**7th Early Detection Research Network (EDRN) Scientific Workshop**

**23rd EDRN Steering Committee Meeting**

**September 13 – 16, 2011**

**Bethesda North Marriott Hotel & Conference Center**

**Bethesda, Maryland**

**Tuesday, September 13, 2011**

**7:00 – 8:00 a.m.**
Registration Check-In

**8:00 – 8:05 a.m.**
Welcome
Sudhir Srivastava, Ph.D., M.P.H., National Cancer Institute

**8:05 – 8:10 a.m.**
Welcome by Chair of the EDRN
Ian Thompson, M.D., University of Texas Health Science Center, San Antonio

**8:10 – 8:30 a.m.**
Basic Scientist's View of Biomarker Research
Ed Harlow, Ph.D., Special Advisor to NCI Director

**8:30 – 10:00 p.m.**
**SESSION 1: Systems Biology Basis of Biomarkers**

*Moderators:* Karin Rodland, Ph.D., Pacific Northwest National Laboratory
Jacob Kagan, Ph.D., National Cancer Institute

**8:30 – 9:00 a.m.**
Invited Presentation
Systems Biology Approach to Molecular Diagnostics
Gordon Mills, M.D., Ph.D., The University of Texas MD Anderson Cancer Center

**9:00 – 9:30 a.m.**
Integrated Genomics
Arul Chinnaiyan, M.D., Ph.D., University of Michigan

**9:30 – 10:00 a.m.**
Title TBD
Adi Gazdar, M.B.B.S., University of Texas Southwestern Medical Center

**10:00 – 10:20 a.m.**
Break

**10:20 a.m. – 12:30 p.m.**
**SESSION 2: Systematic Genomic Approach to Cancer Biomarker Discovery**

*Moderators:* David Sidransky, M.D., Johns Hopkins University School of Medicine
Jo Ann Rinaudo, Ph.D., National Cancer Institute

**10:20 – 10:50 a.m.**
Invited Presentation
Driver Genes and Cancer Biomarkers
Kenneth Kinzler, Ph.D., Johns Hopkins University
Tuesday, September 13, 2011 Continued

SESSION 2: Systematic Genomic Approach to Cancer Biomarker Discovery
Continued

10:50 – 11:15 a.m.  Deep Sequencing to Identify Early Detection Targets
Mark Rubin, M.D., Weill Cornell Medical College

11:15 – 11:40 a.m.  miRNA and noncoding RNA
Carlo Croce, M.D., Ohio State University Medical Center

11:40 a.m. – 12:05 p.m.  Pancreatic Cancer
Ann Killary, Ph.D., The University of Texas MD Anderson Cancer Center

12:05 – 12:30 p.m.  Transcriptomics Profiles
Avrum Spira, M.D., Boston University

12:30 – 1:30 p.m.  Lunch (On Your Own)

12:45 – 1:30 p.m.  Luncheon Debate: Judging the Returns on Investment in Biomarker Research – Too Much or Too Little
Moderator: Paul Engstrom, M.D., Fox Chase Cancer Center
Speaker: Mickey Urdea, Ph.D., Tethys Bioscience, Inc.
Panelists:
- David Sidransky, M.D., Johns Hopkins University School of Medicine
- Ian Thompson, M.D., University of Texas Health Sciences Center, San Antonio
- Joshua LaBaer, M.D., Ph.D., Arizona State University

1:30 – 2:30 p.m.  POSTER SESSION 1

2:30 – 3:00 p.m.  Highlights of Poster Session 1
Moderators: Brain Haab, Ph.D., Van Andel Research Institute
Lynn Sorbara, Ph.D., National Cancer Institute

3:00 – 5:50 p.m.  SESSION 3: Systematic Proteomic Approach to Biomarker Discovery
Moderators: Samir Hanash, M.D., Ph.D., Fred Hutchinson Cancer Research Center
Karl Krueger, Ph.D., National Cancer Institute
Tuesday, September 13, 2011 Continued

