12th Early Detection Research Network (EDRN) Scientific Workshop
20th Year of EDRN: Making Cancer Detection Possible
(virtual via Zoom)
March 23-25, 2021

Tuesday, March 23, 2021 (9:45 a.m. – 6:10 p.m. Eastern Time)

9:45 a.m. – 10:00 a.m.  Admittance to Workshop via Zoom/General Announcements
10:00 a.m. – 10:05 a.m.  Welcome and Opening of March 2021 EDRN Scientific Workshop
                          o  Joshua LaBaer, MD, PhD, Arizona State University/The Biodesign Institute
                          o  Arul Chinnaiyan, MD, PhD, University of Michigan
                          o  Sudhir Srivastava, PhD, MPH, National Cancer Institute
10:05 a.m. – 10:15 a.m.  Opening Remarks
                          Ned Sharpless, MD, Director, National Cancer Institute
10:15 a.m. – 10:40 a.m.  Life-Time Experience with Cancer Diagnostics
                          Robert Bast, MD, The University of Texas MD Anderson Cancer Center
10:40 a.m. – 10:45 a.m.  Q&A

10:45 a.m. – 1:15 p.m.  Session 1: Integrated Approaches to Biomarker Research

10:45 a.m. – 10:50 a.m.  Introduction to the Session
                        Moderators:
                        o  Denise Aberle, MD, University of California, Los Angeles
                        o  Hui Zhang, PhD, Johns Hopkins University School of Medicine
10:50 a.m. – 11:10 a.m.  Precision Medicine of Lung Cancer: Metabolome and Microbiome
                        Curt Harris, MD, National Cancer Institute
11:10 a.m. – 11:15 a.m.  Q&A
11:15 a.m. – 11:35 a.m.  TBD
                        Arul Chinnaiyan, MD, PhD, University of Michigan
11:35 a.m. – 11:40 a.m.  Q&A
11:40 a.m. – 11:50 a.m.  Break
11:50 a.m. – 12:10 p.m.  TBD
                        James Herman, MD, University of Pittsburgh School of Medicine
12:10 p.m. – 12:15 p.m.  Q&A
12:15 p.m. – 12:35 p.m.  The Immunogenicity of Post-Translational Protein Modifications
                        Karen Anderson, MD, PhD, Arizona State University/The Biodesign Institute
12:35 p.m. – 12:40 p.m.  Q&A
12:40 p.m. – 1:10 p.m.  TBD
                        Ash Alizadeh, MD, PhD, Stanford Comprehensive Cancer Center
1:10 p.m. – 1:15 p.m.  Q&A

11:50 a.m. – 1:35 p.m.  Break
1:35 p.m. – 3:45 p.m.  Session 2: Integrated Approaches to Biomarker Research II

1:35 p.m. – 1:40 p.m.  Introduction to the Session
                        Moderators:
                        o  Surinder Batra, PhD, University of Nebraska Medical Center
                        o  Zhen Zhang, PhD, Johns Hopkins University
Tuesday, March 23, 2021 (Continued)

Session 2: Integrated Approaches to Biomarker Research II (Continued)

1:40 p.m. – 2:00 p.m.  Decoding the Cancer Mucinome  
Carolyn Bertozzi, PhD, Stanford School of Humanities and Sciences

2:00 p.m. – 2:05 p.m.  Q&A

2:05 p.m. – 2:25 p.m.  TBD  
Matthew Schabath, PhD, H. Lee Moffit Cancer Center and Research Institute

2:25 p.m. – 2:30 p.m.  Q&A

2:30 p.m. – 2:50 p.m.  Multi-Disciplinary Strategies for Cancer Early Detection  
Victoria Seewaldt, MD, City of Hope

2:50 p.m. – 2:55 p.m.  Q&A

2:55 p.m. – 3:15 p.m.  TBD  
Anirban Maitra, MBBS, The University of Texas MD Anderson Cancer Center

3:15 p.m. – 3:20 p.m.  Q&A

3:20 p.m. – 3:40 p.m.  A Unique Approach Combining Avatar Mice and Mass Spectrometry to Identify Blood Biomarkers for Early Detection of Breast Cancer  
Amanda Paulovich, MD, PhD, Fred Hutchinson Cancer Research Center

3:40 p.m. – 3:45 p.m.  Q&A

3:45 p.m. – 4:00 p.m.  Break

4:00 p.m. – 6:10 p.m.  Session 3: Research Excellence through Alliance of Consortia

4:00 p.m. – 4:05 p.m.  Introduction to the Session  
Moderator: Barbara Kenner, PhD, Kenner Family Research Fund

4:05 p.m. – 4:25 p.m.  Pancreatic Cancer Detection Consortium  
Michael Goggins, MD, Johns Hopkins University School of Medicine

