# New Frontiers in Stem Cell Basic Research, Translation and Clinical Application in association with the *International Placenta Stem Cell Society*

September 19- 21<sup>st</sup>, 2016

### Riyadh,

#### Saudi Arabia

**MEETING VENUE** KSAU-HS Convention Center, King Saud bin Abdulaziz University, Riyadh, Saudi Arabia

		DAY 1 – Monday, 19 September 2016	
		3rd Stem Cells Conference (IV IPLASS MEETING)	
Time	Minutes	Торіс	Speaker
7:30-9:00	1hr 30`	Registration	
		Opening Ceremony	
9:10- 9: 25	15`	Welcome Address, KAIMRC Executive Director	Dr. Ahmed Al Askar
9:25-9:40	15`	Opening Remarks, Chief Executive Officer, NGHA and President, KSAU-HS	H.E. Dr. Bandar Al Knawy
9:40- 10:00	20`	Local Organizer and IPLASS President Welcome	Mohamed Abumaree/ Dunia Jawdat/ Ornella Parolin
10:00- 10:30	30`	Coffee Break	
		SESSION ONE: Stem Cells/ Progenitor Cells in Human Placenta Moderators: Ornella Parolini and Monther Alalwan	
10:30- 10:55	25`	Humane amniotic membrane for novel applications in regenerative medicine	Susanne Wolbank (Austria)
10:55- 11:20	25`	Immune Modulatory Properties of Human Placental Mesenchymal Stem Cells	Mohamed Abumaree (Saudi Arabia)
11:20- 11:45	25`	Immune Aspects of Mesenchymal-Endothelial Interactions	Guenther Eissner (UK)
11:45- 1:00	1hr 15 min	Prayer and Lunch Break	
		SESSION TWO: Placenta Derived Cells from their Characteristics to their Application	n
		Moderators: Stephen Strom and Abdullah Assiri	
1:00- 1:25	25`	The pathobiology of placental stem cells and its relevance to therapeutic interventions	Bill Kalionis (Australia)
1:25- 1:50	25`	Amniotic Membrane, in cooperation with TGFß, induces epithelialization in human chronic wounds	Francisco Villaescusa (Spain)
		Young investigator presentation	
		Moderators: Graham Parker, Benjamin Buller and Raed Abu Dawud	
1:50- 2:05	15`	Amniotic Membrane Stimulates Keratinocyte Proliferation and Migration in	Ángel Bernabé García
		Chronic Wounds by Modifying TGFB-Induced Gene Expression Program	(Spain)
2:05-2:20	15`	In vivo differentiation of Amniotic Epithelial Cells into hepatic sinusoidal	Fabio Marongiu
		endothelial cells	(Italy)
2:20- 2:35	15`	The cardioprotective potential of the human amniotic fluid stem cell secretome	Sveva Bollini
		in a doxorubicin-derived cardiotoxicity model	(Italy)
2:35-2:50	15`	Human amniotic membrane is a suitable candidate to improve bone repair	Florelle Gindraux (France)
2:50- 4:00	1hr 10 min	Poster Session, Prayer and Coffee Break	
		IPLAS Young investigator presentation Moderators: Lee Farmer, Ismail A Bakhsh and Bahauddeen Al-rfaei	
4:00-4:15	15`	Human mesenchymal stem/multipotent stromal cells from Decidua Parietalis of	Bushra Alhazmi
		human term placenta modulate monocyte interaction with HUVEC	(Saudi Arabia)
4:15-4:30	15`	Isolation methods of pluripotent and multipotent stem cells from human	Wahaj Uddin
		umbilical cord blood: Application to Drug Metabolism Studies	(India)
4:30-4:45	15`	Human mesenchymal stem/multipotent stromal cells from Decidua Parietalis of	Saud Al-Sarheed
		human term placenta modulate the expression of receptors important in	(Saudi Arabia)
		mediating the immunomodulatory functions of macrophages in cancer	
4:45-5:00	15`	The Effect of Endothelial Activation and Hypoxia on Placental Chorionic	Batla Al-Sowayan
		Mesenchymal Stem Cell Migration	(Saudi Arabia)
		IPLASS General Assembly	

