

Agenda

Day 1: Monday, October 25

- 7:30 a.m. - 8:00 a.m. **Registration and Continental Breakfast**
- Poster Session Setup**
- 8:00 a.m. - 8:05 a.m. **Welcome and Meeting Charge** *Cyril Magnin Ballroom*
Richard Aragon, Ph.D.
Director
Innovative Molecular Analysis Technologies Program
National Cancer Institute, NIH
- 8:05 a.m. - 8:50 a.m. **IMAT 2010: State of the Program: Where We Are, Where We've Been, and Where We Are Going**
Carolyn C. Compton, M.D., Ph.D.
Director
Office of Biorepositories and Biospecimen Research
National Cancer Institute, NIH
- 8:50 a.m. - 9:10 a.m. **Implementation of Innovative RNA Sample Quality Control Methods**
James C. Willey, M.D.
University of Toledo
- 9:10 a.m. - 10:40 a.m. **Session I: Breakthroughs in Cancer Detection and Prevention: Scientific and Technological Achievements in the Early Detection of Cancer**
- Moderators: Lynn R. Sorbara, Ph.D.
 Division of Cancer Prevention
 National Cancer Institute, NIH
- Paul D. Wagner, Ph.D.
 Division of Cancer Prevention
 National Cancer Institute, NIH
- 9:10 a.m. - 9:40 a.m. ***Spatial-Domain Low-Coherence Quantitative Phase Microscopy for Cancer Detection***
Yang Liu, Ph.D.
University of Pittsburgh
- 9:40 a.m. - 10:10 a.m. ***Fabrication of a Nanocoaxial Biosensor for Detection of Cancer Biomarkers***
Thomas C. Chiles, Ph.D.
Boston College
- 10:10 a.m. - 10:40 a.m. ***Efficient Methods for Profiling Allele-Specific DNA Methylation in Cancer Precursor Tissues***
Benjamin Tycko, M.D., Ph.D.
Columbia University

10:40 a.m. - 11:00 a.m.	Coffee Break
11:00 a.m. - 12:30 p.m.	<p>Session II: Breakthroughs in Cancer Treatment and Diagnosis: Scientific and Technological Innovations to Enable More Effective Individualized Approaches to Cancer Diagnostics and Care</p> <p>Moderator: Avi Rasooly, Ph.D. Division of Cancer Treatment and Diagnosis National Cancer Institute, NIH</p>
11:00 a.m. - 11:30 a.m.	<p><i>DNA Methylation Profiling From Fixed Melanoma Tissues</i> Nancy E. Thomas, M.D., Ph.D. University of North Carolina</p> <p>Sharon N. Edmiston University of North Carolina</p>
11:30 a.m. - 12 noon	<p><i>Single-Cell Analysis Reveals Cellular Heterogeneity of Cancer and Normal Cell Lines</i> John F. Zhong, Ph.D. University of Southern California</p>
12 noon - 12:30 p.m.	<p><i>Developing a Single-Cell Growth Assay Platform for Monitoring Response to Cancer Therapies</i> Scott Manalis, Ph.D. Massachusetts Institute of Technology</p>
12:30 p.m. - 1:30 p.m.	Lunch
1:30 p.m. - 2:15 p.m.	<p>Keynote: <i>Concept, Challenges, and Paradigms in Molecularly Informed Cancer Care</i> Joe W. Gray, Ph.D. Lawrence Berkeley National Laboratory</p>
2:15 p.m. - 3:45 p.m.	<p>Session III: Breakthroughs in Integrated Cancer Biology and Tumor Microenvironment: Technologies for Forming and Building the Foundations of Molecular Medicine</p> <p>Moderators: J. Randy Knowlton, Ph.D. Division of Cancer Biology National Cancer Institute, NIH</p> <p>Jerry Li, Ph.D. Division of Cancer Biology National Cancer Institute, NIH</p>
2:15 p.m. - 2:45 p.m.	<p><i>Development of a Nanoscale Calorimeter</i> Dale N. Larson, M.S. Draper Laboratory</p>

2:45 p.m. - 3:15 p.m. ***Genetically Encoded Photo-Crosslinking Approaches to Map Cancer Signaling Pathways***
Scott Soderling, Ph.D.
Duke University