4:25 p.m. – 4:30 p.m.  Q&A

4:30 p.m. – 4:50 p.m.  Consortium for the Study of Chronic Pancreatitis, Diabetes, and Pancreatic Cancer  
Stephen Pandol, MD, Cedars-Sinai Medical Center

4:50 p.m. – 4:55 p.m.  Q&A

4:55 p.m. – 5:15 p.m.  Translational Liver Consortium  
Hashem El-Serag, MD, MPH, Baylor College of Medicine

5:15 p.m. – 5:20 p.m.  Q&A

5:20 p.m. – 5:40 p.m.  Exosomes - Rigor and Reproducibility  
David Lyden, MD, PhD, Weill Cornell Medicine

5:40 p.m. – 5:45 p.m.  Q&A

5:45 p.m. – 6:05 p.m.  Pre-Cancer Atlas  
Peter Sorger, PhD, Harvard Medical School

6:05 p.m. – 6:10 p.m.  Q&A

6:10 p.m.  Adjourn for the Day

Wednesday, March 24, 2021 (10:00 a.m. – 5:45 p.m. Eastern Time)
12th Early Detection Research Network (EDRN) Scientific Workshop
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(virtual via Zoom)
March 23-25, 2021

10:00 a.m. – 10:05 a.m. Welcome
- Joshua LaBaer, MD, PhD, Arizona State University/The Biodesign Institute
- Arul Chinnaian, MD, PhD, University of Michigan
- Sudhir Srivastava, PhD, MPH, National Cancer Institute

10:05 a.m. – 10:30 a.m. Cancer Biomarkers and Disparity in Underserved Populations
Olufunmilayo Olopade, MD, FACP, University of Chicago Medicine

10:30 a.m. – 1:15 p.m. Session 4: Academic-Industry Partnership Forum
Invited members will discuss the opportunity and future research trends in cancer diagnostics, market forecast and high priority.

10:30 a.m. – 10:35 a.m. Introduction to the Session
Moderator: Ernest Hawk, MD, MPH, The University of Texas MD Anderson Cancer Center

10:35 a.m. – 10:50 a.m. TBD
Josh Ofman, MD, MSHS, GRAIL

10:50 a.m. – 11:05 a.m. TBD
Peter Keeling, Diaceutics

11:05 a.m. – 11:20 a.m. TBD
Kathryn Lang, MBBS, Guardant Health

11:20 a.m. – 11:35 a.m. Break

11:35 a.m. – 11:50 a.m. TBD
Isaac Kinde, MD, PhD, Thrive Detect

11:50 a.m. – 12:05 p.m. TBD
Graham Lidgard, PhD, Exact Sciences

12:05 p.m. – 1:15 p.m. Panel Discussion
Panelists:
- Eric Fung, MD, PhD, GRAIL
- Daniel Chan, PhD, Johns Hopkins University
- Johan Skog, Ph.D., Exosome Diagnostics
- Reena Philip, Ph.D., Food and Drug Administration

1:15 p.m. – 1:30 p.m. Break

1:30 p.m. – 3:30 p.m. Session 5: Public Health Consideration of Biomarker Research
Moderators:
- Philip Castle, PhD, MPH, National Cancer Institute tentative
- Ruth Etzioni, PhD, Fred Hutchinson Cancer Research Center
Speakers will summarize the highlights of the topics that were discussed by the EDRN Steering Committee in October 2020

1:30 p.m. – 1:50 p.m. What Target Sensitivity and Specificity Might Confer Clinical Utility?
- Steve Skates, PhD, Massachusetts General Hospital/Harvard
- Robert Schoen, MD, University of Pittsburgh Cancer Institute

1:50 p.m. – 2:00 p.m. Q&A
Wednesday, March 24, 2021 (Continued)

Session 5: Public Health Consideration of Biomarker Research (Continued)

2:00 p.m. – 2:20 p.m. Modeling, Biomarkers, and Implementation Science
   • Ziding Feng, PhD, Fred Hutchinson Cancer Research Center
   • Ruth Etzioni, PhD, Fred Hutchinson Cancer Research Center

2:20 p.m. – 2:30 p.m. Q&A

2:30 p.m. – 3:05 p.m. Health Disparity and Biomarker Research
   • Christopher Li, MD, PhD, Fred Hutchinson Cancer Research Center
   • Martin Sanda, MD, Emory University
   • Pierre Massion, MD, Vanderbilt-Ingram Cancer Center, Vanderbilt University Medical Center
   • Guest Speaker: Melissa Davis, PhD, Weill Cornell College of Medicine

3:05 p.m. – 3:15 p.m. Q&A

3:15 p.m. – 3:35 p.m. Study Designs for Clinical Utility Trials
   • Yingye Zheng, PhD, Fred Hutchinson Cancer Research Center
   • Steve Skates, PhD, Massachusetts General Hospital/Harvard

