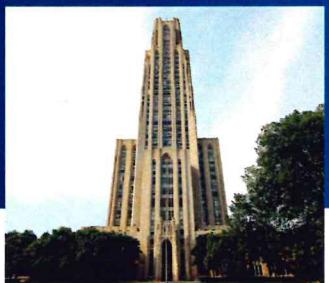




# **Symposium on Biomedical Research across the Continents Insight and Innovation**

**7 to 8 March 2013**

The Hong Kong University of Science and Technology



The Hong Kong University of  
Science and Technology



University of Pittsburgh



The Chinese University of  
Hong Kong



Tsinghua University

## ORGANIZING COMMITTEE



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School of Science  
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## ACKNOWLEDGEMENT

The organizer would like to recognize the Croucher Foundation  
for their generous support.



# **SYMPOSIUM ON**

## **“BIOMEDICAL RESEARCH ACROSS THE CONTINENTS—**

## **INSIGHT AND INNOVATION”**

The symposium on “Biomedical Research across the Continents — Insight and Innovation” will be held at The Hong Kong University of Science and Technology (HKUST) from 7 to 8 March 2013. Organized by HKUST, the University of Pittsburgh (Pitt), The Chinese University of Hong Kong (CUHK), and Tsinghua University (Tsinghua), the two-day symposium will focus on advances in neuroscience, immunology, infectious disease, imaging and modeling, normal and cancer cell biology, developmental biology, and regeneration. It aims to bring together eminent scientists from multiple biomedical fields to share their experiences and latest research findings, offer their insights, and participate in stimulating discussions.

## SYMPOSIUM PROGRAM

Thursday, 7 March 2013

8:00 a.m. Registration and Refreshments

8:30 a.m. Welcoming Remarks

Nancy Ip, PhD, The Hong Kong University of Science and Technology

Arthur S. Levine, MD, University of Pittsburgh

8:45 a.m. **SESSION 1: NEUROSCIENCE — BASIC, TRANSLATIONAL, AND CLINICAL**

Moderator: Nancy Ip, PhD (HKUST)

8:45 a.m. **Sen Song, PhD (Tsinghua)**

Studying Axonal Bouton Dynamics Using In vivo Two-photon Microscopy

and Neurite Tracing Algorithm

9:05 a.m. **Peter L. Strick, PhD (Pitt)**

A Tale of Two Primary Motor Areas: Old and New M1

9:25 a.m. **Nancy Ip, PhD (HKUST)**

Understanding the Molecular Basis of Neural Plasticity

9:45 a.m. **Karl Herrup, PhD (HKUST)**

Cycle Regulation in the Mature Neuron: A Life and Death Situation

10:05 a.m. Refreshment Break

10:20 a.m. **Wing-Ho Yung, PhD (CUHK)**  
Mechanism of Therapeutic Deep Brain Stimulation in Parkinson's Disease:  
Insight from an Animal Model

10:40 a.m. **David A. Lewis, MD (Pitt)**  
Cortical Excitatory/Inhibitory Balance and Cognitive Function in  
Schizophrenia

11:00 a.m. Questions & Discussion

11:20 a.m. **SESSION 2: IMMUNOLOGY AND INFECTIOUS DISEASE**  
Moderator: Donald S. Burke, MD (Pitt)

11:20 a.m. **Eugene D. Ponomarev, PhD (CUHK)**  
Regulation of Inflammation in the Central Nervous System: Platelets as  
Sensors of Neuronal Damage

11:40 a.m. **Wanli Liu, PhD (Tsinghua)**  
Seeing Is Believing: B Cell Immunology Studies Illuminated by High-  
Resolution, High-Speed Live-Cell and Single-Molecule Imaging Techniques

12:00 noon **Fadi G. Lakkis, MD (Pitt)**  
T Cell Migration in Non-Lymphoid Tissues: Lessons Learned from Imaging  
the Transplanted Kidney

12:20 p.m. **Stephen K.W. Tsui, PhD (CUHK)**  
Evolutionary Genomics in SARS-CoV-2 and Mycobacterium  
Tuberculosis

