Conference Chair:
Timothy R. Rebbeck, Dana-Farber Cancer Institute, Harvard T.H. Chan School of Public Health, Boston, MA

Conference Cochairs:
Sangeeta N. Bhatia, Massachusetts Institute of Technology, Cambridge, MA
Luis A. Diaz, Jr., Memorial Sloan Kettering Cancer Center, New York, NY
Ernest T. Hawk, The University of Texas MD Anderson Cancer Center, Houston, TX
Philip W. Kantoff, Convergent Therapeutics, Cambridge, MA

[R] - Remote Presentation

* - Short Talk selected from Proffered Abstracts

THURSDAY, NOVEMBER 17

Registration
1:30 pm-9:00 pm | Zilker North Lobby

Pre-conference Concurrent Satellite Sessions
3:00 pm-5:00 pm

Concurrent Session 1: Preneoplasia: Definitions, PreCancer Atlas and Resources
3:00 pm-5:00 pm | Zilker 4
Not eligible for CME credit

3:00- 3:25
Introduction to the NCI's PreCancer as Part of the Human Tumor Atlas Network
Sudhir Srivastava, National Cancer Institute, Bethesda, MD
Sharmistha Ghosh-Janjigian, National Cancer Institute, Bethesda, MD

3:25 - 4:20
Panel Discussion I: Definition of PreCancer: Viewpoints

Biology of Incipient and Precancer (BIP)
Lead Discussant: Eduardo Vilar-Sanchez, The University of Texas MD Anderson Cancer Center, Houston, TX
Panelist: Veronica M. Rotemberg, Memorial Sloan Kettering Cancer Center, New York, NY [R]
Anatomical and Clinical Pathological Definition of Precancer (ACPDP): Familial, Hereditary and Sporadic
Lead Discussant: Ernest T. Hawk, The University of Texas MD Anderson Cancer Center, Houston, TX
Panelist: Andrew T. Chan, Massachusetts General Hospital, Boston, MA

Molecular, Cellular, and Immuno-pathology of Precancer (MCIP)
Lead Discussant: Mary L. Disis, University of Washington, Seattle, WA
Panelists:
Adewole S. Adamson, The University of Texas at Austin Dell Medical School, Austin, Texas
Joshua LaBaer, The Biodesign Institute at Arizona State University, Tempe, AZ
Scott M. Lippman, Moores Cancer Center at UC San Diego Health, La Jolla, CA

4:20 - 5:00
Panel Discussion II: New Directions to Strengthen the Current Atlas Activities
Moderator: Sudhir Srivastava, National Cancer Institute, Bethesda, MD

Concurrent Session 2: NCI Funding for Precision Prevention Research
3:00 pm-4:30 pm | Zilker Ballroom 1-2
Not eligible for CME credit
Moderator: Goli Samimi, Breast and Gynecologic Cancer Research Group, Division of Cancer Prevention, NCI

3:00-3:05pm Welcome
Philip E. Castle, Division of Cancer Prevention, NCI

3:05-3:25pm Investigator-initiated grant opportunities for Precision Prevention
Brandy Heckman-Stoddard, Breast and Gynecologic Cancer Research Group, Division of Cancer Prevention, NCI

3:25-3:40pm Training Grant Opportunities at NCI
Mark Damico, Cancer Training Branch, Center for Cancer Training, NCI, NIH

3:40-4:00pm DCP/NCI Research Resources
4:00-4:30pm

**Program Director Roundtable**

*Moderator: Goli Samimi, Breast and Gynecologic Cancer Research Group, Division of Cancer Prevention, NCI*

Brandy Heckman-Stoddard  
Mark Damico  
Asad Umar  
Edward Sauter, Breast and Gynecologic Cancer Research Group, Division of Cancer Prevention, NCI  
Altaf Mohammed, Chemoprevention Agent Development Research Group, Division of Cancer Prevention, NCI

