



# Advances in Cancer Early Detection

## Tumorigenesis and the Microenvironment

November 8, 8:00 a.m.-5:00 p.m.

Dana-Farber Cancer Institute Yawkey Conference Center  
450 Brookline Avenue, Boston, MA 02115

7:30-8:00 Registration and Breakfast

8:00-8:10 **Introduction—Doug Micalizzi, MD, PhD (MGH)**

**The Biology of Pre-Cancer** Moderator: Wilhelm Haas, PhD (MGH)

8:10-8:40 Biological Insights from the Lung Squamous Pre-Cancer Atlas—*Jennifer Beane, PhD (Boston University)*

8:40-9:10 Colon Cancer and the Gut Microbiota—*Wendy Garrett, MD, PhD (HSPH)*

**The Immune System** Moderator: Lecia Sequist, MD, MPH (MGH)

9:15-9:45 Strategies for Cancer Immunoprevention—*Shawn Demehri, MD, PhD (MGH)*

9:45-10:15 Early Detection and Interception of Melanoma—*Irene Ghobrial, MD (DFCI)*

10:15-10:30 Coffee Break

**Keynote** Moderator: Sapna Syngal, MD, MPH (DFCI)

10:30-11:30 **Liquid Biopsy Markers in Gastrointestinal Cancers—Ajay Goel, PhD (City of Hope)**

11:30-12:30 Lunch (1 hour)

**What Makes a Tumor Cell?** Moderator: Doug Micalizzi, MD, PhD (MGH)

12:30-1:00 Cell-Cell Interactions in Regulation of Lung Progenitors and Lung Cancer—*Carla Kim, PhD (BCH)*

1:00-1:30 Molecular Analysis of Circulating Prostate Tumor Cells—*Daniel Haber, MD (MGH)*

1:30-1:45 Coffee Break

**Finding Signals of Early Cancer** Moderators: Shyamala Maheswaran, PhD (MGH)

1:45-2:15 AI-Controlled Autonomous Proteomics —*Willi Haas, PhD (MGH)*

2:15-2:45 Quantitative Multiplex Profiling of ctDNA in Early-Stage Pancreatic Cancer —*Erica Pratt, PhD (Boston University)*

2:55-3:25 Discovery of Non-Invasive Plasma Protein Biomarkers for Early Detection of Cancer Using 11k SomaScan Proteomics —*Towia Libermann, PhD (BIDMC)*

3:25-3:55 Molecular Analysis of Extracellular Vesicles in Liquid Biopsy for Cancer Diagnosis and Treatment Monitoring —*Hyungsoon Im, PhD (MGH)*

3:55-4:00 **Closing Remarks—Lecia Sequist, MD, MPH (MGH)**

4:00-5:00 Reception

Sponsored by the Dana-Farber/Harvard Cancer Center and its Cancer Cell Biology and Cancer Risk, Prevention, and Early Detection programs; the DFCI Centers for Early Detection and Interception; and the MGH Cancer Early Detection and Diagnostics Clinic.