PROGRAMME

Saturday, 10 May (Tokyo)

9:00-9:05 **Welcome Address**

Yuji Shimogonya
(Department of Bioengineering and Robotics, Tohoku University)

Podium 1

Chair: L. Liu (Tohoku University)

9:05-9:25 **Functional Differentiation of Human Neural Stem Cells into Neurons expressing particular neurotransmitter phenotypes**

Viknish Krishnan Kutty
(Graduate Programme in Bioengineering, NUS)

9:25-9:45 **A Dynamic Force-strain Control System for Isolated Actin Bundles**

Tsubasa Matsui
(Department of Bioengineering and Robotics, Tohoku University)

9:45-10:05 **Quantitative optical imaging of cellular morphology**

Shalin Mehta
(Graduate Programme in Bioengineering, NUS)

10:05-10:20 **Break**

Podium 2

Chair: T. Matsui (Tohoku University)

10:20-10:40 **Development of Material Close to Anatomy: Experimental Apparatus to Measure Acoustic Properties**

Osamu Yamashita
(Department of Bioengineering and Robotics, Tohoku University)

10:40-11:00 **Fabrication of mineralized electrospun polymeric nanofibrous composites for bone tissue engineering**

Michelle Ngiam Limei
(Graduate Programme in Bioengineering, NUS)

11:00-11:20 **Characteristics of Force Generated by Outer Hair Cell Motility in the Guinea Pig Cochlea -Theoretical Considerations-**

Shinpei Sato
(Department of Bioengineering and Robotics, Tohoku University)

11:20-11:30 **Adjournment**

Viknish Krishnan Kutty
(Graduate Programme in Bioengineering, NUS)

18:30-20:30 **Banquet**

KKR HOTEL TOKYO Room Hakucho (11th floor)

Monday, 12 May (Sendai)

13:00-13:05 **Opening Address**

Viknish Krishnan Kutty
(Graduate Programme in Bioengineering, NUS)

Tutorial Lecture 1

Chair: Y. Shimogonya (Tohoku University)

13:05-13:50 **Dirty Surface – Cleaner Cells? Some Observations with a Bio-Assembled Extracellular Matrix**

Michael Raghunath
(Associate Professor, Division of Bioengineering, Faculty of Engineering, National University of Singapore and Department of Biochemistry, Yong Loo Lin School of Medicine, National University of Singapore)

Podium 3

Chair: Y. Ueki (Tohoku University)

13:50-14:10 **DEP based Lab on a chip: Dielectrophoretic force calculation**

Kalpesh Mehta
(Graduate Programme in Bioengineering, NUS)

14:10-14:30 **Pulmonary Airflow Simulation using Subject-specific Model and Cartesian Adaptive Mesh Refinement Method**

Takahito Miki
(Department of Bioengineering and Robotics, Tohoku University)

14:30-14:45 **Break**

Tutorial Lecture 2

Chair: S. Kumano (Tohoku University)

14:45-15:30 **Collective Motions of Locomotive Cells in a Suspension**

Takuji Ishikawa
(Associate Professor, Dept. of Bioengineering and Robotics, Tohoku University)

Podium 4

Chair: Shalin Mehta (NUS)

15:30-15:50 **Mitochondrial Drug Delivery System for Cancer Treatment: A Preliminary Study**

Bramasta Nugraha
(Graduate Programme in Bioengineering, NUS)

15:50-16:10 **Dynamic transfer of two-dimensional cellular patterns into hydrogels**

Takeaki Kawashima
(Department of Bioengineering and Robotics, Tohoku University)

16:10-16:25 **Break**

Podium 5

Chair: Michelle Ngiam Limei (NUS)

16:25-16:45 **Surface Modification of Polycaprolactone for Vascular Tissue Engineering**

Abhishek Ananthanarayanan
(Graduate Programme in Bioengineering, NUS)

16:45-17:05 **Collagen I Distribution as a Marker for Liver Fibrosis**

Balakrishnan Chakrapani Narmada
(Graduate Programme in Bioengineering, NUS)

17:05-17:15 **Adjournment**

Takami Yamaguchi
(Professor, Graduate School of Engineering, Tohoku University, Leader, Tohoku University Global COE Program "Global Nano-Biomedical Engineering Education and Research Network Centre")

18:00-20:00 **Banquet**

Komorebi Cafe (School of Engineering, Tohoku University)