3:35 p.m. – 3:45 p.m. Q&A

3:45 p.m. – 4:00 p.m. Break

4:00 p.m. – 5:45 p.m. Session 6: EDRN Early Stage Investigators Presentations

Moderators:
   • Karin Rodland, PhD, Pacific Northwest National Laboratory
   • Louise Showe, PhD, The Wistar Institute

4:00 p.m. – 4:12 p.m. Development of Combinatorial Biomarker Panel for Pancreatic Cancer Diagnosis
   Sukhwinder Kaur, PhD, University of Nebraska Medical Center

4:12 p.m. – 4:15 p.m. Q&A

4:15 p.m. – 4:27 p.m. Building a Radiogenomic Portrait of Pancreatic Intraductal Papillary Mucinous Neoplasm
   Jennifer Permuth, PhD, MS, H. Lee Moffitt Cancer Center and Research Institute

4:27 p.m. – 4:30 p.m. Q&A

4:30 p.m. – 4:42 p.m. Digital Microfluidic Methylation Assays for the Detection of Early-Stage Ovarian Cancer
   Thomas Pisanic, PhD, Johns Hopkins University

4:42 p.m. – 4:45 p.m. Q&A

4:45 p.m. – 4:57 p.m. Prostate
   Indu Kohaar, PhD, Center for Prostate Disease Research

4:57 p.m. – 5:00 p.m. Q&A

5:00 p.m. – 5:12 p.m. Prostate
   Jeff Tosoian, MD, MPH, University of Michigan

5:12 p.m. – 5:15 p.m. Q&A

5:15 p.m. – 5:27 p.m. GI
   John Kisiel, MD, Mayo Clinic College of Medicine

5:27 p.m. – 5:30 p.m. Q&A
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Wednesday, March 24, 2021 (Continued)

Session 6: EDRN Early Stage Investigators Presentations (Continued)

5:30 p.m. – 5:42 p.m.  Advancing MS-Based Single-Cell Proteomics  
Tao Liu, PhD, Pacific Northwest National Laboratory

5:42 p.m. – 5:45 p.m.  Q&A

5:45 p.m.  Adjourn for the Day

Thursday, March 25, 2021 (10:00 a.m. – 7:00 p.m. Eastern Time)

10:00 a.m. – 10:05 a.m.  Welcome  
- Joshua LaBaer, MD, PhD, Arizona State University/The Biodesign Institute
- Arul Chinnaiyan, MD, PhD, University of Michigan
- Sudhir Srivastava, PhD, MPH, National Cancer Institute

10:05 a.m. – 10:30 a.m.  Clinical Perspectives on Biomarker Research  
Bruce Johnson, MD, Dana-Farber Cancer Institute

10:30 a.m. – 10:45 a.m.  Session 7: Regulatory, Reimbursement and Entrepreneurship Biomarker Research  
Moderators:  
- Sudhir Srivastava, PhD, MPH, National Cancer Institute
- Robert Schoen, MD, University of Pittsburgh Cancer Institute

10:30 a.m. – 10:45 a.m.  FDA Collaborative on Next Gen Sequencing and its Relevance to Liquid Biopsy for Early Detection  
James Willey, MD, University of Toledo

10:45 a.m. – 10:50 a.m.  Q&A

10:50 a.m. – 11:05 a.m.  Food and Drug Administration Perspective  
Wendy Rubinstein, MD, PhD, Director of Personalized Medicine

11:05 a.m. – 11:10 a.m.  Q&A

11:10 a.m. – 11:25 a.m.  Center for Medicare and Medicaid Services Perspective  
- Melissa Evans, PhD, Director of the Division of Policy and Evidence Review, CMS
- Carl Li, MD, MPH, Medical Officer, CMS

11:25 a.m. – 11:30 a.m.  Q&A

11:30 a.m. – 11:45 a.m.  SBIR Developmental Center: Research and Development Opportunities  
Michael Weingarten, MA, Director, Small Business Innovation Research, National Cancer Institute

11:45 a.m. – 11:50 a.m.  Q&A

11:50 a.m. – 12:10 p.m.  Break

12:10 p.m. – 3:10 p.m.  Poster/Interactive Session & Lightning Talks from Posters (5 minute Presentations)  
NCI Program Directors:  
- Lynn Sorbara, PhD, National Cancer Institute
- Natalie Abrams, PhD, National Cancer Institute

12:10 p.m. – 1:10 p.m.  Poster Highlights Session
Thursday, March 25, 2021 (Continued)

**Poster/Interactive Session & Lightning Talks from Posters** (5 minute Presentations)

1:10 p.m. – 3:10 p.m.  
Poster Viewing Session

3:10 p.m. – 5:00 p.m.  
Break

5:00 p.m. – 7:00 p.m.  
Poster/Interactive Session & Lightning Talks from Japan Investigators (AMED P-CREATE)

5:00 p.m. – 6:00 p.m.  
Poster Highlights Session

6:00 p.m. – 7:00 p.m.  
Poster Viewing Session

7:00 p.m.  
Adjourn Scientific Workshop