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**Welcome and Introduction**

Timothy R. Rebbeck, Ernest T. Hawk, Sangeeta N. Bhatia and Luis A. Diaz Jr.  
6:00 pm-6:10 pm | Zilker Ballroom 1-2

**Opening Keynote Address**  
6:10 pm-7:00 pm | Zilker Ballroom 1-2

- **6:10-6:15**  
  Introduction of Keynote Speaker  
  Timothy R. Rebbeck, Dana-Farber Cancer Institute, Harvard T.H. Chan School of Public Health, Boston, MA

- **6:15-7:00**  
  Innovation and equity in cancer prevention and screening  
  Douglas R. Lowy, National Cancer Institute, Bethesda, MD

**A Vision For The Future Of Cancer Prevention: Three Perspectives**  
7:00-8:00 pm | Zilker Ballroom 1-2  
*Moderator: Timothy Rebbeck, Dana Farber Cancer Institute, Harvard T.H. Chan School of Public Health, Boston, MA*

- **7:00-7:10**  
  Adriana Albini, University Milano Bicocca, Milano, Italy [R]

- **7:10-7:20**  
  Philip E. Castle, National Cancer Institute, Bethesda, MD

- **7:20-7:30**  
  David Crosby, Cancer Research UK, London, UK

- **7:30-8:00**  
  Panel Discussion: Drs. Lowy, Castle, Crosby, and Albini
Opening Reception  
8:00 pm-9:30 pm | Zilker Terrace & Foyer

FRIDAY, NOVEMBER 18

Continental Breakfast  
7:00 am-8:00 am | Zilker Terrace & Foyer

Breakfast Session I: Multicancer Early Detection Tests: New Data and Perspectives  
7:00 am-8:00 am | Zilker Ballroom 1-2  
Session Chair: Christina A. Clarke, Grail Inc. Menlo Park, CA  
Not eligible for CME credit

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| 7:00-7:30  | Assessing implementation of a multi-cancer early detection blood test for population screening in a clinical practice setting: Prospective PATHFINDER cohort study  
Eric A. Klein, Cleveland Clinic Lerner Research Institute, Cleveland, OH |
| 7:30-8:00  | Improved sensitivity of a multi-analyte early detection test based on mutation, methylation, aneuploidy, and protein biomarkers  
Frank Diehl, Exact Sciences Corp., Cambridge, MA |

Break  
8:00 am-8:30 am | Zilker North Lobby

Plenary Session 1: What Will Cancer Prevention and Early Detection Look like in 2041?  
8:30 am-10:00 am | Zilker Ballroom 1-2  
Session Chair: Timothy Rebbeck, Dana Farber Cancer Institute, Harvard T.H. Chan School of Public Health, Boston, MA

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| 8:30-9:00  | Optimizing the public’s health through prevention and early detection (precision and otherwise)  
Timothy R. Rebbeck, Dana-Farber Cancer Institute, Harvard T.H. Chan School of Public Health, Boston, MA |
| 9:00-9:30  | Aspirin and cancer: what’s next?  
Andrew T. Chan, Massachusetts General Hospital, Boston, MA |
| 9:30-10:00 | Molecular imaging and multicancer detection for precision medicine  
Katherine W. Ferrara, Stanford University, Stanford, CA |
Break
10:00 am-10:30 am | Zilker North Lobby

Plenary Session 2: Defining a Molecular Basis for Cancer Prevention and Early Detection
10:30 am-12:00 pm | Zilker Ballroom 1-2
Session Chair: Luis A. Diaz, Jr., Memorial Sloan-Kettering Cancer Center, New York, NY

10:30-11:00 MCEDs: lessons from prospective interventional studies
Nickolas Papadopoulos, Sidney Kimmel Comprehensive Cancer Center, Baltimore, MD

11:00-11:30 Cancer early detection, classification and monitoring using plasma cell-free DNA methylomes
Daniel D. De Carvalho, UHN Princess Margaret Cancer Centre, Toronto, ON, Canada

