

15-16 DEC, 2023

Precision Cancer
Screening with
Al Perspectives

TOKYO, JAPAN
Hotel Villa Fontaine Grand Tokyo-Ariake

15

Pre-Conference of Cancer Screening in Metaverse

Room 5 & 6

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Pre-Conference of Cancer Screening in Metaverse

5 & 6

Bellesalle Ariake Conference Center

4F, Hotel Villa Fontaine Grand Tokyo Ariake

Room

13:30-17:30

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Time	Торіс	Speaker	
13:00-13:30	Registration		
13:30-13:40	Opening Remarks: Prof. Takahisa Matsuda / Prof. Han-Mo Chiu		
	Session (I) Theory and Practical Application of Colorectal Cancer Screening Chair: Prof. Tony Hsiu-Hsi Chen		
13:40-14:40	Real-World Practice of Colorectal Cancer Screening: Japanese (Colonoscopy) and Taiwanese (FIT) Screening Cohorts	Prof. Takahisa Matsuda Prof. Han-Mo Chiu	
14:40-15:10	Keynote Speech: Innovative Modelling for Complex Data on Cancer Prevention	Prof. Ruth Etzioni	
	Coffee Break		
15:10-15:30	Coffee Break		
15:10-15:30	Coffee Break Session (II) Metaverse-based Evaluation of Colorectal Cand Chair: Prof. Takahisa Matsuda/ Prof. Han-Mo Chiu	cer Screening	
15:10-15:30 15:30-16:00	Session (II) Metaverse-based Evaluation of Colorectal Cand	Cer Screening Prof. Tony Hsiu-Hsi Chen Prof. Amy Ming-Fang Yen Prof. Sam Li-Sheng Chen Prof. Chen-Yang Hsu	
	Session (II) Metaverse-based Evaluation of Colorectal Cand Chair: Prof. Takahisa Matsuda/ Prof. Han-Mo Chiu Metaverse in Precision Colorectal Cancer	Prof. Tony Hsiu-Hsi Chen Prof. Amy Ming-Fang Yen Prof. Sam Li-Sheng Chen	









Session (1) Theory and Practical Application of Colorectal Cancer Screening

Real-World Practice of Colorectal Cancer Screening: Japanese (Colonoscopy) and Taiwanese (FIT) Screening Cohorts



Prof. Takahisa Matsuda

Toho University



Prof. Han-Mo Chiu National Taiwan University Hospital



IACCS President
Prof. Hsiu-Hsi Chen
National Taiwan University

Pre-Conference of Cancer Screening in Metaverse
International Asian Cancer and Chronic Disease Screening Network, IACCS 2023



Tony Hsiu-Hsi Chen
National Taiwan University

- Prof. Hsiu-Hsi Chen specializes in designing and evaluating population-based intervention programs with new methodology and perspectives.
- By marrying statistical methods such as stochastic processes with machine learning algorithms, he developed a series of novel approaches, applied the digital twins, to facilitate precision cancer prevention and smart health.
- Prof. Chen has been the President of the International Asian Cancer and Chronic Disease Screening (IACCS) Network to foster cancer screening in Asian countries.
- He has a longstanding research collaboration with institutions in Sweden, the USA, the UK, and Finland, including receiving the Finland Distinguished Professor (FIDIPRO) award from the Academy of Finland between 2007 and 2009.





Takahisa Matsuda **Toho University**

- Professor, Department of Gastroenterology and Hepatology, Faculty of Medicine, Toho University, Tokyo
- Professor, Division of Gastroenterology and Hepatology, Toho University Omori Medical Center, Tokyo
- Board Member of Directors of the Japanese Society of Gastrointestinal Cancer Screening (JSGCS)
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- Member of the Future Planning Committee of the Japan Digestive Disease Week (JDDW)
- Principal investigator of the Japan Polyp Study
- Principal investigator of the Niijima/Oshima Study
- Chairman of the Endoscopy Screening Certification Program Committee (JGES)
- Chairman of the Colorectal Cancer Screening Quality Control Committee (JSGCS)



Han-Mo Chiu **National Taiwan University** Hospital

- Clinical Professor at National Taiwan University.
- Chief of the Health Management Center at National Taiwan University Hospital.
- Deputy Secretary General at the Gastroenterological Society of Taiwan (GEST)
- Councilor member of the Digestive Endoscopy Society of Taiwan.
- His primary research and clinical interests encompass colorectal cancer screening, enhanced endoscopy (IEE) of the colorectum, and endoluminal therapy (EMR/ESD) for colorectal neoplasms, clinical application of artificial intelligence
- Principal investigator of the Taiwan Colorectal Cancer Screening Program
- Asian Chair of World Endoscopy Organization (WEO) Colorectal Cancer Screening Committee
- Professor Chiu actively participates in various multi-center cooperative studies and formulation of guidelines in colorectal cancer screening





Session (1) Theory and Practical Application of Colorectal Cancer Screening

Keynote Speech:

