Panel 9: Soft Tissue Engineering (2) (Day 2, Hall 1)

Panel chair: Dr. Reza Rahbarghazi		
Panel Board: Dr. Nafiseh Bahiraei, Dr. Vahid Hosseinpour Sarmadi, Dr. Rafieh Alizadeh		
Time	Speaker	Title of Presentation
11:00–11:20	Dr. Rahbarghazi	Stem cells therapy in cardiac tissue regeneration after ischemia
11:20–11:40	Dr. Nafiseh Alizadeh	Therapeutic Potential of Stem Cells in Olfactory Dysfunction Treatment
11:40–11:50	Somayeh Saadat	miRNA-32-5p and Smad6 Dynamics in Cardiomyocyte Differentiation of Endometrium-Derived Mesenchymal Stem Cells

11:50-12:00	Zahra Jafarisavari	Development of New Nanofibrous Nerve Conduits by PCL-Chitosan-Hyaluronic Acid containing Piracetam-Vitamin B12 for Sciatic Nerve: A Rat Model
12:00-12:10	Dr. Mozghan Abasi	Enhanced Sciatic Nerve Regeneration Using Poly(ϵ -Caprolactone)/Multi-Wall Carbon Nanotube Neural Guidance Conduit Containing Mesenchymal Stem Cells and EGCG Encapsulated Chitosan Nanoparticles in a Rat Model
12:10-12:20	Sahar Shamsad	Fabrication, Characterization, and Biological Assessment of Gelatin/Chitosan Composite Hydrogels Containing Diprophylline for Use in Neural Tissue Engineering

Panel 10: Skin Regeneration and Repair (2) (Day 2, Hall 2)

Panel chair: Dr. Nasrin Lotfi Bakhshayesh Panel Board: Dr. Afsaneh Sadeghzadeh Bazargan, Dr. Sara Simorgh, Dr. Shohreh Mashayekhan		
Time	Speaker	Title of Presentation
11:00-11:20	Dr. Lotfi Bakhshayesh	Bioprinters in Bone and Skin Tissue Engineering
11:20-11:40	Dr. Simorgh	Revolutionizing Recovery: The Future of full-thickness wound Healing through 3D Bioprinting
11:40-12:00	Dr. Alireza Rezapour	Preparation of vancomycin-loaded silk/dialdehyde starch nanoparticles wound dressing for antibacterial effects on infected burn wounds
12:00-12:20	Dr. Parvaneh Naserzadeh	Herbal Glucose/Cellulose-Based Mesoporous Graphene Frameworks for Activating the Caspase Mechanisms in Diabetic Wound Healing
12:20-12:30	Mahtab Ghasemi Toudeshkchouei	Comparison of the Wound Healing and Antibacterial Effects of a Hydrogel Dressing Based on Natural Polymer Extracted from Flaxseed with Tetracycline Ointment in a Diabetic Wistar Rat Model

Lunch Time

Panel 11: Cell & Cell Extracts: From Bench to Bedside (2) (Day 2, Hall 1)

Panel chair: Dr. Masoud Soleimani Panel Board: Dr. Massoud Vosough, Dr. Behzad Baradaran, Dr. Sara Pahlevan, Dr. Jafar Kiani, Dr. Iman Seyhoun		
Time	Speaker	Title of Presentation
13:20-13:40	Dr. Vosough	Immunotherapy in liver malignancy
13:40-14:00	Dr. Pahlevan	In Vitro Fabricated Cardiac Microtissues Accelerated Cardiovascular Research towards Cardiac Regenerative Medicine and Cardiotoxicity Assays
14:00-14:20	Dr. Baradaran	Emerging Roles of Dendritic Cell Therapy in Cancer and Autoimmune Diseases: Advances and Clinical Applications
14:20-14:40	Dr. Seyhoun	The application of organoids in disease treatment
14:40-14:50	Zeinab Shahm Mahmoudi	Melatonin treatment: a strategy to ameliorate the negative effects of glucose

Panel 12: Tissue Engineering and Cell Therapy in Gynecology (2) (Day 2, Hall 2)

Panel chair: Dr. Sedigheh Hantoushzadeh Panel Board: Dr. Tarafdari, Dr. Shafati, Dr. Ghanbari, Dr. Changizi, Dr. Omranipour		
Time	Speaker	Title of Presentation
13:30–13:40	Dr. Hantoushzadeh	Three-Dimensional Placental Scaffolds, Applications of the Amniotic Membrane, and Advanced Treatments for Fetal Anomalies
13:40–14:00	Dr. Shafati	Engineering of the Follicular Niche, Follicle Preservation After Chemotherapy, and Biobanking Strategies.
14:00–14:20	Dr. Tarafdari	Encapsulation Technologies for Follicles, Ovarian Tissue Transplantation, and Fertility Preservation in Cancer Patients.
14:20-14:40	Dr. Ghanbari – Dr. Changizi – Dr. Omranipour	Treatment of Urinary Incontinence Using Stem Cells, Mesh Alternatives, and Levator Ani Muscle Reconstruction
14:40-15:00	Dr. Marwa al ajami	Tiny messengers, big impact: the role of exosomes in gynecology
15:00-15:20	Fatemeh Hosseinpour	A new approach for preparation of human decellularized ovarian scaffold based on supercritical carbon dioxide protocol