SESSION 3: Systematic Proteomic Approach to Biomarker Discovery Continued

3:00 – 3:30 p.m.  Autoantibodies
Joshua LaBaer, M.D., Ph.D., Arizona State University

3:30 – 4:00 p.m.  Glycoproteomics
Tony Hollingsworth, Ph.D., University of Nebraska Medical Center

4:00 – 4:20 p.m.  Break

4:20 – 4:50 p.m.  Proteomic Discovery using High Density Antibody Arrays
Paul Lampe, Ph.D., Fred Hutchinson Cancer Research Center

4:50 – 5:20 p.m.  Glycoproteomic and Bioinformatic Analyses of Biomarkers for the Early Detection of Aggressive Prostate Cancer
Hui Zhang, Ph.D., Johns Hopkins University School of Medicine

5:20 – 5:50 p.m.  Title TBD
Dan Liebler, Ph.D., Vanderbilt University

7:00 – 9:00 p.m.  Industrial Forum

Wednesday, September 14, 2011

7:00 – 8:00 a.m.  Registration Check-In

8:00 – 11:45 a.m.  SESSION 4: Correlating Phenotypic Changes with Omic Changes
Moderators: Jeffrey Marks, Ph.D., Duke University
Richard Mazurchuk, Ph.D., National Cancer Institute

8:00 – 8:25 a.m.  TCGA and Beyond
Jeffery Marks, Ph.D., Duke University

8:25 – 8:55 a.m.  Invited Presentation
Whole Omics Profiling Reveals Medical and Complex Molecular Phenotypes
Michael Snyder, Ph.D., Stanford University
Wednesday, September 14, 2011 Continued

SESSION 4: Correlating Phenotypic Changes with Omic Changes Continued

8:55 – 9:20 a.m.  
Spectral Biomarkers for Colon Carcinogenes  
Hemant Roy, M.D., NorthShore University Health System

9:20 – 9:45 a.m.  
Genome-wide Studies of the Methylome of Colon Adenomas and Colon Adenocarcinomas  
William Grady, Ph.D., Fred Hutchinson Cancer Research Center

9:45 – 10:05 a.m.  
Break

10:05 – 10:30 a.m.  
Strategies for Imaging Prostate Cancer  
Sanjiv Gambir, M.D., Ph.D., Stanford University

10:30 – 10:55 a.m.  
Prostate  
Dan Mercola, M.D., Ph.D., University of California, Irvine

10:55 – 11:20 a.m.  
Studies in Mesothelioma  
Harvey Pass, M.D., New York University

11:20 – 11:45 a.m.  
Correlating phenotypic and Omic Changes in Lung Cancer and Pulmonary Pre-malignancy  
Steve Dubinett, M.D., University of California, Los Angeles

11:45 a.m. – 1:00 p.m.  
Lunch (On Your Own)

12:00 – 1:00 p.m.  
Luncheon Debate: The Road to Molecular Diagnostics: Are We There Yet?  
Moderator: Dan Chan, Ph.D., Johns Hopkins University

Speaker: Craig Tuttle, Transgenomic, Inc., M.S., M.B.A.

Panelists:
• Laurie Locascio, Ph.D., National Institute of Standards and Technology
• Sandy Stass, M.D., University of Maryland School of Medicine
• EDRN Industrial Member

1:00 – 2:00 p.m.  
POSTER SESSION 2
Wednesday, September 14, 2011 Continued

2:00 – 2:30 p.m. **Highlights of Poster Session 2**
*Moderator:* Alvin Liu, Ph.D, University of Washington
Lynn Sorbara, Ph.D., National Cancer Institute

2:30 – 5:40 p.m. **SESSION 5: From Bed to Bench Side – Biomarker Discovery and Unmet Clinical Needs**
*Moderators:* Dean Brenner, M.D., University of Michigan
Paul Wagner, Ph.D., National Cancer Institute