12:40 p.m.	<b>Gong Cheng, PhD (Tsinghua)</b>
	Mosquito C-Type Lectins Facilitate Flavivirus Infection
1:00 p.m.	Questions & Discussion
1:15 p.m.	LUNCH BREAK
2:30 p.m.	<b>SESSION 3: IMAGING AND MODELING</b>
	Moderator: Arthur S. Levine, MD (Pitt)
2:30 p.m.	<b>Donald S. Burke, MD (Pitt)</b>
	Models and Meta Models for Public Health Decision-Making: Systems
	Public Health and Its Application to Infectious Disease Epidemiology and
	Vaccines
2:50 p.m.	<b>Haitao Li, PhD (Tsinghua)</b>
	Decipher the Histone Methylation Code by Paired Reader Modules
3:10 p.m.	<b>Xuhui Huang, PhD (HKUST)</b>
	Modeling Dynamics of Conformational Changes of RNA Polymerase II
	Using Markov State Models
3:30 p.m.	Refreshment Break
3:45 p.m.	<b>Arthur S. Levine, MD (Pitt)</b>
	Imaging DNA Damage and Repair
4:05 p.m.	<b>Mingjie Zhang, PhD (HKUST)</b>
	Structural Biology of Neuronal Development and Signaling

4:25 p.m. **Ivet Bahar, PhD (Pitt)**  
Multiscale Modeling of Neurosignaling Events: From Molecular to  
Cellular Systems

4:45 p.m. Questions & Discussion

5:00 p.m. Adjournment

**Friday, 8 March 2013**

8:00 a.m. Registration and Refreshments

8:30 a.m. Welcoming Remarks  
Zhijie Chang, PhD, Tsinghua University  
Wai-Yee Chan, PhD, The Chinese University of Hong Kong

8:45 a.m. **SESSION 4: NORMAL AND CANCER CELL BIOLOGY**

Moderator: Zhijie Chang, PhD (Tsinghua)

8:45 a.m. **David K. Banfield, PhD (HKUST)**  
Mechanisms of Membrane Protein Retention in the Golgi

9:05 a.m. **Alexander Sorkin, PhD (Pitt)**  
Epidermal Growth Factor Receptor Endocytosis: Mechanisms and  
Function in Signaling

9:25 a.m. **Kehkooi Kee, PhD (Tsinghua)**  
Human Stem Cell and Germ Cell Biology

9:45 a.m.	<b>Zhijie Chang, PhD (Tsinghua)</b>
	A Novel Protein Family Regulates Differently on Cell Proliferation
10:05 a.m.	Refreshment Break
10:20 a.m.	<b>Randy Y.C. Poon, PhD (HKUST)</b>
	Checkpoint Abrogation and Mitotic Catastrophe: Mechanism and
	Therapeutic Potential
10:40 a.m.	<b>Jia-Wei Wu, PhD (Tsinghua)</b>
	New Element in Calcineurin Autoinhibition
11:00 a.m.	<b>Nancy E. Davidson, MD (Pitt)</b>
	Epigenetics and Breast Cancer
11:20 a.m.	<b>Andrew M. Chan, MD, PhD (CUHK)</b>
	Regulation of PTEN Tumor Suppressor
11:40 a.m.	Questions & Discussion
12:15 p.m.	LUNCH BREAK
1:30 p.m.	<b>SESSION 5: DEVELOPMENTAL &amp; STEM CELL BIOLOGY</b>
	Moderator: Wai-Yee Chan, PhD (CUHK)
1:30 p.m.	<b>Hsiao-Chang Chan, PhD (CUHK)</b>
	Epigenetic Regulation of Embryo Development by CFTR and Mir-125b
1:50 p.m.	<b>Kenneth K.H. Lee, PhD (CUHK)</b>
	Role of Brain and Reproductive organ-Expressed (BRE) Gene in Stem Cell
	Biology and Development

2:10 p.m.	<b>Wai-Yee Chan, PhD (CUHK)</b>  Epigenetic Regulation of Non-coding RNA in Normal and Abnormal Germ Cell Development
2:30 p.m.	<b>Zilong Wen, PhD (HKUST)</b>  Exploring the Origin of Microglia and Their Roles in the Nervous System in Zebrafish
2:50 p.m.	Refreshment Break
3:05 p.m.	<b>Qin Shen, PhD (Tsinghua)</b>  Neural Stem Cells: Lineage and Niche
3:25 p.m.	<b>Woody W.Y. Chan, PhD (CUHK)</b>  Migration of Sacral Neural Crest Cells in Mouse Embryos
3:45 p.m.	<b>Sun-On Chan, DPhil (CUHK)</b>  Axon Growth and Guidance at the Midline of the Mouse Central Nervous System
4:05 p.m.	<b>Zhenguo Wu, PhD (HKUST)</b>  Identification and Characterization of a Novel Pax7-Binding Protein in Muscle Stem Cells
4:25 p.m.	<b>Rocky S. Tuan, PhD (Pitt)</b>  Adult Mesenchymal Stem Cells: A Model for Tissue Development and Regeneration
4:45 p.m.	Questions & Discussion
5:00 p.m.	Adjournment

