

Eighth Principal Investigators Meeting Agenda

Eighth Principal Investigators Meeting
Innovative Molecular Analysis Technologies (IMAT) Program
July 24-25, 2007
Sofitel San Francisco Bay
Redwood City, CA

Agenda

Scientific Theme: Integrating Technology Platforms:
Separation, Detection, Analysis, and Data Management

Tuesday, July 24, 2007

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| 7:00 a.m. - 7:00 p.m. | Registration
<i>Ballroom Foyer</i> |
| 7:00 a.m. - 8:00 a.m. | Breakfast
<i>Ballroom Foyer</i> |
| 7:00 a.m. - 8:00 p.m. | Poster Setup
<i>Champagne</i> |
| 8:00 a.m. - 8:15 a.m. | Welcoming Remarks and Introduction of IMAT Program
<i>Bordeaux</i> |
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Carolyn C. Compton, M.D., Ph.D.
Office of Biorepositories and Biospecimen Research
National Cancer Institute, NIH |
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J. Randy Knowlton, Ph.D.
Division of Cancer Biology
National Cancer Institute, NIH |
| 8:15 a.m. - 9:00 a.m. | Keynote Speaker
<i>Translation of Technical Development into the Clinical Laboratory</i>
Frederic M. Waldman, M.D., Ph.D.
University of California, San Francisco |
| 9:00 a.m. - 10:20 a.m. | Scientific Session I: Gold Standards, Cool Samples, and Analysis—Part 1
Moderator: J. Randy Knowlton, Ph.D.
National Cancer Institute, NIH |

- 9:00 a.m. - 9:20 a.m. ***Evaluation of the Value of Frozen Tissue Section Used as the Gold Standard for Immunohistochemistry***
Shan-Rong Shi, M.D.
University of Southern California
- 9:20 a.m. - 9:50 a.m. ***Tissue Print Micropeels for the Molecular Profiling of Cancer***
Sandra M. Gaston, Ph.D.
Beth Israel Deaconess Medical Center/Harvard Medical School
- 9:50 a.m. - 10:20 a.m. ***Molecular Analysis of EGF Receptor (EGFR) Expression and Activation Using Nanostructured Surfaces and Liquid Crystal-Based Technologies***
Paul J. Bertics, Ph.D.
University of Wisconsin-Madison
- 10:20 a.m. - 10:40 a.m. **BREAK**
Ballroom Foyer
- 10:40 a.m. - 11:40 a.m. **Scientific Session I: Gold Standards, Cool Samples, and Analysis—Part 2**
Bordeaux
Moderator: J. Randy Knowlton, Ph.D.
National Cancer Institute, NIH
- 10:40 a.m. - 11:10 a.m. ***Application of a Sensitive Double-Clad Optical Fiber for Two-Photon Fluorescence Measurement in Tissues***
James R. Baker, Jr., M.D.
University of Michigan
- 11:10 a.m. - 11:40 a.m. ***Identification of Immune-Selected Breast Cancer Antigens***
Kevin Claffey, Ph.D.
University of Connecticut Health Center
- 11:40 a.m. - 11:55 a.m. **IMAT Review**
Jeffrey E. DeClue, Ph.D.
Division of Extramural Activities
National Cancer Institute, NIH
- 11:55 a.m. - 12:15 p.m. **NCI/NIH Research Resources for the IMAT Investigator**
James W. Jacobson, Ph.D.
National Cancer Institute, NIH
- 12:15 p.m. - 1:30 p.m. **Lunch and Posters**
Ballroom Foyer/Champagne
- 1:30 p.m. - 2:45 p.m. **The Cancer Genome Atlas (TCGA)**

Bordeaux

Moderator: Carolyn C. Compton, M.D., Ph.D.

National Cancer Institute, NIH

1:30 p.m. - 1:55 p.m. ***What Is TCGA, and What Are TCGA's Technology Needs?***

Daniela S. Gerhard, Ph.D.

Director, Office of Cancer Genomics

National Cancer Institute, NIH

1:55 p.m. - 2:45 p.m. **TCGA-Related Technical Developments**

1:55 p.m. - 2:20 p.m. ***Exon-Specific Sequencing of Whole Genomic DNA***

Darren R. Link, Ph.D.

RainDance Technologies, Inc.

2:20 p.m. - 2:45 p.m. ***Mapping the Transcriptional Regulatory Networks and Epigenome of Cancer Cells: A ChIP-chip Approach***

Bing Ren, Ph.D.

Ludwig Institute for Cancer Research/University of California, San Diego

2:45 p.m. - 3:30 p.m. **Keynote Presentation**

Pathways-Based Analysis of Cancer Progression From High-Throughput Data

Sylvia K. Plevritis, Ph.D.

Stanford University

3:30 p.m. - 3:50 p.m.

