

27 November 2020 (Fri) - Day 1

Time	Sessions		Venue
09:45 – 10:25	Opening Ceremony Opening Remark Ir Alfred SIT, Secretary for Innovation and Technology, HKSAR Government Ir Prof PL YUEN, HKIE President Ir Prof Richard SO, BME2020 Conference Co-General Chair		Room 1
10:25 – 10:55	Plenary Presentation 1: (30min) <i>Moderator: Ir Prof Daniel CHOW</i> Trends in HealthTech Innovations Shaping Biomedical Engineering Education Prof James GOH, President, International Union of Physical and Engineering Sciences in Medicine (IUPESM); Past- President, International Federation on Medical and Biological Engineering (IFMBE); Professor, Department of Biomedical Engineering, Faculty of Engineering, National University of Singapore and Department of Orthopaedic Surgery, Yong Loo Lin School of Medicine, National University of Singapore		Room 1
10:55 – 11:15	Break		
	Room 1 Theme: <i>Artificial intelligence and robotics</i>	Room 2 Theme: <i>Disease diagnosis, prevention, monitoring, treatment and therapy</i>	
	<i>Moderator: Dr Kannie CHAN</i> <i>Helper: Mr Charles CHU</i>	<i>Moderator: Ir Prof Raymond TONG</i> <i>Helper: Ir Karon LO</i>	
11:15 – 11:35	Concurrent session 1.1: (20min) Artificial Intelligence Regulatory Requirements Dr Seil PARK, Assistant Director, Cardiovascular and Imaging Devices Division, National Institute of Food and Drug Safety Evaluation, Ministry of Food and Drug Safety, South Korea	Concurrent session 1.2: (20min) The Role of Hong Kong Medical Device Industry in terms of OBM, ODM, OEM and distribution against COVID-19 Mr Rupert MOK, Secretary General, Hong Kong Medical and Healthcare Device Industries Association	Room 1 & 2
11:35 – 11:55	Concurrent session 2.1: (20min) Deep Learning Artificial Intelligence Applications in MRI Dr Jiadi XU, Associate Professor, Russell H. Morgan Department of Radiology and Radiological Science, FM Kirby Research Centre, Kennedy Krieger Institute, School of Medicine, Johns Hopkins University.	Concurrent session 2.2: (20min) Novel AI-assisted diagnostic system for rapid and accurate diagnosis of COVID-19 pneumonia Prof Johnson LAU, Adjunct Professor, Department of Applied Biology and Chemical Technology, The Hong Kong Polytechnic University	Room 1 & 2
11:55 – 12:15	Concurrent session 3.1: (20min) Latest Development on Endoluminal Robotic Assisted Surgery and Multi-Scale Medical Robotics R&D Initiatives under InnoHK Prof Philip CHIU, Associate Dean (External Affairs); Professor, Department of Surgery, Faculty of Medicine, The Chinese University of Hong Kong Director, Multi-Scale Medical Robotics Center	Concurrent session 3.2: (20min) Investigating the possible role of two-pore channels in SARS CoV-2 virus host cell infection using zebrafish as a model system Prof Andrew L. MILLER Professor, Division of Life Science and State Key Laboratory for Molecular Neuroscience, Hong Kong University of Science and Technology	Room 1 & 2
12:15 – 12:45	Plenary Presentation 2: (30min) <i>Moderator: Ir Bryan SO</i> Medical device risk management and case study in COVID-19 related product challenges Ir Raymond FU, Director and Engineering Manager, Vincent Medical Manufacturing Co., Ltd. Mr Charles CHU, Engineering Supervisor, Vincent Medical Manufacturing Co., Ltd. <i>(*Speakers from Conference Sponsoring Company)</i>		Room 1
12:45 – 13:00	Fast Forward Poster Presentation Session (15mins) <i>Moderator: Ir Prof Raymond TONG</i> A Cloud-based Body Temperature Screening System by FUNG Kwong Chiu, The Hong Kong University of Science and Technology Rapid Histopathological Imaging by Microscopy with Ultraviolet Surface Excitation using Speckle Illumination by Ivy, Hei Man WONG, Translational and Advanced Bioimaging Laboratory, Department of Chemical and Biological Engineering, Hong Kong University of Science and Technology Interhemispheric Functional Reorganization and Its Structural Base after BCI-Guided Upper-Limb Training in Chronic Stroke by Kai Yuan, The Chinese University of Hong Kong Rapid temperature screening and suspect tracking in a moving crowd by CHIN, Jing Wei Nick, The Hong Kong University of Science and Technology Verification of Finger Joint Stiffness Estimation Method with Soft Robotic Actuator by Xiangqian Shi, The Chinese University of Hong Kong Exoskeleton Knee Robot-assisted Gait Training for persons after stroke by Cathy CY Lau, et al., The Chinese University of Hong Kong A Machine-Learning-Based Predictor for the Multi-Aetiological Knee Osteoarthritis with Clinical Data by CHAN Lok Chun, Department of Biomedical Engineering, The Hong Kong Polytechnic University Determination of optimal way to dendritic cells’ priming with tumor antigens for enhanced cytotoxic activity of CIK cells by Assel Issabekova, Madina Zhunussova, Marzhan Zhumabekova, Vyacheslav Ogay, National Center For Biotechnology, Nur-Sultan, Kazakhstan		Room 1
13:00 – 14:45	Lunch break		
14:45 – 15:15	Keynote presentation: (30min) <i>Moderator : Ir Bryan SO</i>		Room 1