## SPEAKER LIST

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# GENERAL TRAVEL INFORMATION

## Octopus Card

Those who expect to take the MTR subway, based in Hong Kong, may consider buying an "Octopus card" at the Customer Service Center at the MTR or Airport Express stations. Octopus is the electronic ticketing system that makes traveling in Hong Kong simple and hassle-free. You can pass the ticket gates with a simple "touch & go" of your Octopus card. The Octopus cards can be used on multiple modes of transport: MTR (subway), Airport Express, railways, buses, ferries, etc. This saves you the trouble of carrying coins. These cards can also be used on most public payphones, vending machines, and photo booths in transport premises (supermarket and some catering outlets on campus as well). Other tickets available at the MTR and Airport Express stations are single-journey tickets, Tourist MTR 1-Day Pass, and Airport Express Tourist Octopus.

[http://www.mtr.com.hk/eng/homepage/cust\\_index.html](http://www.mtr.com.hk/eng/homepage/cust_index.html)

## The Mass Transit Railway (MTR)

The MTR is the easiest way for visitors to get around Hong Kong. Tickets can be purchased from machines in the stations on a trip-by-trip basis, or you can buy a multi-use Octopus card at MTR ticket windows. The Diamond Hill and Hang Hau MTR stations are the closest to the university.

[http://www.mtr.com.hk/jplanner/eng/planner\\_index.php](http://www.mtr.com.hk/jplanner/eng/planner_index.php)

## Time

The local time in Hong Kong is GMT +8.

## Mobile Phone Network

GSM, PCS, CDMA, and TDMA networks are available in Hong Kong.

## Foreign Currency Exchange

The currency unit in Hong Kong is the Hong Kong dollar (HK\$). It is pegged to the US dollar at a rate of HK\$7.8 to US\$1, with narrow fluctuation. Foreign currency exchange service is not provided by the Conference Office. However, for your convenience, there are three on-campus banks that provide this service.

Name of Bank	Opening Hours		Telephone Number
Hang Seng Bank Ltd.	Monday to Friday	9:00 – 17:00	2998 6262
Bank of China	Monday to Friday	9:00 – 17:00	2358 2345
	Saturday	9:00 – 13:00	
Bank of East Asia Ltd	Monday to Friday	9:00 – 17:00	3609 2425

## Insurance

The University is not responsible for any personal accidents, sickness, theft, or property damage encountered by conference participants. Participants are advised to arrange any necessary insurance for personal protection.

### **Tourism in Hong Kong**

Hong Kong is a unique city. It is more than a city where East-meets-West; it is a city where Chinese tradition blends with Western customs in different aspects. This uniqueness attracts millions of tourists to visit Hong Kong each year, and tourism is a major industry in Hong Kong. The Hong Kong Tourism Board (HKTB) is the official government-funded body that promotes the tourism industry. Please visit their website: <http://www.discoverhongkong.com/login.html> for tourist information about Hong Kong.

### **Other Useful Websites**

The Hong Kong University of Science and Technology

<http://www.ust.hk/eng/index.htm>

Hong Kong International Airport:

