

th CUHK International Symposium on **4** Stem Cell Biology & Regenerative Medicine

17-18 November 2014

The Postgraduate Education Centre Prince of Wales Hospital Shatin, Hong Kong

SMART Programme, Lui Che Woo Institute of Innovative Medicine, Faculty of Medicine, The Chinese University of Hong Kong Department of Orthopaedics and Traumatology, The Chinese University of Hong Kong Stem Cell and Regeneration Theme, School of Biomedical Sciences, The Chinese University of Hong Kong Centre for Stem Cell and Regeneration, The Chinese University of Hong Kong Key Laboratory for Regenerative Medicine (Jinan University-CUHK), Ministry of Education, China

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门内

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Programme Rundown

	Day 1 November 17, 2014 (Monday		onday)
	Time	Key Event	Speaker
		Venue: PEC Shaw Auditorium	
	08:30-08:50	Tendon stem cell aging and rejuvenation	Prof. Herb Sun, MD, PhD Albert Einstein College of Medicine, USA
Session 1: Stem Cells in Tendon and Intervertebral Regeneration	08:50-09:10	Tenogenic differentiation of MSCs and their applications	Prof. Gang Li, MD, PhD The Chinese University Hong Kong
Moderators:	09:10-09:30	Stem cells for intervertebral disc regeneration: Which cells? At we time? And how to deliver them?	nich Prof. Mauro Alini AO Research Institute Davos, Switzerland
Prof. Mauro Alini Prof. Gang Li	09:30-09:50	Notch signaling in development and disease	Prof. Urban Lendahl Karolinska Institutet, Sweden
	09:50-10:00	Panel discussion	
	10:00-10:30	Tea break and exhibitions	
Session 2: Conference Ceremony Moderator: Prof. KM Chan	10:30-10:45	Welcome address Group photo	Prof. Francis Chan Dean of Medical Faculty The Chinese University Hong Kong
	10:45-10:55	Introduction of MRN and SMART Program CUHK A Summary of MRN - From the inception in 2011 to the formal establishment in 2013	Prof. KM Chan The Chinese University Hong Kong
	10:55-11:05	UMC and CUHK	Prof. Wouter Dhert Utrecht University, Netherlands
Session 3:	11:05-11:15	KI and CUHK	Prof. Christer Rolf Karolinska Institute, Sweden
Musculoskeletal Regeneration Research Network (MRN) Moderator: Prof. KM Chan	11:15-11:23	Stanford and CUHK	Prof. Gang Li The Chinese University Hong Kong Prof. Stuart Goodman Stanford University
	11:23-11:30	ACC and OUH-Danish Technological Institute & CUHK	Prof. Ling Qin The Chinese University Hong Kong
	11:30-11:40	Summary of CUHK MSK regeneration research	Prof. KM Chan The Chinese University Hong Kong
	11:40-11:50	The 2015 KI MRN meeting in Stockholm on June 2-4, 2015	Prof. Li Felländer-Tsai Karolinska Institute, Sweden
Session 4: Keynote Speech 1 Moderator: Prof. Wai Yee Chan	12:00-13:00	Application of iPS cell technologies to cartilage regeneration	Prof. Noriyuki Tsumaki, M.D., Ph. D. Kyoto University, Japan
	13:00-14:00 Lunch break and exhibitions Buffet lunch in foyer		
Session 5:	14:00-14:20	3D printing technology and applications in orthopaedics	Prof. Jos Malda Utrecht University, Netherlands
New Technologies and Advancements Moderators:	14:20-14:40	MiR-204 suppresses skeletal neoplasia through inhibition of Runs Activated AKT signaling in mesenchymal stem cells	x2- Prof. Di Chen Rush University, USA
Prof. Stuart Goodman Prof. Wouter Dhert	14:40-15:00	Towards intraoperative cell repair	Prof. Geoff Richards AO Foundation Research Institute, Switzerland
	15:00-15:15	Panel discussion	
Session 6: Keynote Speech 2 Moderator: Prof. Jack Cheng	15:15-15:50	Regenerative Applications of Adult Stem Cells: Repair, Renovate, Re-create	and Rocky Tuan University of Pittsburg, USA
	15:50-16:05	Tea break and exhibitions	
	16:05-16:25	From development to osteoarthritis (OA) treatment	Prof. Hongwei Ouyang Zhejiang University, China
Session 7:	16:25-16:45	Technovolution of cartilage repair: one stage technology using aut and allogeneic cells	tologous Prof. Daniel Saris Utrecht University, Netherlands
Clinical Perspectives of Regenerative Medicine: The Reality and Challenges	16:45-17:05	The crosstalk of the town! – macrophages, osteoprogenitors and b formation	one Prof. Stuart Goodman Stanford University, USA
Moderators: Prof. Jack Cheng Prof. Li Felländer-Tsai	17:05-17:25	Osteoarthritis of the knee: What have we learnt?	Prof. Peter KY Chiu The University of Hong Kong
	17:25-17:40	Panel discussion	
	18:00-19:00	Dr. Lui Che Woo Distinguished Professor Public Lecture New Era of Medicine with iPS Cells	Prof. Shinya Yamanaka, MD, PhD Nobel Laureate in Physiology or Medicine 2012 Shaw Laureate in Life Science and Medicine 2008
			Shuw Luureure in Eije Science una meaterne 2000
	19:20	Meeting adjourns and bus transport to dinner venue at Shatin cen	