Rundown for BME2020 (Last update: 2020.11.26)

	COVID-19 from local to global Prof Paul CHAN, Clinical Professor and Chairman of the Department of Microbiology Deputy Director of the Stanley Ho Centre for Emerging Infectious Diseases, Faculty of Medicine, The Chinese University of Hong Kong		
	Room 1 Theme: <i>Disinfection and personal protective equipment</i>	Room 2 Theme: <i>Research, development and management of medical devices</i>	
	<i>Moderator : Ir Bryan SO</i> <i>Helper: Mr Charles CHU</i>	<i>Moderator : Ir Stanley SIU</i> <i>Helper: Mr Tony TAI</i>	
15:15 – 15:35	Concurrent session 4.1: (20min) Smart antimicrobial technologies for a healthy environment Prof King Lun YEUNG, Professor, Department of Chemical and Biological Engineering Division of Environment and Sustainability, The Hong Kong University of Science and Technology	Concurrent session 4.2: (20min) Automated multiplex diagnostic system for testing 2019-nCoV Dr Terence LAU, Interim Associate Vice President (Innovation and Technology Development) Director of Innovation and Technology Development, The Hong Kong Polytechnic University	Room 1 & 2
15:35 – 15:55	Concurrent session 5.1: (20min) Restoring Public Confidence Back to Normal Dr CH WONG, Director of Science of Avalon Steritech	Concurrent session 5.2: (20min) Ventilator for low resources countries Ir Dr Anthony CHAN, Program Head, Biomedical Engineering Technology Program, British Columbia Institute of Technology Canada	Room 1 & 2
15:55 – 16:15	Concurrent session 6.1: (20min) Healthcare Innovations on Medical Face Masks & Respirators Mr Kevin ORR, Group Vice President & CIO Winner Medical Group	Concurrent session 6.2: (20min) Transdermal delivery of Receptor-Binding Domain of SARS-CoV-2 Spike protein with dissolvable microneedle skin patch Prof Chenjie XU, Associate Professor, Department of Biomedical Engineering, City University of Hong Kong	Room 1 & 2
16:15 – 16:30	Break		
16:30 – 17:00	Plenary presentation 3: (30min) <i>Moderator : Ir Karon LO</i> Healthcare Infrastructure Resilience in times of Pandemics Mr Chee Keong LIM, Solution Architect in Healthcare, Schneider Electric <i>(*Speakers from Conference Sponsoring Company)</i>		Room 1
17:00 – 17:05	Closing Remark (5min) Ir Raymond POON, BME2020 Conference Co-General Chair		Room 1

