

NYCU-TU Joint Workshop

Schedule of 5th June 2023

Venue: Sakura Hall 2F, Katahira Campus

13:30	Joint Workshop (Opening and Plenary Session), Sakura Hall AB	
14:25		
14:40	Joint Workshop 1, Sakura Hall AB (Social and EE) Chairs: Prof. S. Samuakwa and K. Endo	Joint Workshop 2, Sakura Hall C (Medical / Dental Gr.) Chairs: Prof. M. Hsu and G. Hong
17:30		

Opening and Plenary Session (Sakura Hall AB)

Sakura Hall AB

Chair: Prof. Kaoru Maruta, Director, Institute of Fluid Science, Tohoku University

- 13:30-13:40 **Opening**
Prof. Motoko Kotani, Executive Vice President, Tohoku University &
Prof. Jenn-Hwan Tarng, Senior Vice President, National Yang Ming
Chiao Tung University
- 13:40-14:05 **Plenary: Overview of NYCU**
Prof. Jenn-Hwan Tarng, Senior Vice President, National Yang Ming
Chiao Tung University
- 14:05-14:25 **Plenary: Overview Picture of Tohoku University**
Mr. Takuro Ueda, Executive Vice President, Tohoku University

Joint Workshop 1 (Sakura Hall AB)
“Session for Social Science and Electrical Engineering”

Sakura Hall AB

Moderator: Prof. Seiji SAMUKAWA; NYCU, College of Electrical and Computer Engineering
Prof. Kazuhiko ENDO; TU, Institute of Fluid Science

Keynote Session:

Co-Creation

- 14:40-15:05 **Taiwan (TECH) Startup Ecosystem: for example from universities**
Prof. Hank Huang (Department of Electronics and Electrical Engineering, National Yang Ming Chiao Tung University)
- 15:05-15:30 **Industry-university collaboration on microsystem technology and human resource development at open-access facility**
Prof. Kentaro Totsu (R&D Center of Excellence for Integrated Microsystems, Tohoku University)

Social Science

- 15:30-15:55 **Humanities and Social Sciences at NYCU**
Prof. Chien Chou (Senior Vice President, National Yang Ming Chiao Tung University)
- 15:55-16:20 **Tackling Local and Global Challenges in Disaster Risk Reduction**
Prof. Yuichi Ono (International Research Institute of Disaster Science, Tohoku University)

Semiconductor

- 16:30-16:55 **Atomic Layer Technology and Its Application for Advanced Heterogeneous Integrated Nano-device**
Prof. Seiji Samukawa (College of Electrical and Computer Engineering, National Yang Ming Chiao Tung University)
- 16:55-17:20 **Development of 3D-Stacked Artificial Retina Chip with 3DIC/TSV Technology**
Prof. Tetsu Tanaka (Graduate School of Biomedical Engineering, Tohoku University)

Joint Workshop 2 (Sakura Hall C)
“Session for DX in Healthcare and Educational setting”

Cosponsored by Graduate School of Medicine, Tohoku University

Sakura Hall C

Moderator: Prof. Allen Ming-Lun HSU; NYCU, College of Dentistry
Prof. Guang HONG; TU, Graduate School of Dentistry

Keynote Session:

- 14:40-15:25 **Overview of biomedical researches in NYCU**
 <Online> Prof. Muh-Hwa Yang (Institute of Clinical Medicine, National Yang Ming Chiao Tung University)
- 15:05-15:25 **Task shift from human to Dx for aging society**
 Prof. Masanori Yamauchi, Eiko Onishi (Department of Anesthesiology and Perioperative Medicine, Tohoku University School of Medicine)
- 15:25-15:40 **Pragmatic collaboration leads to new horizons in dental education**
 Prof. Allen Ming-Lun HSU (College of Dentistry, National Yang Ming Chiao Tung University)
- 15:40-15:55 **Digital transformation in healthcare and educational setting**
 Prof. Guang Hong, Hiroshi Egusa, Nobuhiro Yoda, Ken Osaka (Tohoku University Graduate School of Dentistry)
- 15:55-16:10 **Coffee Break**

Keynote and Invited Lecture:

- 16:10-16:22 **Digital Transformation in Mechanical Ventilation**
 Prof. Kazuhiro Takahashi, Hiroaki Toyama (Department of Anesthesiology and Perioperative Medicine, Tohoku University School of Medicine)
- 16:22-16:34 **Cancer Genomics on the Cloud-An Interdisciplinary Perspective**
 Dr. Yu-Cheng Lin (School of Dentistry, National Yang Ming Chiao Tung University)
- 16:34-16:46 **Introduction of Tohoku University's Medical Simulation Center and Academia-Industry Collaboration**
 Dr. Yutaro Arata, Yuta Yokokawa, Eiko Onishi, Masakazu Kobayashi, Masanori Yamauchi (Tohoku University Clinical Skills Laboratory)

- 16:46-17:03 **AI assisted precisional treatments of temporomandibular disorders**
(Keynote Lecture)
Prof. Wen-Liang Lo (College of Dentistry, National Yang Ming Chiao Tung University)
- 17:03-17:15 **3D blood flow field estimation network based on vascular morphology information**
Dr. Hitomi Anzai (Institute of Fluid Science, Tohoku University)
- 17:15-17:32 **An overview of NYCU Brain Research Center** *(Keynote Lecture)*
Prof. Cheng-Chang Lien (College of Life Sciences, National Yang Ming Chiao Tung University)