11:30-12:00 Early detection of cancer using cell-free DNA fragmentomes
Victor E. Velculescu, Sidney Kimmel Comprehensive Cancer Center, Baltimore, MD

Lunch
12:00 pm-1:00 pm | Zilker 3-4

Panel Discussion: How Can We Merge Novel Technologies with Knowledge of Cancer Mechanisms to Improve Early Detection of Cancer?
12:15 pm-1:15 pm | Zilker Ballroom 1-2
Moderator: Katherine W. Ferrara, Stanford University, Stanford, CA

Panelists:
Joshua LaBaer, The Biodesign Institute at Arizona State University, Tempe, AZ
Sudhir Srivastava, National Cancer Institute, Bethesda, MD
Victor E. Velculescu, Sidney Kimmel Comprehensive Cancer Center, Baltimore, MD

Break
1:15 pm-1:45 pm | Zilker North Lobby
Plenary Session 3: Preneoplastic Conditions as a Model for Early Detection
1:45 pm-3:15 pm | Zilker Ballroom 1-2
Session Chair: Ernest T. Hawk, The University of Texas MD Anderson Cancer Center, Houston, TX

1:45-2:15
Precision prevention of hematologic malignancies using clonal hematopoiesis
Kelly L. Bolton, Washington University at St. Louis, St. Louis, MO

2:15-2:45
Early detection and interception of lung cancer via a precancer atlas
Avrum E. Spira, Johnson & Johnson Innovation Center, Boston University, Boston, MA

2:45-3:15
Challenges and Opportunities in Early Detection of Melanoma
Veronica M. Rotemberg, Memorial Sloan Kettering Cancer Center, New York, NY [R]

Break
3:15 pm-3:45 pm | Zilker North Lobby

Plenary Session 4: Innovative Approaches for Implementation - Community, Regulatory, and Operational
3:45 pm-5:45 pm | Zilker Ballroom 1-2
Session Chair: Ernest T. Hawk, The University of Texas MD Anderson Cancer Center, Houston, TX

3:45-4:15
Implementation of population-based precision cancer screening programs
Nora Pashayan, University College London, London, UK

4:15-4:45
Precision prevention in high-risk populations: the example of Lynch syndrome
Eduardo Vilar-Sanchez, The University of Texas MD Anderson Cancer Center, Houston, TX

4:45-5:15
Delivering an effective community-driven model to reduce cancer risk at a population level: Results from MD Anderson’s Be Well Communities
Ruth Rechis, The University of Texas MD Anderson Cancer Center, Houston, TX

5:15-5:45
Precision public health approaches to health equity
Derek M. Griffith, Georgetown University, Washington, DC

Break
Spotlight on Proffered Papers I: Immunosuppression
6:00 pm-7:00 pm | Zilker Ballroom 1-2
Session Chair: Philip E. Castle, National Cancer Institute, Bethesda

6:00-6:15
Mechanisms by which Mito-LND inhibits KRAS mutant lung cancer*
Katherine M. Weh, University of Michigan, Ann Arbor, MI

6:15-6:30
A pilot study of a MUC1 vaccine in current and former smokers at high risk for lung cancer*
Arjun Pennathur, University of Pittsburgh School of Medicine, Pittsburgh, PA

6:30-6:45
Multiplexed immune phenotyping and miRNA-ISH in bronchial premalignant lesions reveals a mechanism of immune suppression*
Darren J. Chiu, Boston University School of Medicine, Boston, MA

6:45-7:00
The role of NOTCH1 in bronchial pre-malignant lesions*
Roxana Pfefferkorn, Boston University School of Medicine, Boston, MA

