

# International Symposium on Human Welfare Engineering for Smart-Aging

Date: December 8 (Thursday), 2022

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## Program

Chair Dr. Xiaoyong ZHANG, Associate Professor

National Institute of Technology, Sendai College & Smart Aging Research Center, Tohoku University

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13:30~13:35 Opening address by Dr. Noriyasu HOMMA, Professor, Tohoku University

Graduate School of Medicine & Human Welfare Engineering Division, Smart Aging Research Center

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13:35~14:15 **Special lecture 1**

Title: **Learning Entropy: Machine Learning Based Information Concept for Anomaly Detection**

Dr. Ivo BUKOVSKY

Associate Professor, University of South Bohemia in ČESKÉ BUDĚJOVICE & Czech Technical University in Prague

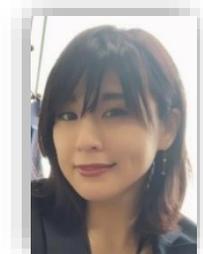


14:15~14:55 **Special lecture 2**

Title: **Time series transition of the human heart rate variability using ALLSTAR database**

Dr. Emi YUDA

Assistant Professor, Tohoku University



14:55~15:05 Break

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15:05~15:45 **Special lecture 3**

Title: **Video based beat-by-beat blood pressure monitoring**

Dr. Osama A. OMER

Professor, Aswan University, Egypt



## Student session

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15:50~16:05 Title: **How intra-source imbalance affects deep learning performance for COVID-19 diagnosis using chest X-ray images**

Zhang ZHANG, Xiaoyong Zhang, Kei Ichiji, Ivo Bukovsky, Noriyasu Homma

Graduate School of Biomedical Engineering, Tohoku University

16:05~16:20 Title: Pre-clinical evaluation approach of a bare metal aortic stent for interventional dissection treatment  
Xiaoxi HOU, Mayo Kobayashi, Yasuyuki Shiraishi, Tomoyuki Yambe and Kazuhiko Hanzawa

Graduate School of Biomedical Engineering, Tohoku University

16:20~16:30 Closing address by Dr. Makoto YOSHIKAWA, Specially Appointed Professor, Tohoku University

**Registration deadline: December 6 (Tue), 2022 / 参加申し込み 12/6(火)締切**

<https://forms.gle/UsHtG34efkcz8ZBn6>

\*We will stop accepting applications when the number of applicants reaches the quota / 定員に達し次第、締切りいたします。

\*Zoom link will be sent for online participation / 遠隔参加申し込みの方には、後日参加 URL をお知らせいたします。

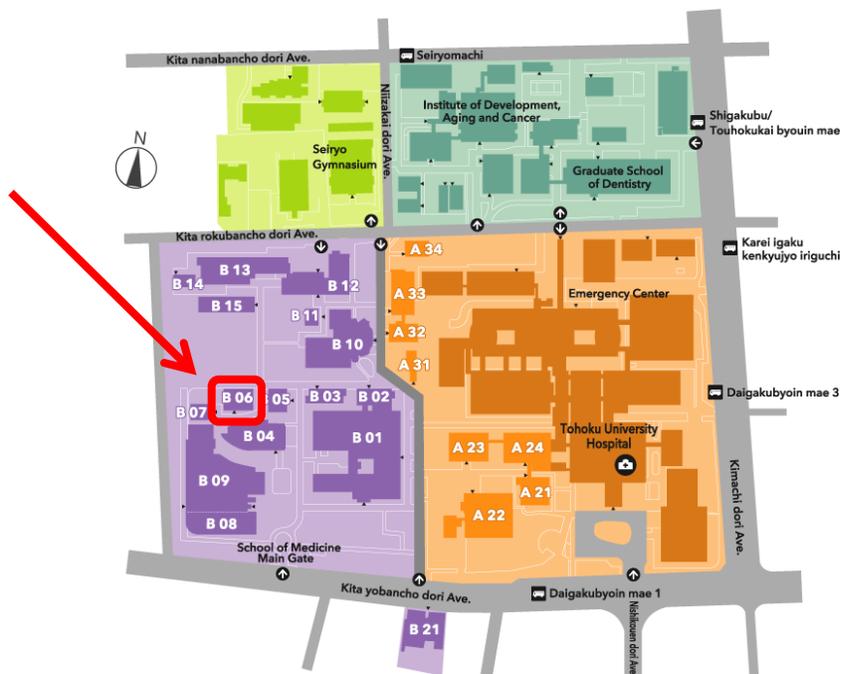


For further information, please contact us at / お問い合わせ [conf@rii.med.tohoku.ac.jp](mailto:conf@rii.med.tohoku.ac.jp)

**Onsite: Tohoku University School of Medicine, Education and Research Base Support Building (B06) 2<sup>nd</sup> Seminar Room**

**会場：東北大学医学研究科 教育研究基盤支援棟 (B06) 2階セミナー室2**

<https://goo.gl/maps/AiLj9nxqzzGvT4D57>



Sponsor: Human Welfare Engineering Division, Smart Aging Research Center, Tohoku University

Co-sponsors: SICE Tohoku Chapter

AI Applied Medicine Division, ART, Tohoku University Graduate School of Medicine  
Systems Control Sub-Group, Study Groups on Electrical Communication, Tohoku University