Programme Rundown

51			2014 (Tueseday)	- D 1.2	
'ime\Venue	РЕС К	ai Chong Tong		ar Room 1-3	
	Session 8: Muscle Highlights Symposium	Moderators: P rof. Huating Wang Prof. Jorge Ruas	Session 9: Regulatory Factors in Development and Diseases	Moderators: Prof. Yiping Li Prof. Kenneth Lee	
08:30-08:50	Prof. Tom Cheung <i>The Hong Kong University of Science a</i> Molecular regulation of stem cell quie		Prof. Oscar Lee Yangming University, Taiwan Calcium phosphate-bearing matrices induce osteogenic differentiation of mesenchymal stem cells through adenosine signaling		
08:50-09:10	Prof. Huating Wang <i>The Chinese University of Hong Kong</i> Functional characterization of Malat1 muscle regeneration	in skeletal myogenic differentiation and	Prof. Christer Rolf <i>Karolinska Institute, Sweden</i> The role of infection and genetic predisposition of failed healing in chronic tendon injuries and failed healing		
09:10-09:30	Prof. Zhenguo Wu <i>The Hong Kong University of Science a</i> The role of STAT3 in adult muscle ster		Prof. Bo Feng <i>The Chinese University of Hong Kong</i> Modulating stem cell genes using engineered TALE and Cas9 transcription factors		
09:30-09:50	Prof. Jorge Ruas Karolinska Institute, Sweden Targeting the PGC-1a system to regul diseases	ate skeletal muscle function and associated	Prof. Dongqing Cai Jinan University, China Cardiac telocytes synergized adult stem cell therapy for myocardial infarction		
09:50-10:10	Prof. Dahai Zhu <i>Beijing Union Hospital, China</i> The long noncoding RNA linc-RNA re regeneration by facilitating myoD-baf		Prof. Kingston Mak <i>The Chinese University of Hong Kong</i> Yap1 inhibits the initiation of fracture healing by controlling chondrocyte differentiation		
10:00-10:20	Panel discussion				
10:20-10:40	Tea break and exhibitions				
	Session 10: Cartilage Regeneration and Osteoarthritis	Moderators: Prof. Xiaodong Chen Prof. Lei Wei	Session 11: Musculoskeletal Tissue Engineering	Moderators: Prof. Tingting Tang Prof. Kevin Ho	
10:40-10:55	Prof. Nidhi Bhutani <i>Stanford University, USA</i> Epigenetic dysfunction in Osteoarthr	Prof. Nidhi Bhutani		Prof. Chao Wan <i>The Chinese University of Hong Kong</i> Erythropoietin/erythropoietin receptor in skeletal regeneration	
10:55-11:10	Prof. Xiaodong Chen Texas University, USA Tissue-specific Extracellular Matrix C Mesenchymal Stem Cell Differentiatic	controls the Fate of Bone Marrow-derived	Prof. Tingting Tang Shanghai Jiaotong University, China Repair and reconstruction of articular cartilage and subchondral bone with Sox 9 gene therapy and biphasic scaffold		
11:10-11:25	Prof. Lei Wei Brown University, USA Identification of Alpha 2 Macroglobulin (A2M) as a master inhibitor to attenuate osteoarthritis cartilage degeneration		Prof. Yang Wang Shanghai Jiaotong University, China Exosomes secreted by human-induced pluripotent stem cell-derived mesenchymal stem cells attenuate ischemic injury by promoting angiogenesis		
11:25-11:40	Prof. Yiping Li University of Alabama, USA Cbfβ promotes osteogenesis and chon expression and activating Wnt/β-cate:	drogenesis by suppressing adipocyte regulator nin signaling	Prof. Zhiyong Zhang Shanghai Jiaotong University, China 3D printing technique based bone tissue regeneration strategy		
11:40-12:00	Panel discussion				
12:00-13:00	Lunch break and exhibitions Buffet lunch in foyer				
	Session 12: Stem Cells Manipulation	Moderators: Prof. Ping Yuan Prof. Herb Sun	Session 13: Biomaterials and Regenerative Medicine	Moderator: Prof. Barbara Chan Prof. Li-ming Bian	
13:00-13:15	Prof. Cynthia Jiang <i>The Chinese University of Hong Kong</i> Dedifferentiation-reprogrammed MS6	Cs in regenerative medicine	Prof. Shengmin Zhang <i>Huazhong University of Science and Technology, China</i> Gradient bioactive scaffold for in vivo reconstruction of articular cartilage/ subchondral bone		
13:15-13:30		lly-derived mesenchymal stem cells while cy characteristics and their capacity for	Prof. Yunqing Kang, Kevin Florida Atlantic University, USA Tissue-engineering a vascularized β -TCP scaffold using biomimetic periosteum for bone regeneration		
13:30-13:45	Prof. Ping Yuan <i>The Chinese University of Hong Kong</i> The role of Rif1 in pluripotent stem ce	ll stability	Prof. Liming Bian <i>The Chinese University of Hong Kong</i> Functional biomaterials for cartilage repair		
13:45-14:00	Prof. Xufeng Qi Jinan University, China		Prof. Ling Qin <i>The Chinese University of Hong Kong</i> Magnesium as bioactive and biocorrosive orthopaedic implants		
	Involvement of Foxo3a in senescence	of cardiac microvascular endothelial cells	Magnesium as bioactive and biocorrosive	orthopaedic implants	

