Ninth Principal Investigators Meeting Agenda

Agenda

Ninth Principal Investigators Meeting
Innovative Molecular Analysis Technologies (IMAT) Program
October 26-28, 2008
Hyatt Regency Cambridge
President's Ballroom

Sunday, October 26, 2008

2:00 p.m. - 8:30 p.m.	**Registration and Poster Setup**
3:00 p.m. - 3:15 p.m.	**Welcome and Introductions**
3:15 p.m. - 5:00 p.m.	**Scientific Session 1: Technologies To Capture Circulating Tumor Cells (CTCs)** Moderator: Paul Wanger, Ph.D. National Cancer Institute, NIH ***Development of a Membrane Microfilter Device for Capture and Characterization of CTCs in Blood*** Richard J. Cote, M.D. University of Southern California ***Development of an RNA Sensor Platform for Detection of CTCs*** Gary Clawson, M.D., Ph.D. The Pennsylvania State University ***Isolation of Rare Cells From Whole Blood Using Microfluidics*** Lance L. Munn, Ph.D. Harvard Medical School ***Performance Characteristics of a New CTC Enrichment Method Using a Negative Selection Strategy*** Steven Bogen, M.D., Ph.D. Boston University
5:00 p.m. - 5:15 p.m.	**Break**
5:15 p.m. - 6:15 p.m.	**Keynote Address: When Quality Matters Most: Driving Innovative Research and Develoment Through Emerging**

	Paradigms in Biospecimen Science and Utilization Carolyn C. Compton, M.D., Ph.D. National Cancer Institute, NIH
6:15 p.m. - 7:15 p.m.	**Prospects and Possibilities** Moderator: J. Randy Knowlton, Ph.D. National Cancer Institute, NIH
	Funding Opportunities and Strategies for Moving Your Research Forward Jennifer Couch, Ph.D. National Cancer Institute, NIH
	Center to Reduce Cancer Health Disparaties and IMAT: Fostering Collaborations, Exploring Synergies and Reducing Cancer Health Disparities LeeAnn Bailey, Ph.D. National Cancer Institute, NIH
	The Biospecimen Research Network: A Resource For Technology Development Mark D. Lim, Ph.D. National Cancer Institute, NIH

Monday, October 27, 2008

7:00 a.m. - 8:00 a.m.	**Registration and Continental Breakfast**
8:00 a.m. - 8:45 a.m.	**Keynote Address: *Mass Spectrometry-Based Proteomic Approaches for the Discovery of Disease Biomarkers for Lymphoma*** Megan S. Lim, M.D., Ph.D. University of Michigan
8:45 a.m. - 10:30 a.m.	**Scientific Session II: New Technologies for Sample Preparation** Moderator: Lynn R. Sorbara, Ph.D. National Cancer Institute, NIH
	High Resolution Karyotype Analysis of Single Cells Using BAC-FISH Assays Heinz-Ulrich Weier, Ph.D. Lawrence Berkeley National Laboratory

Magnetically Patterned Co-Cultures for Cancer Studies
Daniel H. Reich, Ph.D.
John Hopkins University

Microfluidic Channels for High-Density, High-Performance Culture Assays
David J. Beebe, Ph.D.
University of Wisconsin

Sample Preparation Methods for Microvessel Analysis in Tumors
Rosalinda Sepulveda, M.D.
Harvard School of Public Health

10:30 a.m. - 10:45 a.m. **Break**

10:45 a.m. - 12:30 p.m. **Scientific Session III: New Technologies for Genomic Analysis**
Moderator: Jay N. Choudry
National Cancer Institute, NIH

Interaction-Specific Network Perturbation of Disease Proteins
Marc Vidal, Ph.D.
Dana-Farber Cancer Institute

Impact of q-RT-PCR Analytical Methods on a Multicenter Biomarker Trial in Colorectal Cancer
Terry Hyslop, Ph.D.
Thomas Jefferson University

Sequence Enrichment Using Droplet-Based Microfluidics
Jeff Olson
RainDance Technologies, Inc.