3:15 p.m. - 3:45 p.m. ***Defining Epigenetic Proteomes Using Novel Crosslinking Agents***
Lucy Ann Godley, M.D., Ph.D.
University of Chicago

3:45 p.m. - 4:00 p.m. **Break**

4:30 p.m. - 6:00 p.m. **Poster Session and Reception** *Cyril Magnin Foyer*

Day 2: Tuesday, October 26

8:00 a.m. - 8:30 a.m. **Continental Breakfast**

8:30 a.m. - 8:40 a.m. **Recap of Day One** *Cyril Magnin Ballroom*
Richard Aragon, Ph.D.
Director
Innovative Molecular Analysis Technologies Program
National Cancer Institute, NIH

8:40 a.m. - 10:35 a.m. **Session IV: The Science of Team Science: Finding, Making, and Keeping Strategic Technological Partnerships**

Moderator: Richard Aragon, Ph.D.
Director
Innovative Molecular Analysis Technologies Program
National Cancer Institute, NIH

8:40 a.m. - 9:10 a.m. ***The Biomarkers Consortium: Lessons Learned***
Shawnmarie Mayrand-Chung, J.D., Ph.D.
Office of Science Policy Analysis
Office of the Director, NIH

9:10 a.m. - 9:40 a.m. ***The Science of Team Science: Why Bother With Return on Investment Analysis?***
Stefano Bertuzzi, Ph.D.
Office of Science Policy Analysis
Office of the Director, NIH

9:40 a.m. - 10:05 a.m. ***NIH's View of Public-Private Partnerships***
Barbara B. Mittleman, M.D.
Office of Science Policy Analysis
Office of the Director, NIH

10:05 a.m. - 10:35 a.m.	<i>NCI SBIR Funding Opportunities to Commercialize New Innovations</i> Deepa Narayanan, M.S. National Cancer Institute, NIH	
10:35 a.m. - 11:00 a.m.	Break	
11:00 a.m. - 12:30 p.m.	Session V: Breakthroughs in Cancer Control and Population Sciences: Technologies for Risk Assessment in Populations Moderator: Rao L. Divi, Ph.D. Division of Cancer Control and Population Sciences National Cancer Institute, NIH	
11:00 a.m. - 11:30 a.m.	<i>Evaluation of Ultra-High-Throughput qPCR Platforms for MicroRNA Profiling: Implications for Profiling Plasma MicroRNAs in Pancreatic Cancer Patients</i> Thomas D. Schmittgen, Ph.D. Ohio State University	
11:30 a.m. - 12 noon	<i>High-Resolution Optical Molecular Cytogenetic Analysis of Fresh and Archival Tissues Using Spread Chromatin Arrays</i> Heinz-Ulli Weier, Ph.D., M.S. Lawrence Berkeley National Laboratory	
12 noon - 12:30 p.m.	<i>MMPA: A Novel Method for Simultaneous Detection of Multiple Methylated Sequences in a Large Background of Unmethylated Sequences</i> Baochuan Guo, Ph.D. GLC Biotechnology, Inc	
12:30 p.m. - 1:30 p.m.	Lunch	
1:30 p.m. - 2:00 p.m.	Poster Session	<i>Cyril Magnin Foyer</i>
2:00 p.m. - 3:00 p.m.	Session VI: From Lab to Market: Nontraditional Paradigms and Strategies in Technology Dissemination and Commercialization (Latest IMAT Success Stories) Moderator: Richard Aragon, Ph.D. Director Innovative Molecular Analysis Technologies Program National Cancer Institute, NIH	<i>Cyril Magnin Ballroom</i>
2:00 p.m. - 2:30 p.m.	<i>RainDance Technology: Commercialization of Droplet Microfluidics</i> Darren R. Link, Ph.D. RainDance Technologies, Inc.	

2:30 p.m. - 3:00 p.m.

***Single-Molecule Analysis and Whole Genome Amplification
Technologies Based on Strand-Displacing DNA Polymerases***

Paul Lizardi, Ph.D.
Yale University

3:00 p.m. - 3:30 p.m.

Closing Remarks

Richard Aragon, Ph.D.
Director
Innovative Molecular Analysis Technologies Program
National Cancer Institute, NIH

3:30 p.m.

Meeting Adjourned

