2018 MOLECULAR IMAGING INSTRUMENTATION CONFERENCE

PET/MRI & SPECT/MRI

GUANGDONG
April 15, 2018

HONG KONG
April 16-17, 2018
Organizers:

- University of Chicago (UChicago) Pritzker School of Medicine
- University of Chicago (UChicago) Center in Hong Kong

Co-organizers:

- The Institute of High Energy Physics (IHEP) of the Chinese Academy of Sciences (CAS)
- The University of Hong Kong (HKU)
- Shenzhen Institutes of Advanced Technology (SIAT) of the CAS
- City University of Hong Kong (CityU)
AGENDA

Venue: China Spallation Neutron Source (CSNS)
Institute of High Energy Physics (IHEP)/CAS, Dongguan

April 15 (Sunday)

8:50  GATHER AT THE ROYAL GARDEN HOTEL (DALANG, DONGGUAN) LOBBY FOR BUS RIDE* TO CSNS

9:00  REGISTRATION

9:30  Welcome and Opening Remarks
  ➢ Long WEI, PhD, IHEP
  ➢ Chin-Tu CHEN, PhD, UChicago

SESSION 1  CO-CHAIRS: Zhiming ZHANG, PhD, IHEP
  Chien-Min KAO, PhD, UChicago

9:35  “Overview of CSNS & School of Nuclear Science and Technology, University of Chinese Academy of Sciences”
  ➢ Long WEI, PhD, IHEP

10:05  “The New Progress of Molecular Imaging in IHEP”
  ➢ Zhe WANG, PhD, IHEP

10:30  “Detector Optimization for A Dedicated Brain PET Scanner”
  ➢ Qian YANG, PhD, SIAT

10:55  BREAK

SESSION 2  CO-CHAIRS: Yongfeng YANG, PhD, SIAT
  Ching-Han HSU, PhD, Tsing-Hua University (Hsinchu)

11:10  “PET/MRI and SPECT/MRI Multi-Modality Theranostic Probes”
  ➢ Chin-Tu CHEN, PhD, UChicago

11:35  “Accelerator Produced Iodine-124 and Applications in Molecular Imaging”
  ➢ Wenjiang YANG, PhD, IHEP

12:00  LUNCH & TOUR OF CSNS

*Bus Ride for Pre-registered Guests Only
AGENDA

Venue: CSNS/IHEP/CAS, Dongguan

SESSION 3  CO-CHAIRS: Ling-Jian MENG, PhD, Univ. of Illinois at Urbana/Champaign (UIUC)
Yes-Jehng CHEN, PhD, Nat’l Yang-Ming University (NYMU)

14:00  “Research on Key Technology of MBI system”
   ➢ Xianchao HUANG, PhD, IHEP

14:30  “The Development of Electronic System in Nuclear Imaging Equipment”
   ➢ Xiaohui LI, PhD, IHEP

14:55  “Dual-Ended Readout Small Animal PET Detectors with 0.5 mm Pixelated LYSO
       Crystal Arrays and SiPMs”
   ➢ Zhonghua KUANG, PhD, SIAT

15:20  BREAK

SESSION 4  CO-CHAIRS: Cunfeng WEI, PhD, IHEP
Yes-Jehng CHOU, PhD, NTU

15:35  “Performance of A Long Rectangle Semi-Monolithic LYSO Scintillator PET
       Detector”
   ➢ Xin FU, PhD, SIAT

16:00  “The Application of Sub-Surface Laser Engraving in Scintillation Detectors n”
   ➢ Haohui TANG, PhD, IHEP

16:25  PANEL DISCUSSION
   ➢ Long WEI, PhD, IHEP
   ➢ Chin-Tu CHEN, PhD, UChicago

17:00  DINNER

18:00  GATHER AT THE LOBBY FOR BUS RIDE* TO L’HOTEL ISLAND SOUTH (HONG KONG)

*Bus Ride for Pre-registered Guests Only
AGENDA

Venue: UChicago Center in Hong Kong

8:45  GATHER AT THE L’HOTEL ISLAND SOUTH (HK) LOBBY FOR BUS RIDE* TO THE CENTER IN HONG KONG

9:30  WELCOME AND OPENING REMARKS - Auditorium
  ➢ Kitty CHONG, UChicago Center in Hong Kong
  ➢ Chin-Tu CHEN, PhD, UChicago
  ➢ Long WEI, PhD, UChicago

SESSION 5  CO-CHAIRS: Chien-Min KAO, PhD, UChicago
            Lin LI, PhD, IHEP

9:35  “Simultaneous PET/MR in Brain Cancer and Cardiac Applications”
  ➢ Georges EL FAKHRI, PhD, Harvard Medical School and Massachusetts General Hospital (MGH/Harvard)

10:05 “Dynamic PET/MR in neurological disease”
  ➢ Garrett HO, MD, Hong Kong Sanatorium & Hospital (HKS&H)

10:35 “MRI and PET Imaging of Brain Circuits”
  ➢ Ed X. WU, PhD, HKU

11:05 BREAK

SESSION 6  CO-CHAIRS: Garrett HO, MD, HKS&H
            Mythra Varun NEMALLAPUDI, PhD, Institute of Physics/Academia Sinica (IOP/AS)