Poster Session / Reception
7:00 pm-9:00 pm | Zilker Ballroom 3-4

SATURDAY, NOVEMBER 19

Continental Breakfast
7:00 am-8:00 am | Zilker Terrace and Foyer

Breakfast Session II: Multicancer Early Detection Tests: New Data and Perspectives
7:00 am-8:00 am | Zilker Ballroom 1-2
Not eligible for CME credit
Session Chair: Christina A. Clarke, Grail Inc. Menlo Park, CA

7:00-7:30
The role of consortia building the paradigm of blood-based early cancer detection
Christina A. Clarke, Grail Inc. Menlo Park, CA

7:30-8:00
Rethinking risk assessment in the era of multi-cancer early detection
Alpa V. Patel, American Cancer Society, Atlanta, GA

Break
Keynote Address
8:30 am-9:30 am | Zilker Ballroom 1-2

8:30-8:45  Introduction of Keynote Speaker
Luis A. Diaz, Jr., Memorial Sloan Kettering Cancer Center, New York, NY

8:45-9:30  Clinical consideration for the promise of blood-based multicancer-screening
Minetta C. Liu, Natera, Inc. Austin, TX

Plenary Session 5: Prevention and Interception
9:30 am-11:00 am | Zilker Ballroom 1-2
Session Chair: Luis A. Diaz, Jr., Memorial Sloan-Kettering Cancer Center, New York, NY

9:30-10:00  Vaccine approach for interception of colon cancer
Mary L. Disis, University of Washington, Seattle, WA

10:00-10:30  Targeting the mTOR pathway for the prevention of triple-negative breast cancer
Powel H. Brown, The University of Texas MD Anderson Cancer Center, Houston, TX

10:30-11:00  Opportunity for interception as a driver of benefit in cancer early detection: implications for multi-cancer early detection testing
Ruth D. Etzioni, Fred Hutchinson Cancer Research Center, Seattle, WA

Lunch
11:00 am-12:00 pm | Zilker 3-4

Spotlight on Proffered Papers II: General (Merit)
11:15 am-12:15 pm | Zilker Ballroom 1-2
Session Chair: Timothy Rebbeck, Dana-Farber Cancer Institute, Harvard T.H. Chan School of Public Health, Boston, MA

11:15-11:30  Features and susceptibility to dietary-induced alkylating damage in colorectal cancer*
Marios Giannakis, Dana-Farber Cancer Institute, Boston, MA
11:30-11:45  Screening under-served populations by mobile low dose computerized tomography (LDCT) scans results in stage shift with potential cures: Time for a change in health policy?*
Derek Raghavan, Atrium Health Levine Cancer Institute, Charlotte, NC

11:45-12:00  A liposomal priming agent increases the sensitivity of liquid biopsies*
Maria Carmen Martin Alonso, Massachusetts Institute of Technology, Cambridge, MA

12:00-12:15  Development and testing of a polygenic risk score for breast cancer aggressiveness*
Yiwey Shieh, Weill Cornell Medicine, New York, NY

Break
12:15 pm-12:30 pm | Zilker North Lobby

Plenary Session 6: Technological Advances and Their Application in Early Detection
This session is dedicated to the Work and Life of Sanjiv Sam Gambhir, MD, PhD
12:30 pm-2:00 pm | Zilker Ballroom 1-2
Session Chair: Sangeeta N. Bhatia, Massachusetts Institute of Technology, Cambridge, MA

12:30-1:00  Nanotechnology-enabled approaches for early cancer detection
Sangeeta N. Bhatia, Massachusetts Institute of Technology, Cambridge, MA

1:00-1:30  Early cancer detection through the analyses of extracellular vesicles
Hakho Lee, Massachusetts General Hospital/Harvard University, Boston, MA

1:30-2:00  Contribution of biomarker based risk profiles to cancer early detection
Samir M. Hanash, The University of Texas MD Anderson Cancer Center, Houston, TX

Closing Remarks
2:00 pm-2:15 pm

Closing remarks
Luis A. Diaz, Jr., Memorial Sloan Kettering Cancer Center, New York, NY