## The 11th GCB Biomedical Science and Engineering Symposium

Dates: August 18(Sun), 2024

Venue: < Hybrid Event> Hokkaido University and Online via Zoom

2024/8/17 Time Time Time Time JST PDT Opening remarks Prof. Shigetsugu Hatakeyama Director of Global Center for Biomedical Science and Engineering 16:30 From Hokkaido University Dean, Faculty of Medicine Hokkaido University Prof. Quynh-Thu Le From Stanford University Department of Radiation Oncology School of Medicine, Stanford University Virtual 18:30 Physics 8:40 10:30 16:40 Session Chair: Dr.Taeko Matsuura (GCB, Hokkaido University) Dr.Cheng-Ying Shiau (Taipei Veteran general Hospital) Dr. Yong Yang Clinical Professo 8:40 9:10 16:40 Automation & Artificial Intelligence in Radiation Oncology- Stanford Experiences Department of Radiation Oncology Stanford University Dr.Xianjin Dai Assistant Profe 17:10 Advances in Large Language Models and Their Applications in Radiation Therapy 9:10 9:30 17:30 Department of Radiation Oncology Stanford University Dr. Yusuke Nomura Carbon ion radiotherapy in upright position and potential impacts of deep 9:30 9:50 17:30 17:50 Researcher National Institutes for Quantum Science and Technology Dr. Chun-You Chen Director of AI Center, Wan Fang Hospital
Taiwan Associate Executive Officer, TMU Biodsign Center 9:50 10:10 17:50 18:10 Developing a Radiation Oncology Assistant with Large Language Models (LLMs) BREAK Virtual Speaker 10:30 11:30 18:30 19:30 **H&N** Session Chair: Dr. Jo-Ting Tsai (Taipei Medical University Shuang-Ho Hospital) Dr. Masayuki Matsuo (Gifu University Graduate School of Medicine) Commentator : Dr. K.S.Clifford Chao (China Medical University Hospital) Dr. Yu-Jen Chen Treatment Strategy for Synchronous Head and Neck and Esophageal Squamous Senior Attending Physician Department of Radiation Oncology 10:30 11:00 18:30 19:00 Cell Carcinoma Mackay Memorial Hospital Dr.Takeshi Kodaira Japanese Clinical trial for head and neck cancer: past, current, future Department of Radiation Oncology Aichi Cancer Center Hospital LUNCH BREAK 13:30 ~ 15:00 21:30 ~ 23:00 Diagnostic Imaging/Radiation Oncology Session Chair : Dr. Takaaki Yoshimura (GCB, Hokkaido University) Dr. Sandy Cheng-Yu Chen (College of Medicine, Taipei Medical University) Dr. Noriyuki Kadoya Assistant Professo 13:30 14:00 21:30 22:00 Artificial Intelligence in automated radiation treatment planning Department of Radiation Oncology Tohoku University Hospital Dr. Tomoyuki Fujioka Associate Professor
Department of Artificial Intelligence Radiology 14:30 Expectations for AI in Breast Imaging Diagnostics: Current Status and Outlook Tokyo Medical and Dental University Dr. Wan-Yuo Guo Professor 14:30 15:00 22:30 23:00 Toward the Era of AI Assisted Radiation Oncology: An Imaging Perspective Department of Radiology Taipei Veterans General Hospital National Yang-Ming Chiao-Tung University and China Medical University Hospital BRFAK Virtual 15:15 ~ 16:45 23:15 Diagnostic Imaging 0:45 Session Chair : Prof. Kosuke Kudo (GCB, Hokkaido University) Dr. Seung Hong Choi (Seoul National University College of Medicine) Dr. Takaaki Yoshimura Assistant Professor Faculty of Health Sciences 15:15 15:45 23:15 Super-Resolution Networks in Medical Image GCB. Hokkaido University Dr. Noriyuki Fujima Senior Lecturer 15:45 16:15 23:45 0:15 Deep learning application for head and neck imaging Department of Diagnostic and Interventional Radiology GCB, Hokkaido University Dr. Melissa Chen Associate Professor 16:15 16:45 0:15 0:45 AI in Oncologic Imaging Department of Neuroradiology MD Anderson Cancer Center Closing remarks Prof. Yuji Kuge Deputy Director of Global Center for Biomedical Science and Engineering 17:00 0:50 16:50 1:00 From Hokkaido University Hokkaido University

Stanford Time JST-16
\*Summer time: USA