CLINICCAI 2023 Agenda

October 10, 2023

8:00-8:15	Welcome and Introduction
8:15-9:15	Surgery and Endoscopy Moderators: Lideke Van Der Steeg, MD and Filippo Filicori, MD
9:15-10:05	Surgery beyond Endoscopy Moderators: Sandrine De Ribaupierre, MD
10:05-11:00	Coffee Break
11:00-12:00	MICCAI Keynote (LeCun)
12:00-13:00	Lunch Break
13:00-14:00	CLINICCAI Keynote Gretchen Purcell Jackson, MD PhD FACS FACMI FAMIA VP, Scientific Medical Officer | Intuitive President | American Medical Informatics Association *Scientific Evidence to Support Computational Technology Adoption in Clinical Settings*
14:00-15:10	Subspecialty Medicine & Pathology Moderators: Philip Edgcumbe, MD PhD
15:10-15:30	Break
15:30-16:30	Radiology Moderators: Mariam Aboian, MD PhD and Hersh Sagreiya, MD
16:30-17:15	CLINICCAI Panel: Interdisciplinary Clinical Translation Moderator: Daniel Hashimoto, MD and Mariam Aboian, MD PhD Panelists: Sandrine de Ribaupierre, MD PhD (Western University) Regina Beets-Tan, MD (Netherlands Cancer Institute) Roy Eagleson, PhD (Western University) Ronald Summers, MD PhD (National Institutes of Health)
17:15-17:30	Closing Remarks

Surgery and Endoscopy		
Time	Authors	Title
08:15-08:25	Daichi Kitaguchi (National Cancer Center Hospital East)*; Norihito Kosugi (National Cancer Center Hospital East); Yuto Ishikawa (National Cancer Center Hospital East); Kazuyuki Hayashi (National Cancer Center Hospital East); Hiro Hasegawa (National Cancer Center Hospital East); Nobuyoshi Takeshita (National Cancer Center Hospital East); Masaaki Ito (National Cancer Center Hospital East)	A Comparison of Recognition Performance for Key Anatomical Structures between Artificial Intelligence and Surgeons in Laparoscopic Colorectal Surgery: A Prospective Observational Study
8:25-8:35	Pieter De Backer (Orsi Academy)*; Jasper Hofman (Orsi Academy); Ilaria Manghi (University of Modena and Reggio Emilia); Jente Simoens (Orsi Academy); Julie Lippens (Ghent University); Tim Oosterlinck (KU Leuven); Charlotte Debbaut (Ghent University); Ruben De Groote (OLV Hospital Aalst); Hannes Van Den Bossche (AZ West Hospital); Charles Van Praet (Ghent University Hospital); Mathieu D'Hondt (AZ Groeninge Hospital); Federica Ferraguti (University of Modena and Reggio Emilia); Zhjin Li (NVIDIA); Oliver Kutter (NVIDIA); Karel Decaestecker (AZ Maria Middelares Hospital); Alex Mottrie (Orsi Academy)	Improving Augmented Reality Surgery through first-in-human real time AI-powered instrument segmentation

Time	Authors	Title
8:35-8:45	Rafal D Kocielnik (California Institute of Technology)*; Andrew Hung (University of Southern California); Elyssa Wong (University of Southern California); Timothy Chu (University of Southern California); De-An Huang (NVIDIA); Animashree Anandkumar (Caltech)	Deep Multimodal Fusion for Classification of Surgical Feedback Components in Robot-Assisted Surgery
8:45-8:55	Nobuyoshi Takeshita (National Cancer Center Hospital East)*	Validation Study of an AI Support System for Intraoperative Recognition of Anatomical Structures in Laparoscopic/Robot-assisted Hysterectomy
8:55-9:05	Martijn Jong (Amsterdam UMC)*; Kiki Fockens (Amsterdam UMC); Jelmer Jukema (Amsterdam UMC); Tim G.W. Boers (Eindhoven University of Technology); Carolus H.J. Kusters (Eindhoven University of Technology); Joost van der Putten (Eindhoven University of Technology); Roos Pouw (Amsterdam UMC); Lucas Duits (Amsterdam UMC); Nahid Montazeri (Amsterdam UMC); Bas Weusten (St. Antoniusziekenhuis); Lorenza Alvarez-Herrero (St. Antoniusziekenhuis); Martin Houben (Haga Ziekenhuis); Wouter Nagengast (UMC Groningen); Jessie Westerhof (UMC Groningen); Alaa Alkhalaf (Isala Ziekenhuis); Rosalie Mallant-Hent (Flevoziekenhuis); Pieter Scholten (OLVG); Krish Ragunath (Royal Perth Hospital); Stefan Seewald (Hirslanden Klinik); Peter Elbe (Karolinska Hospital); Francisco Baldaque Silva	Computer aided detection system for Barrett's neoplasia improves endoscopic detection by general endoscopists: an ex-vivo benchmarking study.