Break

Panel 13: Cell & Cell Extracts: From Bench to Bedside (3) (Day 2, Hall 1)

Panel chair: Dr. Ali Samadikuchaksaraei Panel Board: Dr. Mousa Kehtari, Dr. Shahrbanoo Jahangir, Dr. Naghme Bahrami		
Time	Speaker	Title of Presentation
15:30–15:50	<u>Dr. Hengameh Dortaj</u>	Secretome Rich Scaffold as a Niche to Accelerate Full Thickness Skin Regeneration
15:50–16:10	<u>Elham Seidkhani</u>	Bioactive, injectable and schiff base cross-linked ternary hydrogel encapsulating ectomesenchymal stem cells for spinal cord injury repair
16:10–16:20	<u>Dr. Soheila Naderi Gharahgheshlagh</u>	Clinical trials of autologous epidermal cell transplantation in hypopigmented burn scar spot treatment
16:20–16:30	Mohammadmehdi Barfar	Intratesticular Administration of Menstrual Blood-Derived Stem Cell Secretome Improves Hormonal Profile in Patients with Idiopathic Non-Obstructive Azoospermia: A Phase I Clinical Trial
16:30-16:40	Dr. Elham Ghanbari	Investigation of Osteogenic Differentiation and Bone Regeneration Potential of Calcitonin Incorporated into Gelatin/Silk Fibroin Scaffolds
16:40-16:50	Mohsen Bakhtiari	Sustained and localized delivery of mesenchymal stem cells-derived extracellular vesicles by in situ forming PEG click hydrogel for diabetic nephropathy therapy

Panel 14: Soft tissue engineering (3) (Day 2, Hall 2)

Panel chair: Dr. Zohreh Bagher Panel Board: Dr. Haramshahi, Dr. Setayeshmehr, Dr. Bozorgi, Dr. Narges Fereydouni		
Time	Speaker	Title of Presentation
15:30–15:50	Dr. Narges Fereydouni	Development of Dual-Drug Thermoresponsive Chitosan Hydrogels Incorporating Repaglinide and Difluorinated Curcumin for Enhanced Antibacterial and Wound-Healing Performance
15:50–16:10	<u>Mohammad Ali Omidwar</u>	Evaluation of the effect of secretome extracted from Wharton's jelly mesenchymal stem cells on bovine sperm during induced oxidative stress
16:10–16:20	Dr. Azam Bozorgi	Decellularized placenta/PRP composites for generating insulin-producing cells, an in vitro study
16:20–16:30	<u>Mardmohammad Davoudi</u>	Beta cell regeneration using mRNA containing embryonic genes in a rat model of STZ-induced diabetes
16:30-16:40	<u>Mina Bahrami</u>	Bilayer Chitosan and Carboxymethyl cellulose Hydrogel Film Reinforced with Eggshell-Derived Calcium Phosphate as Potential Wound Dressing
16:40-16:50	<u>Dr. Hossein Eyni</u>	Design and fabrication of a novel bioink based on testicular extracellular matrix/gelatin methacrylate for generation of human bioartificial testis
16:50-17:00		

Special Symposium on Exosome Therapy: Opportunities and Challenges: (Day 3, Main Hall)

Panel 1: Opportunities in exosome therapy

Panel chair: Dr. Nilforoushzadeh Panel Board: Dr. Elham Behrangi, Dr. Aghdami, Dr. Saeed Mehrzadi, Dr. Ali Dehghani Firoozabadi, Dr. Hoda Madani, Dr. Aghayan, Dr. Zahra Ghalanbor, Dr. Abedi		
Time	Speaker	Title of Presentation
08:30-08:40	Dr. Behrangi	The role of exosomes and cellular growth factors in the treatment of various types of hair loss
08:40-09:00	Dr. Aghdami	
08:40-09:00	Dr. Hashemi	Engineering of extracellular vesicles and their therapeutic applications: a review of preclinical studies
09:00-09:20	Dr. Nilforoushzadeh	Regenerative medicine in dermatology

Panel 2: Regulations

Panel Board: Dr. Nilforoushzadeh, Dr. Aghayan, Dr. Zahra Ghalanbor, Dr. Ali Dehghani Firoozabadi, Dr. Abedi, Dr. Madani, Dr. Mehrzadi	
	Dr. Saeed Mehrzadi
	Dr. Ali Dehghani Firoozabadi
	Dr. Madani
	Dr. Aghayan
	Dr. Zahra Ghalanbor
	Dr. Abedi

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