Programme Rundown

	Day	2 November 18, 2014 (Tueseday)	
	Time	Key Event	Speaker
		Venue: PEC Kai Chong Tong	
Session 14: Free Paper 15 min Award Paper 7 min presentation & 3 min questions Judger and commentators: Prof. Stuart Goodman Prof. Yiping Li Prof. Kingston Mak Prof. Tingting Tang	14:40-14:55	Themoreversible hyaluronan hydrogel induces disc phenotype in human mesenchymal stromal cells	David Eglin AO Foundation, Switzerland
	14:55-15:05	Yap1 inhibits the initiation of fracture healing by controlling chondrocyte differentiation	Yujie Deng School of Biomedical Sciences, CUHK
	15:05-15:15	Stepwise differentiation of human induced pluripotent stem cells for Achilles tendon regeneration by change of physical substrate	Can Zhang Zhejiang University
	15:15-15:25	Recovery of systolic synchrony in acute myocardial ischemia with treatment of autologous bone marrow mesenchymal stem cell transplantation in combination of transmyocardial laser revascularization in rabbit model	Fang Fang Cardiology, CUHK
	15:25-15:40	Intervention the cell energy metabolism – a possible route to prevent osteoporosis?	Yan Li Karolinska Institute, Sweden
	15:40-15:50	Repair of osteochondral defects with biodegradable hydrogel encapsulating manipulated mesenchymal stem cells in an animal model	Sien Lin Orthopaedics and Traumatology, CUHK
	15:50-16:00	PiggyBac mediated multiplex gene transfer in mouse embryonic stem cells	Xibin Lu South University of Science and Technology of China
	16:00-16:10	Mir-21 overexpressing mesenchymal stem cells accelerate fracture healing in a rat closed femur fracture model	Yuxin Sun Orthopaedics and Traumatology, CUHK
	16:10-16:20	Comments and questions	Judge panel members
		Free paper awards ceremony	Prof. Gang Li Prof. Stuart Goodman
	16:20-16:30	Conclusion remarks	Prof. KM Chan Prof. Gang Li
	16:30	Meeting adjourns and free evening time	