	(Karolinska Hospital); Maximilien Barret (Cochin Hospital); Jacobo Ortiz Fernandez-Sordo (Nottingham University Hospitals NHS Trust); Guiomar Moral Villarejo (Nottingham University Hospitals NHS Trust); Oliver Pech (St. John of God Hospital Regensburg); Torsten Beyna (Evangelisches Krankenhaus Düsseldorf); Fons van der Sommen (Dept. Electrical Engineering, Eindhoven University of Technology, Eindhoven, NL); P. H. N. de With (Eindhoven University of Technology); Albert De Groof (Amsterdam UMC); Jacques Bergman (Amsterdam UMC)	
9:05-9:15	Surgery and Endoscopy Discussion	
Surgery beyond Endoscopy		
09:15-09:25	Bin Zheng (Surgical Simulation Research Lab, Dept. of Surgery, University of Alberta)*; Xianta Jiang (Memorial University of Newfoundland); M. Stella Atkins (Simon Fraser University); Roman Bednarik (University of Eastern Finland)	Surgical Team: Measuring the Shared Cognition and Performance
09:25-09:35	Andrew Wood (Cleveland Clinic Foundation)*	Sarcopenia and Hypoalbuminia are associated with decreased overall survival after Nephrectomy and IVC Thrombectomy for renal cell carcinoma
09:35-09:45	Jennifer Eckhoff (Surgical Artificial Intelligence and Innovation Laboratory)*; Xiang Li	The SAGES Critical View of Safety Challenge – Infrastructure of a

	(Massachusetts General Hospital and Harvard Medical School); Yutong Ban (MIT/MGH); Deepak Alapatt (IHU Strasbourg); Jean-Paul Mazellier (IHU Strasbourg); Pietro Mascagni (Fondazione Policlinico Universitario Agostino Gemelli IRCCS); Zhiliang Lyu (Massachusetts General Hospital, Surgical Artificial Intelligence and Innovation Laboratory (SAIIL)); Sarah Choksi (Northwell Health); Filippo Filicori (Northwell Health); Guy Rosman (MIT); Danial Hashimoto (University of Pennsylvania); Quanzheng Li (Massachusetts General Hospital and Harvard Medical School); Nicolas Padoy (University of Strasbourg); Ozanan Meireles (Massachusetts General Hospital)	Biomedical Data Challenge from the Perspective of a Clinical Society
09:45-09:55	Mahdi Ebnali (MGB/Harvard Medical School)*; Marco Zenati (VA Boston Healthcare System, West Roxbury, MA); Vaibhav Unhelkar (Department of Computer Science, Rice University, Houston, TX); Steven Yule (Department of Clinical Surgery, University of Edinburgh, Scotland); Roger Dias (Department of Emergency Medicine, Mass General Brigham, Boston, MA)	Using Deep Learning to Assess Teamwork During Cardiac Surgery
09:55-10:05	Surgery beyond Endoscopy Discussion	
10:05-11:00	**Coffee Break and Social**	
11:00-12:00	**MICCAI Keynote (LeCun)**	

12:00-13:00	**Lunch** We encourage you to check out the Women in MICCAI Lunch Panel	
13:00-14:00	**CLINICCAI Keynote Lecture** Gretchen Jackson, MD PhD FACS, FACMI, FAMIA "Scientific Evidence to Support Computational Technology Adoption in Clinical Settings"	
	Subspecialty Medicine and Pathology	
14:00-14:10	Christina Luong (Vancouver General Hospital)*; Mohammad Jafari (UBC); Delaram Behnami (UBC); Yaksh Shah (UBC); Lynn Straatman (UBC); Nathan Van Woudenberg (University of British Columbia); Leah Christoff (Vancouver General Hospital); Nancy Gwadry (Vancouver General Hospital); Nathaniel Hawkins (UBC); Eric Sayre (Arthritis Research Canada); Darwin Yeung (UBC); Michael Tsang (Vancouver General Hospital); Ken Gin (Vancouver General Hospital); John Jue (Vancouver General Hospital); Parvathy Nair (Vancouver General Hospital); Purang Abolmaesumi (The Univ. of British Columbia); Teresa Tsang (Vancouver General Hospital)	Validation of machine learning models for estimation of left ventricular ejection fraction on point-of-care ultrasound: Insights on features that impact performance
14:10-14:20	Mitchel Molenaar (Amsterdam UMC)*	Deep learning-based segmentation of coronary arteries in x-ray coronary angiography
14:20-14:30	Sandrine de Ribaupierre (Western University, Canada)*; Juan S Bottan (Western University); Greydon Gilmore (Western University); Jonathan Lau (Western University);	Robot-Assisted SEEG Electrode Placement for Epilepsy in Pediatric Patients: Workflow Comparison

