



# **Symposium Bioengineering in the 21<sup>st</sup> Century**

**August 20, 2015**

**Lecture Theater C, Chow Yei Ching Building  
The University of Hong Kong  
Pokfulam Road, Hong Kong**

**Organized by  
Medical Engineering Programme  
Faculty of Engineering  
The University of Hong Kong**



**Medical Engineering Programme  
The University of Hong Kong**

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**香 港 大 學**

# Symposium on Bioengineering in the 21<sup>st</sup> Century

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## Symposium Programme

8:30 - 9:00	<b>Registration</b>
9:00 - 9:10	<i>Welcome Address</i> Prof. Min Wang, The University of Hong Kong, Hong Kong
9:10 - 9:20	<i>IAC Chairman's Address</i> Prof. John Mok, Co-Chairman, AML Holdings Limited, Hong Kong
	<b>Session 1</b> Session Chair: Prof. Min Wang
9:20 - 10:20	<b>Keynote Lecture</b> <i>Bioengineering: Celebrating the Past, Envisioning the Future</i> Prof. Robert M. Nerem, Georgia Institute of Technology, USA
10:20 - 10:50	<i>Simulating the Cerebellum</i> Dr. Chung Tin, City University of Hong Kong, Hong Kong
10:50 - 11:00	Coffee break
11:00 - 11:30	<i>Stretching Light for Reaching Big-Data Biomedicine</i> Dr. Kevin Tsia, The University of Hong Kong, Hong Kong
11:30 - 12:00	<i>Image-guided and Robot-assisted Minimally Invasive Surgery</i> Dr. Ka-Wai Kwok, The University of Hong Kong, Hong Kong
12:00 - 12:30	<i>Orthopaedic Application of Silver Nanoparticles in Wound Healing</i> Dr. Michael To, The University of Hong Kong, Hong Kong
12:30 - 14:00	Lunch break
	<b>Session 2</b> Session Chair: Prof. Robert M. Nerem
14:00 - 14:45	<i>Heart, Heart Rate, and Heart Rate Variability with Applications of Controlled Breaths</i> Prof. Kang-Ping Lin, Chung Yuan Christian University, Taiwan
14:45 - 15:00	<i>Making Human Body Tissues - Making the Miracle</i> Miss Yu Zhou, The University of Hong Kong, Hong Kong
15:00 - 15:30	<i>Understanding the Role of Cross-membrane Transport in the Mechanical and Biological Response of Live Cells</i> Dr. Yuan Lin, The University of Hong Kong, Hong Kong
15:30 - 16:00	<i>A Gold@polydopamine Core-shell Nanoprobe for Long-term Intracellular Detection of microRNAs in Differentiating Stem Cells</i> Dr. C.H. Jonathan Choi, The Chinese University of Hong Kong, Hong Kong
16:00 - 16:10	Coffee break
16:10 - 16:40	<i>Nanopore and Nanoparticle Based Optical Biosensor for Biomolecule Detection</i> Dr. Mo Yang, Hong Kong Polytechnic University, Hong Kong
16:40 - 17:10	<i>Ultrasound Elasticity Imaging of Anisotropic Soft Tissues</i> Dr. Wei-Ning Lee, The University of Hong Kong, Hong Kong
17:10 - 17:40	<i>Development of Bioactive Protein Materials by Genetically Encoded Click Chemistry</i> Dr. Fei Sun, Hong Kong University of Science and Technology, Hong Kong
17:40 - 17:50	<i>Closing Remarks</i> Prof. Robert M. Nerem, Georgia Institute of Technology, USA

Registration Desk: Outside symposium venue, at 8:30 - 9:00 a.m., August 20, 2015