11:30 “Developments of High Resolution MRI Compatible PET Scanners at SIAT”
  ➢ Yongfeng YANG, PhD, SIAT

12:00 “A PET Insert for Preclinical PET-MRI Using TOF-Capable Strip-Line Readout and MVT Sampling DAQ: Recent Advances”
  ➢ Chien-Min KAO, PhD, UChicago

12:30 LUNCH - Function Room
AGENDA

Venue: UChicago Center in Hong Kong

SESSION 7

CO-CHAIRS: Charles CHANG, PhD, HKU
Zhanli HU, PhD, SIAT

13:30  “Development of the MRC-SPECT-C: An Ultrahigh Performance MR-Compatible SPECT System for Clinical Cardiovascular Imaging”
  ➢ Ling-Jian MENG, PhD, UIUC

14:00  “Advances in Image Reconstruction for PET/MR Imaging”
  ➢ Cheng-Ying CHOU, PhD, Nat’l Taiwan University (NTU)

14:30  “Detector Development at Academia Sinica for TOF-PET Applications”
  ➢ Mythra Varun NEMALLAPUDI, PhD, IOP/AS

15:00  BREAK

SESSION 8

CO-CHAIRS: ED X. WU, PhD, HKU
Pek Lan KHONG, MD, HKU

15:30  “Reduction of Motion-Related Artifacts in MRI”
  ➢ Charles CHANG, PhD, HKU

16:00  “Performance Evaluation of Preclinical PET/MRI NanoScan with NEMA IQ-Phantom and Self-Designed Phantoms”
  ➢ Jyh-Cheng CHEN, PhD, NYMU

16:30  Panel Discussion
  ➢ Long WEI, PhD, IHEP
  ➢ Chin-Tu CHEN, PhD, UChicago

17:30  TOUR OF UCHICAGO CENTER

18:00  GROUP DINNER
Golden Lilies Banquet - Shop 102, the Arcade, 100 Cyberport Road

19:30  GATHER AT GOLDEN LILIES BANQUET ENTRANCE FOR BUS RIDE* TO THE L’HOTEL ISLAND SOUTH (HK)

*Bus Ride for Pre-registered Guests Only
AGENDA

April 17 (Tuesday)

Venue: UChicago Center in Hong Kong

8:15  GATHER AT THE L’HOTEL ISLAND SOUTH (HK) LOBBY FOR BUS RIDE* TO THE CENTER IN HONG KONG

SESSION 9  CONFERENCE PLENARY SESSION – Auditorium
Honorary Keynote Speaker: Way KUO, PhD
President, City University of Hong Kong (CityU)

9:00  Introduction
➢ Chin-Tu CHEN, PhD, UChicago

9:02  “Data Analysis and Accountability”
➢ Way KUO, PhD, CityU

9:40  GROUP PHOTO

9:45  BREAK

SESSION 10  SPECIAL MINI-WORKSHOP ON “MOLECULAR IMAGING AND ONE HEALTH”

CO-CHAIRS: Michael YANG, PhD, CityU
Chin-Tu CHEN, PhD, UChicago

10:00  Welcome and Opening Remarks
➢ Michael YANG, PhD, CityU
➢ Chin-Tu CHEN, PhD, UChicago

10:05  “Targeting Cancer Stem Cells by Hyperthermia Using Magnetic Nanoparticles”
➢ Michael YANG, PhD, CityU

10:25  “Development of Theranostic Agents for Cancer Imaging and Treatment”
➢ Gigi LO, PhD, CityU

10:45  “Imaging and One Health”
➢ Chin-Tu CHEN, PhD, UChicago
AGENDA

Venue: UChicago Center in Hong Kong

11:05  “Developing Fluorescent Probes for Biological Applications”
   ➢ Hongyan SUN, PhD, CityU

11:25  “Upconversion Nanoparticles for Biological Imaging and Therapy”
   ➢ Wang FENG, PhD, CityU

11:45  “Design Considerations for Developing PET Systems in Veterinary Imaging”
   ➢ Chien-Min KAO, PhD, UChicago

12:05  LUNCH - Function Room

12:45  “Neuronal Imaging: From Circuits to Behavior”
   ➢ Geoff LAU, PhD, CityU

13:05  “MR Imaging of Molecules in Cancer and Regenerative Medicine”
   ➢ Kannie CHAN, PhD, CityU

13:25  “Of Mice and Men – An Imaging Perspective”
   ➢ Georges EL FAKHRI, PhD, MGH/Harvard

13:45  Panel Discussion
   Co-Moderators: Michael YANG, PhD, CityU
     Chin-Tu CHEN, PhD, UChicago
   Panelists: ALL Speakers
     Pek Lan KHONG, MD, HKU
     Ed X. WU, PhD, HKU
     Ling-Jian MENG, PhD, UIUC

14:30  CLOSING REMARKS
   ➢ Michael YANG, PhD, CityU
   ➢ Long WEI, PhD, IHEP
   ➢ Chin-Tu CHEN, PhD, UChicago
We thank the following corporate participants for their generous contributions:

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