	Roy Eagleson (Western University, Canada)	between Frame-Based and Frameless approaches
14:30-14:40	Jacob Jaremko (University of Alberta)*	Feasibility of Ultrasound Screening for Hip Dysplasia in Primary Care Clinics Using AI
14:40-14:50	Willa Yim (IMCB, A*STAR)*; Felicia Wee (ASTAR IMCB); Jia Meng (IMCB, A*STAR); Jeffrey Lim (IMCB, A*STAR); Craig Joseph (IMCB, A*STAR); Xinru Lim (IMCB, A*STAR); Kai Soon Ng (IMCB, A*STAR); Jiangfeng Ye (IMCB, A*STAR); Zhen Wei Neo (IMCB, A*STAR); Li Yen Chong (IMCB, A*STAR); Chan Way Ng (SIgN, A*STAR); Tony Lim (Singapore General Hospital); Mai Chan Lau (BII A*STAR); Joe Yeong (Singapore General Hospital	H&E 2.0: deep learning-enabled identification of tumor-specific CD39+CD8+ T cells in marker-free images for predicting immunotherapy response
14:50-15:00	Joe Yeong (Singapore General Hospital); Minh Nguyen (BII); Willa Yim (IMCB, A*STAR); Felicia Wee (ASTAR IMCB); Xinyun Feng (NUS); Marcia Zhang (NUS); Menaka Rajapakse (SIgN); Jeffrey Lim (IMCB); Chandra Verma (BII); Mai Chan Lau (BII A*STAR)*	HE2.0 web server: an image database supports interactive visualization towards AI-empowered pathology training
15:00-15:10	Subspecialty Medicine and Pathology Discussion	
15:10-15:30	**Break**	
	Radiology	
15:30-15:40	Andrew L Wentland (University of Wisconsin School of Medicine &	Transformer-Based Image Synthesis for Radiation Dose Reduction in

	Public Health)*; Syed Jamal safdar Gardezi (University of Wisconsin School of Medicine & Public Health, Department of Radiology	Multi-Phase CT Imaging of the Kidneys
15:40-15:50	Ali Nabavizadeh (University of Pennsylvania)*; Jeffrey Ware (University of Pennsylvania); Nastaran Khalili (Children's Hospital of Phildalphia); Debanjan Haldar (Children's Hospital of Philadelphia); Ariana Familiar (Children's Hospital of Philadelphia); Karthik Viswanathan (Children's Hospital of Philadelphia); Sina Bagheri (Children's Hospital of Philadelphia); Hannah Anderson (Children's Hospital of Philadelphia); Phillip B. Storm (Children's Hospital of Philadelphia); Adam Resnick (Children's Hospital of Philadelphia); Christos Davatzikos (University of Pennsylvania); Arastoo Vossough (vossough@chop.edu); Anahita Fathi Kazerooni (Children's Hospital of Philadelphia)	Automated Brain Tumor Subregion Segmentation on Multi-Parametric MRI Sequences of Pediatric Brain Tumors Across Multiple Institutions and Histologies
15:50-16:00	Dietmar Frey (Charité University Medicine Berlin)*	Prediction of hematoma expansion in acute intracerebral hemorrhage using a multimodal neural network model
16:00-16:10	Philip Edgcumbe (University Of British Columbia)*; Duncan Ferguson (University Of British	Diagnosis of Pulmonary Emboli in Low Resource Settings with Rapid

	Columbia); Joshua F Ho (University Of British Columbia)	Serial Radiographs and IV Contrast Dual-Subtraction Radiography
16:10-16:20	Jacob Jaremko (University of Alberta)*	Automated segmentation of the humeral cortex and subacromial bursa with rotator cuff tear detection on shoulder ultrasound using deep learning
16:20-16:30	Radiology Discussion	
16:30-17:15	**CLINICCAI Panel** *Interdisciplinary clinical translation* Sandrine de Ribaupierre, MD PhD (Western University) Regina Beets-Tan, MD (Netherlands Cancer Institute) Roy Eagleson, PhD (Western University) Ronald Summers, MD PhD (National Institutes of Health)	
17:15-17:30	**Closing Remarks**	