2:30 – 2:45 p.m. **Overview and Introductory Remarks**
Dean Brenner, M.D., University of Michigan

2:45 – 3:15 p.m. **Invited Presentation**
*Title TBD*
Bruce Johnson, M.D., Dana Farber Cancer Institute

3:15 – 3:40 p.m. **Prostate Cancer**
Martin Sanda, M.D., Beth Israel Deaconess Medical Center

3:40 – 4:00 p.m. **Break**

4:00 – 4:25 p.m. **Novel Biomarker Panels for Early Detection of Lung Cancer**
William Rom, M.D., New York University

4:25 – 4:50 p.m. **Ovarian Cancer**
Michael Birrer, M.D., Massachusetts General Hospital

4:50 – 5:15 p.m. **Current Hurdles for Biomarker Development in Pancreatic Cancer**
Peter Allen, M.D., Memorial Sloan Kettering Cancer Center

5:15 – 5:40 p.m. **Breast Cancer**
Paul Engstrom, M.D., Fox Chase Cancer Center

Thursday, September 15, 2011

7:00 – 8:00 a.m. **Registration Check-In**
Thursday, September 15, 2011 Continued

8:00 – 10:30 a.m. SESSION 6: Systems Analysis of Biomarker Data from Across Molecular Approaches
Moderators: Steven Skates, Ph.D., Massachusetts General Hospital
Christos Patriotis, Ph.D., National Cancer Institute

8:00 – 8:10 a.m. Overview and Introductory Remarks
Steven Skates, Ph.D., Massachusetts General Hospital

8:10 – 8:40 a.m. Invited Presentation
TCGA with Respect to Informatics and Biomarkers
John Weinstein, MD, PhD, The University of Texas MD Anderson Cancer Center

8:40 – 9:10 a.m. Lung Cancer in Never Smokers
Wan Lam, Ph.D., British Columbia Cancer Research

9:10 – 9:35 a.m. Recognizing PTM Differences Between Proteomes
David Tabb, Ph.D., Vanderbilt University

9:35 – 10:00 a.m. Title TBD
Marc Lenburg, Ph.D., Boston University

10:00 – 10:30 a.m. Challenges in Data Integration
Mark Thornquist, Ph.D., Fred Hutchinson Cancer Research Center

10:30 – 10:50 a.m. Break

10:50 – 12:30 p.m. SESSION 7: Highlights of Recent EDRN Research
Moderator: David Sidransky, M.D., Johns Hopkins University School of Medicine
Jacob Kagan, Ph.D., National Cancer Institute

10:50 – 11:15 a.m. DNA Repair Biomarker for Lung Cancer Risk
Zvi Livneh, Ph.D., Weizmann Institute

11:15 – 11:40 a.m. Canary Foundation
Prostate Active Surveillance Study
Ian Thompson, M.D., University of Texas Health Science Center at San Antonio
Thursday, September 15, 2011 Continued

SESSION 7: Highlights of Recent EDRN Research Continued

11:40 a.m. – 12:05 a.m. Lung Cancer in Never Smokers
Samir Hanash, M.D., Ph.D., Fred Hutchinson Cancer Research Center

12:05 – 12:30 p.m. Ovarian Cancer Biomarkers
Nicole Urban, Sc.D., Fred Hutchinson Cancer Research Center

12:30 p.m. Adjourn Scientific Workshop

EDRN Steering Committee Meeting (Closed Sessions- By Invitation Only)

12:30 – 1:30 p.m. Executive Committee Luncheon

1:30 – 5:30 p.m. Collaborative Group Meetings
Lung and Other Upper Aerodigestive Cancers
Breast and Gynecological Cancers
Prostate and Other Urological Cancers
Gastrointestinal Cancers

Friday, September 16, 2011

7:00 – 8:00 a.m. Registration Check-In

8:00 a.m. – 12:00 p.m. EDRN Steering Committee Meeting (Closed Session-By Invitation Only)

12:00 p.m. Adjourn