28 November 2020 (Sat) - Day 2

Time	Sessions		Venue
	Room 1 Theme: <i>Healthcare system and infrastructure</i>	Room 2 Theme: <i>Healthcare data management</i>	
	<i>Moderator : Prof Terence WONG Helper: Mr Arvin HUI</i>	<i>Moderator : Dr Thomas LEE Helper: Mr Barry MOK</i>	
09:30 – 09:50	Concurrent session 7.1: (20min) Development of Singapore's National Centre for Infectious Diseases (NCID) Mr Stephen LOH, Chief Development Officer, Tan Tock Seng Hospital, Singapore	Concurrent session 7.2: (20min) Innovation, the Smart Hospital and COVID 19 Mr Kevin CAI, Chief Information Officer, Hospital Authority	Room 1 & 2
09:50 – 10:10	Concurrent session 8.1: (20min) Evidence-Based Maintenance of Medical Equipment Dr Binseng WANG, Vice President, Program Management, Sodexo Health Technology Management	Concurrent session 8.2: (20min) Post-pandemic Travel with a Blockchain Immunity Passport Mr Eric CHAN, Chief Architect of Open Platform, WeBank	Room 1 & 2
10:10 – 10:30	Concurrent session 9.1: (20min) Development and management of medical devices in clinical setting Mr Eric WOO, Regional Director, Asia Pacific ECRI	Concurrent session 9.2: (20min) IoT Geofencing and Contact Tracing to Fight Against Covid-19 Prof Gary CHAN, Professor, Department of Computer Science and Engineering, The Hong Kong University of Science and Technology	Room 1 & 2
10:30 – 10:45	Break		
	Room 1 Theme: <i>In-vitro diagnostics and rapid screening</i>	Room 2 Theme: <i>Precision healthcare</i>	
	<i>Moderator : Prof Terence WONG Helper: Mr Arvin HUI</i>	<i>Moderator : Ir Dr LIN Yuan Helper: Mr Barry MOK</i>	
10:45 – 11:05	Concurrent session 10.1: (20min) Towards COVID-19 Vaccine Development Prof Matthew MCKAY, Professor, Department of Electronic & Computer Engineering Department of Chemical & Biological Engineering, The Hong Kong University of Science and Technology	Concurrent session 10.2: (20min) Analysis of COVID-19 viral gene Dr Gilman SIU, Associate Professor Department of Health Technology and Informatics, The Hong Kong Polytechnic University	Room 1 & 2
11:05 – 11:25	Concurrent session 11.1: (20min) AI Diagnostic System for COVID-19 Pneumonia Prof Kang ZHANG, Faculty of Medicine, Macau University of Science and Technology	Concurrent session 11.2: (20min) Wearable device supporting smart social distancing in hostel Mr Yiu Chau TAM, Master of Philosophy Student, Department of Biomedical Engineering, The Hong Kong Polytechnic University	Room 1 & 2
11:25 – 11:45	Concurrent session 12.1: (20min) Closed-loop inertial microfluidics for deformability-based sorting under continuous flow Ms LIAO Junchen, Ph.D. candidate, Department of biomedical engineering, City University of Hong Kong	Concurrent session 12.2: (20min) Automated analysis of COVID-19 from CT images via Semi-supervised Deep Learning Dr LIN Huang-Jing, Director of Research & Development, Imsight Medical Technology Co. Ltd	Room 1 & 2
11:45 – 11:50	Closing Remark (5min) Ir Prof Raymond TONG, BME2020 Conference Co-Chair on Industry		Room 1