Novel Biomarkers for Assessing Epigenetic Instability and Risk of Head and Neck Cancer
Paul M. Lizardi, Ph.D.
Yale University School of Medicine

12:30 p.m. - 1:45 p.m. **Lunch and Posters**

1:45 p.m. - 4:00 p.m.	**Scientific Session IV: New Molecular Tools** Moderator: J. Randy Knowlton, Ph.D. National Cancer Institute, NIH
	Digital Transcriptome Subtraction To Discover New Human Tumor Viruses Patrick S. Moore, M.D., M.P.H. University of Pittsburgh Cancer Center
	Going After the "Sweet Spot" in Selecting Aptamers for Glycoproteins Binghe Wang, Ph.D. Georgia State University
	Real-Time PCR Quantification of Precursor and Mature MicroRNAs as a Means To Study Posttranscriptional Regulation of MicroRNAs Thomas D. Schmittgen, Ph.D. Ohio State University
	One-Step Synthesis of Biofunctionalized Quantum Dots Using DNA Ligands Shana Kelley, Ph.D. University of Toronto
4:00 p.m. - 4:15 p.m.	**Break**
4:15 p.m. - 5:00 p.m.	**Keynote Address: *Microchannel Resonators for Single Cell Analysis*** Scott Manalis, Ph.D. Massachusetts Institute of Technology
5:00 p.m. - 7:00 p.m.	**Poster Session and Reception**
7:00 p.m. - 9:00 p.m.	**Special Session: Successful Commercialization of a New Biotechnology** *President's Ballroom, Salons A-C* Moderator: Richard Aragon, Ph.D. National Cancer Institute, NIH
	Biomolecular Analysis Using Liquid Crystals Nicolas L. Abbott, Ph.D.

University of Wisconsin

Commercializing a Disruptive Technology
Laura M. Heisler, Ph.D.
Wisconsin Alumni Research Foundation
Douglas Crawford, Ph.D.
California Institute for Quantitative Biosciences

Technology Transfer: A Tool to Advance Scientific Research for IMAT Researchers
Kevin Brand, J.D.
National Cancer Institute, NIH

Tuesday, October 28, 2008

Special Joint Session With Clinical Proteomics Technologies for Cancer (CPTC) Annual Meeting

7:30 a.m. - 8:00 a.m.	**Breakfast, Registration, and CPTC Poster Setup**
8:00 a.m. - 8:10 a.m.	**Welcome and Introduction** Henry Rodriguez, Ph.D. National Cancer Institute, NIH
8:10 a.m. - 8:50 a.m.	**Keynote Address: *Genomic Variation and Disease*** David Altsuler, M.D., Ph.D. Professor of Genetics and Medicine Harvard Medical School/Massachusetts General Hospital Director Program in Medical and Population Genetics Broad Institute of MIT and Harvard
8:50 a.m. - 12 noon	**Special CPTC-IMAT Joint Session: Fostering Collaborative Efforts** Co-Moderators: Chris Kinsinger, Ph.D. National Cancer Institute, NIH J. Randy Knowlton, Ph.D. National Cancer Institute, NIH
8:50 a.m. - 9:15 a.m.	***CPTC Antibody Characterization Pipeline-Grand Opening*** Tara Hiltke, Ph.D.

	National Cancer Institute, NIH
9:15 a.m. - 9:40 a.m.	***Technology To Optimize SCFVs for Targeting Therapeutics*** Mark J. Federspiel, Ph.D. Mayo Clinic
9:40 a.m. - 10:05 a.m.	***Incorporating IMAT-Developed Technology Into Another NCI Program*** Paul Tempst, Ph.D. Memorial Sloan-Kettering Cancer Center
10:05 a.m. - 10:20 a.m.	**Break**
10:20 a.m. - 10:45 a.m.	***An Integrated Programmatic Environment To Support In-Depth Proteomics and Phosphoproteomics Profiling and Studies of Gas Phase Chemistry of Peptides and Phosphopeptides*** Katheryn Resing, Ph.D. University of Colorado at Boulder
10:45 a.m. - 11:10 a.m.	***Performance and Optimization of LC-MS/MS Platforms for Proteomic Analyses: An Interlaboratory Study*** Daniel C. Liebler, Ph.D. Vanderbilt University
11:10 a.m. - 11:35 a.m.	***Nanoscaled Detection of the Disease Proteome*** Nicolas J. Wang, Ph.D. Lawrence Berkeley National Laboratory
11:35 a.m. - 12 noon	***Verification of Candidate Protein Biomarkers: Reproducibility of MRM-Based Assays*** Steven Hall, Ph.D. University of California, San Francisco
12 noon - 1:30 p.m.	**Joint Networking and Poster Session (with Lunch)**
1:30 p.m.	**IMAT Meeting Adjournment**

IMAT attendees are welcome to stay and attend the CPTC meeting.

For more information on the CPTC meeting, please go to:
http://www.capconcorp.com/meeting/proteomic2008/.

For more information on the CPTC program, please go to:
http://proteomics.cancer.gov/.