City University of Hong Kong
Department of Biomedical Sciences
presents a seminar

# "Long term cell storage: the key to making regenerative medicine a reality"

by

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**Date : 21 Nov 2016**
**Time: 2pm to 3pm**
**Venue: Meeting Room 3 (1B-G04), G/F, Block 1, To Yuen Building**

**Abstract**
Regenerative medicine has been hailed as the future of medicine where the preservation and storage of single cells and cellular aggregates is indispensable to most therapeutic strategies. Current clinical protocols almost exclusively use cryopreservation with dimethyl sulfoxide (DMSO) to store haematopoietic stem cells despite its known cellular and systemic toxicity. There is also minimal understanding and control to optimise the process of cryopreservation, from nucleation, choice of cell density, through to the rate of freezing and thawing of the samples.

My research combines the demonstration of a safe and efficacious alternative cryoprotectant whilst developing a clearer understanding of the physics behind freezing, through parallel research threads. As such it is anticipated to have a broad beneficial impact on regenerative cellular therapies.

**About the Speaker**
The research interest of Dr Mahbubani is investigating efficient and effective delivery of probiotics to the intestine. In investigating the behaviour of probiotics in this environment, speaker's bioscience engineering group has focused on the effect of intestinal microbicides such as bile on dried probiotics, and is developing a novel formulation that relies on the principles of chromatography to protect dried bacteria from bile toxicity using Bile Adsorbing Resins.

## Contact

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## All are welcome