

International Mini-Symposium on Intelligent Biomedical Systems, 2026 Summer, Sendai, Japan

Date and time: 13:30 – 17:45, July 24th (Fri.), 2026 (JST; UTC+9:00)

Venue

- Onsite
Large Conference Room, 2nd Floor, School of Medicine Building 1 (B01)
Tohoku University Graduate School of Medicine,
2-1 Seiryō-machi, Aoba-ku, Sendai, Miyagi, 980-8575, Japan
- Online
Google Meet (The link will be provided via online registration form.)
Deadline: 12:00, July 23th (Thu.)

Registration: <https://forms.gle/9ZBqQ1X61zYVm4oa9>

Program

Opening remarks: 13:30 – 13:35

- **Dr. Naoto ISHII** (Dean, Professor, Tohoku University Graduate School of Medicine, Japan)

Special Lectures: 13:35 – 15:15

Moderator: **Dr. Kei ICHIJI** (Lecturer, Department of Radiological Imaging and Informatics, Tohoku University Graduate School of Medicine)

- **Special Lecture 1:**
“Tackling the Critical Challenges of Knowledge Capture, Management, and Transfer in Research Laboratories”
Prof. Shuo-Yan CHOU, PhD.
(Distinguished Professor, Department of Industrial Management, National Taiwan University of Science and Technology, Taiwan / Director, Center for Internet of Things Innovation, National Taiwan University of Science and Technology, Taiwan/ Member, Investment Review Committee, National Development Fund, Executive Yuan, Taiwan)
- **Special Lecture 2:**
“When Does Latent Nociceptive History Change Optimal Policy? Functionally Grounded Models of Afferent Regulation and Pain Memory”
Prof. Wolfgang MAASS, PhD.
(Distinguished Professor, Chair of Business Informatics, Saarland University, Germany)

/ Scientific Director, German Research Center for Artificial Intelligence (DFKI) / Senior Data Science Advisor, National Cancer Institute (NCI), USA)

Coffee Break

Researcher and Student Session: 15:25 – 17:40

(15 mins and 5 mins for presentation and discussion, respectively)

Moderator: Dr. Kengo TAKAHASHI (Postdoctoral researcher, Department of Radiological Imaging and Informatics, Tohoku University Graduate School of Medicine)

- **“Detection of Atrial Fibrillation in Holter ECG Recordings Using Machine Learning and Temporal Error Correction”**

Dr. Hidefumi KAMOZAWA

Assistant Professor, Department of Electrical Engineering, Graduate School of Engineering, Tohoku University

- **“Explainable Multimodal Learning for Non-invasive Molecular Subtype Prediction in Glioma Using MRI and Radiomic Features”**

Mr. Haoyang LIU

M.S. student, Intelligent Biomedical Systems Engineering Laboratory, Graduate School of Biomedical Engineering, Tohoku University

- **“Global-Local Mask-Guided Generative Models for Controllable Lesion Synthesis in Mammography”**

Mr. Wuhong JIANG

M.S. student, Intelligent Biomedical Systems Engineering Laboratory, Graduate School of Biomedical Engineering, Tohoku University

- **5 minutes Break**

Moderator: Dr. Kei ICHIJU (Lecturer, Department of Radiological Imaging and Informatics, Tohoku University Graduate School of Medicine)

- **“Transformer-based Deep Learning Models with Shape Guidance for Predicting Breast Cancer in Mammography Images”**

Dr. Kengo TAKAHASHI

Postdoctoral researcher, Department of Radiological Imaging and Informatics, Tohoku University Graduate School of Medicine

- **“Evaluation of Recursive Language Models in the Knowledge Transfer Environment”**

Mr. Linus Gmelin

M.S. student, Department of Technology Management, University of Stuttgart

- **“Accelerating First-Principles Atomistic Simulations with Machine Learning: A Case Study of a Hybrid Metal–Organic Biomaterial System”**

Mr. Hoang-Duc Vu LE

Ph.D. student, Graduate School of Chemistry, Université Paris-Saclay

Closing remarks: 17:40 – 17:45

- **Dr. Noriyasu HOMMA** (Vice Dean, Professor, Division Director of AI Applied Medicine of ART, Tohoku University Graduate School of Medicine, Tohoku University, Japan)

Organizer:

- Department of Radiological Imaging and Informatics, Tohoku University Graduate School of Medicine
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Co-sponsors:

- United Centers for Advanced Research and Translational Medicine (ART), Tohoku University Graduate School of Medicine

知能バイオメディカルシステム 国際ミニシンポジウム 2026

日時： 2026 年 7 月 24 日（金） 13:30 – 17:45

会場

- オンサイト
〒980-8575 仙台市青葉区星陵町 2-1
東北大学 大学院医学系研究科
医学部 1 号館 2 階 大会議室
- オンライン
Google Meet (登録フォームを通じて提供されます)
締切: 12:00 July 23th (Thu.)

参加登録： <https://forms.gle/9ZBqQ1X61zYVm4oa9>

プログラム

（英語版をご覧ください）

主催：

- 東北大学大学院医学系研究科医用画像工学分野
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共催：

- 東北大学大学院医学系研究科附属 創生応用医学研究センター