## **SCIENTIFIC PROGRAM**

DAY 2 – Tuesday, 20 September 2016 3rd Stem Cells Conference (IV IPLASS MEETING)					
Time	Minutes	Торіс	Speaker		
		SESSION THREE: Cell Approaches Using Placental Stem Cells Moderators: Bill Kalionis, Susanne Wolbank and Abdullah Aldahmash			
8:00- 8:25	25`	The current landscape of the therapeutic potential of placental cells	Ornella Parolini (Italy)		
8:25- 8:50	25`	Translation of human amnion epithelial cell therapy of liver disease to the clinic	Stephen Strom (Sweden)		
8:50-9:15	25`	Placental Mesenchymal Stromal Cells Rescue Ambulation in Ovine Myelomeningocele	Lee Farmer (USA)		
9:15-9:40	25`	Multiple aspects of Wharton's jelly mesenchymal stem cells action in cell therapy.	Giampiero La Rocca (Italy)		
		IPLAS Young investigator presentation Moderators: Guenther Eissner and Alaa Alshareeda			
9:40- 9:55	15`	In vivo-like membrane lipidomics positively influence in vitro features of cultured mesenchymal stromal cells derived from human placenta	Martina Rossi (Italy)		
9:55- 10:10	15`	Mesenchymal stem cells (MSCs) contribute to the pathology of endometriosis	Fawaz Abomaray (Sweden)		
10:10- 10:40	30`	Coffee Break	(Sweden)		
		Cord Blood Banking, Stem Cell Therapy and Stem Cells in Diseases			
		SESSION ONE: Cord Blood Banking and Cord Blood Immune Cells Moderators: Mohsen Alzahrani and Martin Maiers			
10:40-11:05	25`	Improving the quality and usage of Cord Blood transplants	Dunia Jawdat (Saudi Arabia)		
11:05- 11:30	25`	Towards optimizing the use of umbilical cord blood for immunotherapy	Aurore Saudemont (UK)		
11:30- 11:55	25`	WHERE CORD BLOOD? RE-SHAPING CB BANKS	Sergio Querol (Spain)		
11:55- 1:00	1hr 5 min	Prayer and Lunch Break			
		SESSION TWO: Stem Cell Therapy			
1 00 1 25	25)	Moderators: Gamal Gmati, Khadega Ahmed and Dipok Kumar Dhar			
1:00- 1:25	25`	Umbilical Cord Blood Transplantation – Strategies to Enhance Lympho-	John Wagner		
	-	Umbilical Cord Blood Transplantation – Strategies to Enhance Lympho- Hematopoietic Recovery	(USA)		
1:00- 1:25 1:25- 1:50	25` 25`	Umbilical Cord Blood Transplantation – Strategies to Enhance Lympho-			
	-	Umbilical Cord Blood Transplantation – Strategies to Enhance Lympho- Hematopoietic Recovery	(USA) Karen Ballen		
1:25- 1:50 1:50- 2:15	25` 25`	Umbilical Cord Blood Transplantation – Strategies to Enhance Lympho- Hematopoietic Recovery Alternative Donor Transplantation-2016 Adoptive cell therapy after stem cell transplantation	(USA) Karen Ballen (USA)		
1:25- 1:50 1:50- 2:15 2:15- 2:40	25` 25` 25`	Umbilical Cord Blood Transplantation – Strategies to Enhance Lympho- Hematopoietic Recovery   Alternative Donor Transplantation-2016   Adoptive cell therapy after stem cell transplantation   Exosomes /miRNA mediate cell-based therapy induced neurological recovery?	(USA) Karen Ballen (USA) Michael Uhlin (Sweden) Benjamin Buller (USA)		
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1:25- 1:50 1:50- 2:15 2:15- 2:40 2:40- 3:05 3:05- 3:35	25` 25` 25` 25` 25` <b>86</b> <b>30</b> `	Umbilical Cord Blood Transplantation – Strategies to Enhance Lympho- Hematopoietic Recovery   Alternative Donor Transplantation-2016   Adoptive cell therapy after stem cell transplantation   Exosomes /miRNA mediate cell-based therapy induced neurological recovery?   Umbilical Cord Blood Transplantation – Strategies to Prevent GVHD and enhance Immune Recovery   Selected presentations: Stem Cell Therapy   derators: Steven Marsh, Khaled Alsayegh, Bhavesh V. Mistry and Mohammad Aziz   Prayer and Coffee Break   Selected presentations: Stem Cell Therapy   Moderators: Steven Marsh, Khaled Alsayegh and Mohammad Aziz   Stem Cell Therapy for Avascular necrosis of Femoral Head in Sickle cell disease   Vasoreparative effect of metformin on human CD34 <sup>+</sup> cells under	(USA) Karen Ballen (USA) Michael Uhlin (Sweden) Benjamin Buller (USA) John Wagner (USA) John Wagner (USA) Sherin Bakhashab		
1:25- 1:50 1:50- 2:15 2:15- 2:40 2:40- 3:05 3:05- 3:35 3:35- 3:50	25` 25` 25` 25` 25` 25` 15`	Umbilical Cord Blood Transplantation – Strategies to Enhance Lympho- Hematopoietic Recovery   Alternative Donor Transplantation-2016   Adoptive cell therapy after stem cell transplantation   Exosomes /miRNA mediate cell-based therapy induced neurological recovery?   Umbilical Cord Blood Transplantation – Strategies to Prevent GVHD and enhance Immune Recovery   Selected presentations: Stem Cell Therapy   derators: Steven Marsh, Khaled Alsayegh, Bhavesh V. Mistry and Mohammad Aziz   Prayer and Coffee Break   Selected presentations: Stem Cell Therapy   Moderators: Steven Marsh, Khaled Alsayegh and Mohammad Aziz   Stem Cell Therapy for Avascular necrosis of Femoral Head in Sickle cell disease	(USA) Karen Ballen (USA) Michael Uhlin (Sweden) Benjamin Buller (USA) John Wagner (USA) John Wagner (USA) Sherin Bakhashab (Saudi Arabia) Haifa Al- Turki		
1:25- 1:50 1:50- 2:15 2:15- 2:40 2:40- 3:05 3:305- 3:35 3:35- 3:50 3:50- 4:05	25` 25` 25` 25` 25` 30` 30` 15` 15`	Umbilical Cord Blood Transplantation – Strategies to Enhance Lympho- Hematopoietic Recovery   Alternative Donor Transplantation-2016   Adoptive cell therapy after stem cell transplantation   Exosomes /miRNA mediate cell-based therapy induced neurological recovery?   Umbilical Cord Blood Transplantation – Strategies to Prevent GVHD and enhance Immune Recovery   Selected presentations: Stem Cell Therapy   derators: Steven Marsh, Khaled Alsayegh, Bhavesh V. Mistry and Mohammad Aziz   Prayer and Coffee Break   Selected presentations: Stem Cell Therapy   Moderators: Steven Marsh, Khaled Alsayegh and Mohammad Aziz   Stem Cell Therapy for Avascular necrosis of Femoral Head in Sickle cell disease   Vasoreparative effect of metformin on human CD34 <sup>+</sup> cells under hyperglycemia and hypoxia	(USA) Karen Ballen (USA) Michael Uhlin (Sweden) Benjamin Buller (USA) John Wagner (USA) John Wagner (USA) Sherin Bakhashab (Saudi Arabia)		