<http://www.hongkongairport.com/eng/index.html>

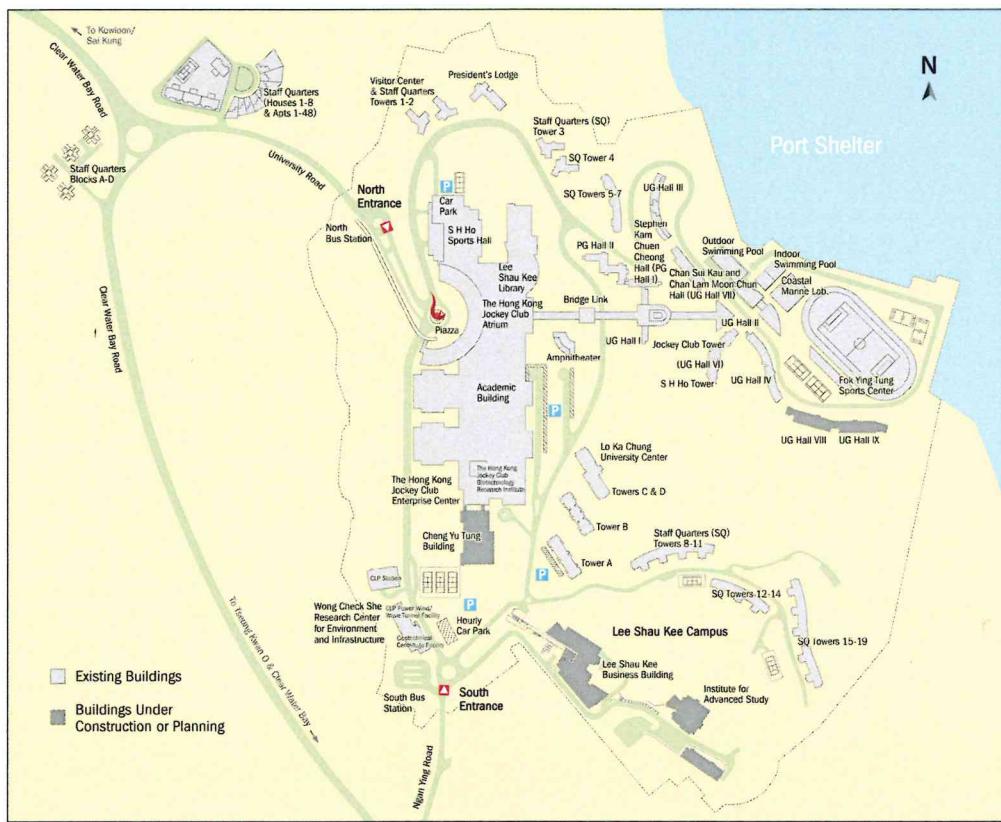
Hong Kong Tourism Board:

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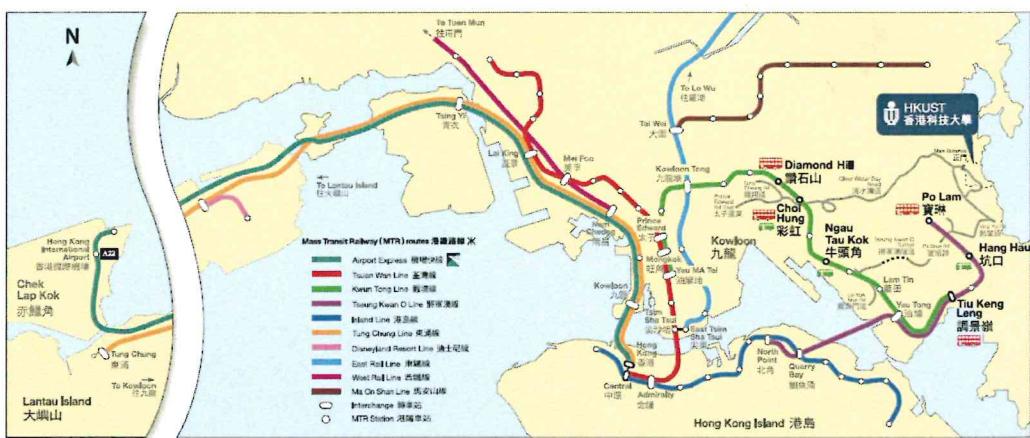
Mass Transit Railway Corporation

[http://www.mtr.com.hk/eng/homepage/cust\\_index.html](http://www.mtr.com.hk/eng/homepage/cust_index.html)

**CAMPUS MAP**  
THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY



**LOCATION MAP**  
THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY



**Transportation from airport to HKUST:**  
For passengers with bulky luggage, taking a taxi to HKUST direct is recommended.  
Those with simple luggage may take Airport Bus A22 to Lam Tin, and change for taxi to HKUST.

**Bus Routes** 巴士路線  
**Green Minibus Routes** 綠色專線小巴路線