# Croucher Advanced Study Institute - Frontiers in Aging and Longevity

# 26-28 May 2019

Day 1 - 26 May 2019 (Sunday) Seminar Room 2, G/F, Laboratory Block, 21 Sassoon Road		
Time	Event	
8:45-9:00	Registration	
9:00-9:15	<b>Opening Ceremony: Welcome Address</b> Danny Chan, Acting Director, School of Biomedical Sciences, The University of Hong Kong	
	Public Lectures Chairs: John Sedivy and Yu Huang	
9:15-10:15	<b>Reprogramming Aging</b> Juan Carlos Izpisua Belmonte, Salk Institute for Biological Studies, USA	
10:15-10:45	Break	
10:45-11:30	SIRT6 in heterochromatin silencing and aging Vera Gorbunova, Department of Biology, University of Rochester, USA	
11:30-12:15	Intervention of Human Aging Brian Kennedy, National University of Singapore, Singapore	
12:15-14:00	Lunch (Registered participants only)	
14:00-15:00	The microbiome in aging and age-associated disorders Liping Zhao, Rutgers University, USA	
	Workshop 1 "Epigenetics, Metabolism and Aging" Chairs: Vera Gorbunorva and Bo Gao	
15:00-15:30	Vascular ageing: endothelial inflammation & atherogenesis Yu Huang, School of Biomedical Sciences, The Chinese University of Hong Kong	
15:30-16:00	Break	
16:00-16:20	Structural basis of SIRTs functions and their application in aging Quan Hao, School of Biomedical Sciences, The University of Hong Kong	
16:20-16:40	Perfecting DSB Repair on Transcriptionally-Active Chromatin Michael SY Huen, School of Biomedical Sciences, The University of Hong Kong	
16:40-17:00	<b>DNA methylation in stem cells maintenance</b> Chengmin Qian, School of Biomedical Sciences, The University of Hong Kong	
17:00-17:20	<b>Epigenetic regulation of cell fate</b> <i>Kui Ming Chan, Department of Biomedical Sciences, City University of Hong Kong</i>	
17:20-18:00	Close-door Discussion Discussion leader: Brian Kennedy	

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Day 2 - 27 May 2019 (Monday) Seminar Room 2, G/F, Laboratory Block, 21 Sassoon Road	
Time	Event
9:00-10:00	Close-door Workshop and Panel discussion on "New horizon of translational research in aging and longevity" Panel members: Juan Carlos Izpisua Belmonte, Brian Kennedy, Vera Gorbunova, John Sedivy
10:00-10:30	Break
	Public Lectures Chair: Juan Carlos Izpisua Belmonte
10:30-11:30	Old drug in new battle field: Retrotransposon as a target of aging and inflammation John Sedivy, Department of Molecular Biology, Cell Biology and Biochemistry, Brown University, USA
11:30-12:30	Immune remodeling in aging: etiology, consequences, and intervention Sean Leng, School of Medicine, Johns Hopkins University, USA
12:30-14:15	Lunch (Registered participants only)
14:15-15:00	Using stem cell and gene editing techniques to study and treat aging-related disorders Guanghui Liu, Institute of Biophysics, Chinese Academy of Sciences, China
	Workshop 2 "Stem cell and Aging" Chairs: Sean Leng and Gang Li
15:00-15:30	<b>Muscle stem cell regeneration</b> Zhenguo Wu, Division of Life Science, The Hong Kong University of Science and Technology
15:30-16:00	Break
16:00-16:20	<b>Muscle stem cell differentiation and self-renewal</b> Tom HT Cheung, Division of Life Science, The Hong Kong University of Science and Technology
16:20-16:40	<b>Regulation of muscle stem cells by non-coding RNA</b> Huating Wang, Department of Obstetrics and Gynaecology, The Chinese University of Hong Kong
16:40-17:00	<b>Stem cell spheres for therapeutic applications</b> <i>Renhe Xu, Faculty of Health Sciences, The University of Macau</i>
17:00-18:00	Close-door discussion Discussion leader: Zhongjun Zhou

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Day 3 - 28 May 2019 (Tuesday) Seminar Room 5, LG1/F, Laboratory Block, 21 Sassoon Road		
Time	Event	
	Public Lectures Chairs: Danny Chan and Michael SY Huen	
9:00-10:00	Longevity regulation mechanisms in C. elegans Seung-Jae Lee, Korea Advanced Institute of Science and Technology, South Korea	
10:00-10:30	Break	
10:30-11:15	Parkinson's disease - possible future disease modifiers (focusing on alpha- synuclein) Daniel Chan, University of New South Wales, Australia	
11:15-12:00	<b>Targeting on mitophagy and NAD<sup>+</sup> to extend human healthspan and Lifespan</b> <i>Evandro F. Fang, Faculty of Medicine, University of Oslo, Norway</i>	
12:00-14:00	Lunch (Registered participants only)	
14:00-15:00	The Telomere biology and aging Zhou Songyang, Baylor College of Medicine, USA	
	Workshop 3 "Regeneration and Aging" Chairs: Seung-Jae Lee and Zhenguo Wu	
15:00-15:30	<b>ECM as stem cell niche in tissue degeneration and regenerative medicine</b> Danny Chan, School of Biomedical Sciences, The University of Hong Kong	
15:30-16:00	<b>Sirtuin Family in aging</b> Baohua Liu, Department of Biochemistry and Molecular Biology, Shenzhen University, China	
16:00-16:30	Break	
16:30-17:30	Panel discussion on "Challenges and Opportunities in the era of aging" Panel members: Juan Carlos Izpisua Belmonte, Seung-Jae Lee, Danny Chan	
17:30-18:00	Conclusion of the ASI	

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#### Acknowledgement

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The Croucher Foundation is an independent private foundation established by the late Noel Croucher in 1979 to promote the standard of the natural sciences, technology and medicine in Hong Kong. The work of the Foundation is organised into five broad areas:

- scholarships and fellowships for promising young Hong Kong scientists and medical doctors to pursue research overseas;
- research fellowships to enable scientists in Hong Kong to pursue their intellectual inclinations, and to engage in bold new work;
- conferences, workshops and collaborative research to facilitate the exchange of ideas between Hong Kong scientists and their counterparts overseas;
- demonstration lectures to promote a wider understanding of science among Hong Kong school students and undergraduate students; and
- support for any undergraduate or postgraduate student in Hong Kong experiencing sudden financial difficulty.

Noel Croucher entrusted the governance of his Foundation to the discretion of a Board of Trustees. Lord Todd, the Nobel Laureate and Master of Christ's College, Cambridge was the founding President of the Foundation. The current Chairman is Professor Tak Wah Mak, a Fellow of the Royal Society, a foreign associate of the US National Academy of Sciences, a Fellow of the Royal Society of Canada and an internationally recognised pioneer in the fields of immunology and cancer research. Professor Mak took up the chairmanship of the Croucher Foundation in June 2011. The immediate past Chairman is Professor Yuet Wai Kan FRS.