## **SCIENTIFIC PROGRAM**

DAY 3 – Wednesday, 21 September 2016 3rd Stem Cells Conference (IV IPLASS MEETING)						
Time	Minutes	Торіс	Speaker			
		SESSION THREE: Research Ethics, Donor Registry and HLA TYPING				
		Moderators: Aurore Saudemont, Dunia Jawdat and John Wagner				
8:00-8:25	25`	Research Ethics and Regenerative Medicine	Graham C Parker (Canada)			
8:25- 8:50	25`	HLA and non-HLA Criteria to Pick the Optimal Unrelated Donor	Carlheinz Mueller (Germany)			
8:50- 9:15	25`	HLA Diversity in the Middle East and Globally	Martin Maiers (USA)			
9:15-9:40	25`	Third Generation Sequencing - the solution to HLA typing	Steven Marsh (UK)			
9:40- 10:05	25`	HLA typing and beyond	lilias Doxi (Germany)			
10:05- 10:35	30`	Coffee Break				
		SESSION FOUR: Stem Cells in Diseases, Disease Modelling and Stem Cell Sheet Moderators: Michael Uhlin and Bhavesh Mistry				
10:35-11:00	25`	Modeling human metabolic liver disease with iPS and liver humanized mice	Stephen Strom (Sweden)			
11:00- 11:25	25`	Epigenetic Regulation of Mesenchymal Stem Cell Differentiation	Nehad M. Alajez (Saudi Arabia			
11:25- 11:50	25`	Characterization of novel genes regulating osteoblast differentiation of bone marrow stromal cells	Amer Mahmood (Saudi Arabia			
11:50- 1:00	1hr 10 min	Prayer and Lunch Break				
		SESSION FOUR: Stem Cells in Diseases, Disease Modelling and Stem Cell Sheet Moderators: Francisco Villaescusa and Iilias Doxi				
1:00- 1:25	25`	Towards the control of stem cell migration through the engineering cell surface glycans	Jasmeen Merzaban (Saudi Arabia)			
1:25- 1:50	25`	Cancer Stem Cells: Real or just Hype	Monther Alalwan (Saudi Arabia			
		Selected presentations: Stem Cells in Diseases, Disease Modelling and Stem Cell Shee Moderators: Sherin Bakhashab and Sveva Bollini	rt			
1:50- 2:05	15`	A novel Stem Cell Model for Personalized Drug Screening in Motor Neuron Disease	Sufana Al-Mashhadi (Saudi Arabia)			
2:05-2:20	15`	Enhancing the Safety of Induced Pluripotent Stem Cell (iPS) -Based Therapy for Heart Regeneration	Khaled Alsayegh (Saudi Arabia)			
2:20- 2:35	15`	The effect of MSCs on vascularization and function of Hepatocellular carcinoma	Alaa Alshareeda (Saudi Arabia)			
2:35- 3:35	60`	Poster Session, Prayer and Coffee Break				
		Selected presentations: Stem Cells in Diseases, Disease Modelling and Stem Cell Shee	et			
		Moderators: Tanvir Khatlani and Batla Al-Sowayan				
3:35- 3:50	15`	Pan-mammalian target of rapamycin (mTOR) inhibitor PP242 potentiates	Farid Ahmed			
		synergistically ABT737 induced apoptosis in acute myeloid leukemia cells	(Saudi Arabia)			
3:50- 4:05	15`	Effects of blue low-level laser to enhance the proliferation, viability and migration of	Ashok Kumar			
		human embryonic stem cells derived mesenchymal stem cells	(Saudi Arabia)			
4:05- 5:05	60`	CLOSING REMARKS				