Innovative Modelling for Complex Data on

Cancer Prevention



Prof. Ruth Etzioni
Fred Hutchinson Cancer Center



IACCS President
Prof. Hsiu-Hsi Chen
National Taiwan University

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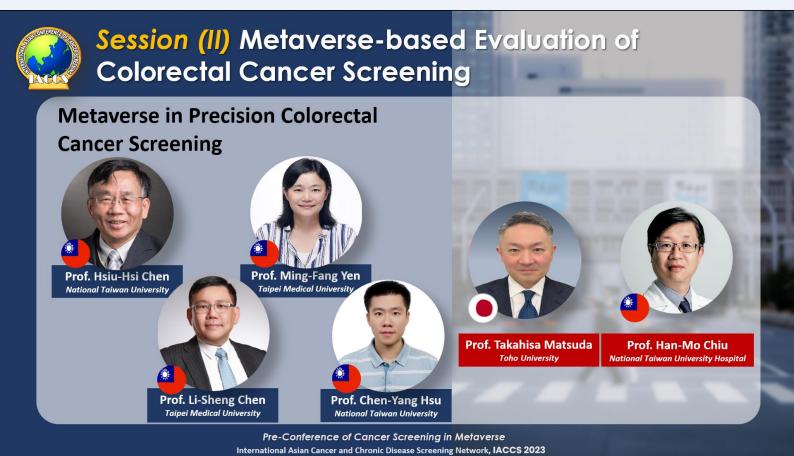




Ruth Etzioni
Fred Hutchinson Cancer
Research Center
University of Washington

- Holder of Rosalie and Harold Rea Brown Endowed Chair, Fred Hutch Cancer Center, 2021 – present
- Member, American Cancer Society Cancer Early Detection Guidelines Panel and coauthor of ACS guidelines for breast, prostate, colorectal, lung, and cervical cancer screening
- Member American Urology Association and National Comprehensive Cancer Network Prostate Cancer Screening Guidelines Panels
- Primary Author, "Statistics for Health Data Science: An Organic Approach,"
 Published by Springer Nature in 2022
- Fellow, American Statistical Association (2016) and past Chair of its Health Policy Statistics Section (2019)
- Principal Investigator, Prostate Cancer Co-ordinating Center, Cancer Intervention and Surveillance Modeling Network (CISNET) of the National Cancer Institute, USA
- Recipient of the Outstanding Investigator Award from the US National Cancer Institute, 2022-present







Takahisa Matsuda **Toho University**

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Amy Ming-Fang Yen Taipei Medical University

- Professor at Taipei Medical University
- Obtained PhD in statistics from University College London
- Specialized in cancer screening evaluation using stochastic processes
- Key contributor to population-based screening programs for oral, breast, and colorectal cancer
- Continues research in the evaluation of cancer screening and communitybased intervention program



Sam Li-Sheng Chen
Taipei Medical University

- Professor at Taipei Medical University.
- Associate Dean at College of Oral Medicine, Taipei Medical University
- Director at School of Oral Hygiene, College of Oral Medicine, Taipei Medical University.
- Co-Principal investigator of the Taiwanese Nationwide Breast Cancer/Oral Cancer/Colorectal Cancer Screening Program
- Executive Member at Taiwan Association of Medical Screening



Chen-Yang Hsu
Daichung Hospital, Miaoli,
Taiwan
National Taiwan University

- Biostatistician with expertise in assessing population-based intervention programs, particularly screening initiatives, utilizing stochastic methodologies.
- Holds a Ph.D. and M.Sc. in Biostatistics, both awarded by the Institute of Epidemiology and Preventive Medicine, School of Public Health, National Taiwan University.
- Completed postdoctoral research fellowship training focused on evaluating processes and outcomes within population-based cancer screening programs.
- Actively involved in academic research with a primary focus on applying stochastic processes to understand complex disease progression, including colorectal cancer, breast cancer, oral cancer, and emerging infectious diseases, within the College of Public Health at National Taiwan University.
- Currently engaged in the practical application of disease prevention methods, including the design and implementation of screening initiatives in clinical practice and community-based services.
- Currently holds the position of Chairman at the Taiwan Association of Medical Screening





Session (II) Metaverse-based Evaluation of Colorectal Cancer Screening

Machine Learning and Digital Twin Showcases



Dr. Chiu-Wen Su National Taiwan University



Dr. Ting-Yu Lin National Taiwan University



Prof. Takahisa Matsuda Toho University



Prof. Han-Mo Chiu National Taiwan University Hospital

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Session (II) Metaverse-based Evaluation of Colorectal Cancer Screening

Metaverse Platform & Feedback



Bioengineer Shih-Hsiang Wei National Taiwan University



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Takahisa Matsuda **Toho University**

- Professor, Department of Gastroenterology and Hepatology, Faculty of Medicine, Toho University, Tokyo
- Professor, Division of Gastroenterology and Hepatology, Toho University Omori Medical Center, Tokyo
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Chiu-Wen Su National Taiwan University Hospital

- Ph.D. in biostatistics from the Institute of Epidemiology and Preventive Medicine at the College of Public Health, National Taiwan University.
- Currently serves as a post-doctoral research fellow at National Taiwan
 University, focusing on data evaluation for the nationwide cancer screening
 programs.
- Work involves breast cancer, colorectal cancer, and oral cancer screening programs, all of which are subsidized by the Health Promotion Administration.



Abbie Ting-Yu Lin
National Taiwan University

- Post-Doctoral research fellow at the Institute of Epidemiology and Preventive Medicine, College of Public Health, National Taiwan University.
- Specialized in biostatistics and machine learning approaches for the evaluation of cancer screening.
- Research contributions spanning from Non-communicable NCD surveillance to addressing the multifaceted challenges of COVID-19.



Shih-Hsiang Wei
National Taiwan University

 Master student in biostatistics from the Institute of Epidemiology and Preventive Medicine at the College of Public Health, National Taiwan University.





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