# 5th Conference on Clinical Translation of Medical Image Computing & Computer Assisted Intervention (CLINICCAI)

Daejeon Convention Center I (Room #301), S. Korea September 25 (Thur), 2025

## 8:00-9:20 Session 1: Diagnostic Imaging & Pathology AI (Moderators: J. Young and Y. Chong)

Introduction of CLINICCAI 2025

Joon Beom Seo

Pre-Clinical Multicenter Evaluation of Lunit INSIGHT CXR 4.0: Advancing Chest X-Ray AI Analysis

Benoit RIZK

 Bridging Development and Practice: First Al-Assisted Intestinal Ultrasound for Inflammatory Bowel Disease Evaluated on Unprocessed Clinical Images

Bobby Lo

• Stochastic AnoGAN: Robust Unsupervised Plaque Detection and Segmentation in Carotid Ultrasound Imaging

Arash Saboori

 Automated CT-Based Volumetric Body Composition Analysis Predicts Post-Operative Complications Following Pancreaticoduodenectomy: A Retrospective Study

Victoria Gershuni

• Ex-Vivo Evaluation of an Improved Computer-Aided Detection System for Barrett's Neoplasia on Real-World Imaging Conditions

Martijn Jong

 Generative Al-Based Translation of Frozen Sections to FFPE: A Pilot Study on Clinical Application to Skin Cancer Resection Margins

Sang-Hoon Lee

9:30-10:30 Keynote: Bioadhesive ultrasound and telerobotic neurointervention (Main Hall)

**Xuanhe Zhao** 

11:00-12:30

Poster Session (Moderators: J. Woo) - DCC II

## 13:30-15:00 Session 2: Multimodal & Systems-Level / Foundational-Model AI (Moderators: P. Mascagni and C. K. Jung)

 Prognostic Data Extraction via a Privacy-Preserving Large Language Model: A Clinician-Al Collaborative Evaluation in Head and Neck Oncology

Yujing Zou

 Retrospective Analysis of Foundation Models for Breast MR Image Analysis: Comparing Contrast-Enhanced vs Non-Contrast Protocol

Tri-Thien Nguyen

 MedARC: A Reinforcement-Learned Multi-Agent Collaboration System for Expert-Level Medical Visual Reasoning

Juseong Jin

Al-Based Spectral Imaging Biomarkers for Recognizing Sepsis and Predicting Mortality in Intensive Care:
 A Prospective Study of 483 Critically III Patients

Maximilian Dietrich

• Predictive Radiogenomic Al Model for Patient Stratification in Brain Tumor Immunotherapy Trials

Prajwal Ghimire

GASTRONET-5M: A Multicenter Dataset for Foundation Model Development in Gastrointestinal Endoscopy

Martijn Jong

Artificial Clarity, Clinical Confusion: Reassessing Al-Based Fundus Image Enhancement in Biomarker Prediction Sunjin Hwang

#### 15:30-17:00 Session 3: Surgical, Interventional AI (Moderators: O. Meireles and C. W. Jeong)

Surgical-LLaVA: An Instruction-Tuned Vision-Language Model for Surgical Scenario Understanding

Juseong Jin

• Clinical Integration of MR-Derived Contours into Intraoperative TRUS-Guided HDR Prostate Brachytherapy

Joel Beaudry

 Feasibility of Intraoperative Transcervical Ultrasound Guidance During Transoral Robotic Surgery: A Prospective Clinical Study

Jae Young Kwon

Integrating Intraoperative 3D Scanned Specimen Maps into Postoperative Radiation Therapy Planning for Head and Neck Cancer: A Feasibility Study

Jae Young Kwon

Robot-Assisted Automated Intra-Cardiac Echocardiography for EP/SHD Procedures: Preclinical Validation in Animal and Heart Phantom Models

Young-Ho Kim

• 3D Generative Models for Vertebral Segmentation and Pedicle Screw Path Prediction

Byeongkuen Kwon

Deep Learning-Based Pipeline for Automatic Tissue Differentiation in Surgical Hyperspectral Imaging with Sparse Annotation

Oscar MacCormac

### 17:00-18:30 Panel Discussion: From Idea to Product (Moderators: J. B. Seo and J. Woo)

· Clinical Researcher: What is a Valuable Unmet Need?

Joe Young

Engineer in University: How to Translate Unmet Needs into Products at the Lab Level?

Jonghye Woo Kyuhwan Jung

Engineer in Industry: How to Make Commercial Product?

Ozanan Meireles

· Legal Approval: Industry Perspective

Jason Seo

Legal Approval: Government Perspective

Real World Implementation: Practical Issue Pietro Mascagni