7th US-Japan
Workshop on Biomarkers
for Cancer Early Detection

～Collaboration Across International Boundaries: It Takes a Village～

Program

Sunday, January 26

Opening Remarks 13:00

Tetsuo Noda   Japanese Foundation for Cancer Research,Cancer Institute

Sudhir Srivastava   National Cancer Institute

Session 1: Radiomics, Digital Detection, Pathomics, and Big Data   13:10

Chairpersons: Alexander Borowsky, Yasuteru Urano

Quantitative Imaging and Radiomics in the Early Detection of Lung Cancer

Matthew Schabath   Moffitt Cancer Center

A novel radiomic imaging system utilizing cancer oxidoreduction (redox) metabolism

Masayuki Matsuo   Gifu University

Japan Pathology AI Diagnostics Project

Hiroyuki Abe   The University of Tokyo

The role of Artificial intelligence in endoscopic field.

Tomohiro Tada   AI Medical Service Inc.,

From Space to Biomedicine: Enabling Biomarker Data Science on the Cloud

Daniel Crichton   Jet Propulsion Laboratory

Intraoperative Rapid Imaging of Tiny Tumors by Novel Fluorogenic Probes for Exopeptidases

Yasuteru Urano   The University of Tokyo

Breast cancer overdiagnosis and the precancer problem

Alexander Borowsky   UC Davis Comprehensive Cancer Center

Session 2: Introduction of Early Detection Research Network   15:40   *Chairperson: Sudhir Srivastava*

Early Detection Research Network: Collaboration Across International Boundaries

Sudhir Srivastava   National Cancer Institute

Investigator perspective on EDRN major strengths.

Pierre Massion   Vanderbilt University

Discovery of urinary glycoproteins for aggressive prostate cancer.

Hui Zhang   Johns Hopkins University

Session 3: New Technologies for Cancer Early Detection   16:25   *Chairpersons: Hui Zhang, Takuji Yamada*

Structural and Functional Analyses of Glycoproteins Using Mass Spectrometry

Hui Zhang   Johns Hopkins University

Unique mass spectrometric methods for cancer marker discovery ~ from metabolites to proteins

Yoshihiro Shimizu   RIKEN Center for Biosystems Dynamics Research

Development of a Highly Sensitive Device for Counting the Number of Disease-Specific Exosomes in Human Sera

Yasuaki Kabe   Keio University

Detection of Genomic Markers in Biological Fluids in the Management of Cancer

Nickolas Papadopoulos   Johns Hopkins University

Metagenomic and metabolomic analyses reveal distinct stage-specific phenotypes of the gut microbiota in colorectal cancer

Takuji Yamada   Tokyo Institute of Technology

Cancer early detection by olfaction of C. elegans

Yohei Matsunaga   Hirotsu Bio Science Inc.

Monday, January 27

Session 4: Multimodal Early Detection and Liquid Biopsy   9:30

Chairpersons: Nickolas Papadopoulos, Takahiro Ochiya

A large-scale validation study of circulating microRNA biomarkers

Takahiro Ochiya   Tokyo Medical University

Airway gene expression biomarkers for early lung cancer detection, precision screening and interception.

Marc Lenburg   Boston University

NGS of circulating tumor DNA in clinical cancer research

Siew-Kee Low   Japanese Foundation for Cancer Research

Applications of liquid biopsies in the early detection of cancer

Nickolas Papadopoulos   Johns Hopkins University

A DIAGNOSTIC POTENTIAL OF PANCREATIC CANCER-SPECIFIC SATELLITE RNAS

Motoyuki Otsuka   The University of Tokyo

PreCancer Atlas: A Window to Identifying Targets for Early Detection

Sudhir Srivastava   National Cancer Institute

Session 5: Lightening Talks (Short Oral Presentations From Selected Posters)   11:30

Chairperson: Kazufumi Honda

Session 6: Organ-site Highlights 1 14:30   *Chairpersons: Matthew Schabath, Koji Ueda*

Management of indeterminate pulmonary nodules with a novel combined clinical, blood and imaging-based biomarker strategy

Pierre Massion   Vanderbilt University

EDRN efforts related to the early detection of lung cancerr

Matthew Schabath   Moffitt Cancer Center

Multisialylated LacdiNAc glycans on PSA (PSA G-Index®) as a specificity-enhanced secondary biomarker for prostate cancer

Koji Ueda   Japanese Foundation for Cancer Research

Technical development for clinical application of early detection markers for colorectal cancer.

Jun Adachi   National Institute of Biomedical Innovation, Health and Nutrition

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Session 7: Organ-site Highlights 2   16:00   *Chairpersons: Aatur Singhi, Kazufumi Honda*

A Highly Accurate Non-Endoscopic Method for the Detection of Barrett's Esophagus

Joseph E Willis   Cleveland Cancer Center

Early Detection of Pancreatic Cancer through the Evaluation of Pancreatic Cysts

Aatur Singhi   University of Pittsburgh

Development of diagnosis technology of pancreatic cancer using a novel glycan marker

Hiroaki Tateno   National Institute of Advanced Industrial Science and Technology

Stratification for risk individuals of pancreatic cancer from general population with blood test

Kazufumi Honda   National Cancer Center Research Institute

Session 8: Panel Discussion   17:30   *Chairperson: Tetsuo Noda*

Closing Remarks 18:30

Sudhir Srivastava   National Cancer Institute

Tetsuo Noda   Japanese Foundation for Cancer Research,Cancer Institute