BREAK

Ballroom Foyer

3:50 p.m. - 5:50 p.m. **Scientific Session II: FFPE Samples: Turning Lead Into Gold**

Bordeaux

Moderator: Lynn R. Sorbara, Ph.D.

National Cancer Institute, NIH

3:50 p.m. - 4:20 p.m. ***Starting Material Degradation Test Is Tied to Success in Whole-Genome Amplification From Diverse Clinical Samples***

G. Mike Makrigiorgos, Ph.D.

Dana Farber Cancer Institute/Harvard Medical School

4:20 p.m. - 4:50 p.m. ***Ultrasound Tissue Fixation and Processing Achieve Superior Morphology and Macromolecule Integrity***

Wei-Sing Chu, M.D.

U.S. Department of Veterans Affairs

4:50 p.m. - 5:20 p.m. ***Automated, Whole-Slide-Based, Multiplexed Molecular***

Marker Assessment in Formalin-Fixed, Paraffin-Embedded Tissues

Richard M. Levenson, M.D.

Cambridge Research & Instrumentation, Inc.

5:20 p.m. - 5:50 p.m.

Expression Profiling in Paraffin-Embedded Tissues and Patient Cell Lines Reveals Predictive Markers in Intestinal Tumorigenesis and Colorectal Cancer Treatment

Rossanna C. Pezo, M.S.

Albert Einstein College of Medicine

6:00 p.m. - 8:00 p.m.

Poster Session and Reception

Champagne

6:00 p.m. - 7:00 p.m.

Odd poster numbers will stand by their posters for Q&A.

7:00 p.m. - 8:00 p.m.

Even poster numbers will stand by their posters for Q&A.

Wednesday, July 25, 2007

7:00 a.m. - 8:00 a.m.

Breakfast and Posters

Ballroom Foyer/Champagne

7:30 a.m. - 3:30 p.m.

Registration

Ballroom Foyer

8:00 a.m. - 10:20 a.m.

\$\$\$Future Potential\$\$\$

Bordeaux

Moderator: Jennifer Couch, Ph.D.

Division of Cancer Biology

National Cancer Institute, NIH

8:00 a.m. - 8:40 a.m.

Topic 1: Downstream Funding Opportunities

8:00 a.m. - 8:15 a.m.

Jennifer Couch, Ph.D.

Division of Cancer Biology

National Cancer Institute, NIH

8:15 a.m. - 8:40 a.m.

Rohit K. Shukla, M.A.

Commercialization Assistance Program Representative

Larta Institute

8:40 a.m. - 10:20 a.m.

Topic 2: Technology Transfer

8:40 a.m. - 8:55 a.m.

Kevin Brand, J.D.

Technology Transfer Center

National Cancer Institute, NIH

8:55 a.m. - 9:10 a.m.

J.P. Kim, J.D., M.B.A., M.S.

- Division of Extramural Inventions and Technology
National Cancer Institute, NIH
- 9:10 a.m. - 9:25 a.m. Wendy D. Streitz, M.S.E.E.
Policy, Analysis, and Campus Services
University of California System
- 9:25 a.m. - 9:40 a.m. Novel 3-D Tissue Imaging: A Multi-Dimensional Story of
Technology Development
Bevin P. Engelward, Sc.D.
Massachusetts Institute of Technology
- 9:40 a.m. - 10:20 a.m. Panel Discussion for Technology Transfer Extramural
Community (Licensing Technologies, Intellectual Properties,
and Patent MTAs and CDAs)
- 10:20 a.m. - 10:40 a.m. **BREAK**
Ballroom Foyer
- 10:40 a.m. - 11:25 a.m. **Keynote Presentation**
Bordeaux
Genomic Data Management and Analysis: Good, Bad, and Ugly
Timothy J. Triche, M.D., Ph.D.
Children's Hospital Los Angeles
- 11:25 a.m. - 12:30 p.m. **Lunch and Posters**
Ballroom Foyer/Champagne
- 12:30 p.m. - 3:30 p.m. **Scientific Session III: Circulating Cells: Catch Me If You Can**
Moderator: James W. Jacobson, Ph.D.
National Cancer Institute, NIH
- 12:30 p.m. - 1:00 p.m. ***Integrated Polymer-Based Microfluidic Systems for the Efficient Capture and Enumeration of Circulating Tumor Cells (CTCs) From Peripheral Blood***
Steven A. Soper, Ph.D.
Louisiana State University
- 1:00 p.m. - 1:30 p.m. ***Chip-Based RNA Sensor Platform for the Detection of Circulating Tumor Cells***
Gary A. Clawson, M.D., Ph.D.
The Pennsylvania State University
- 1:30 p.m. - 2:00 p.m. ***Activity-Based Probes for Profiling Histone Deacetylase Complexes in Proteomes***
Cleo M. Salisbury, Ph.D.

- The Scripps Research Institute
- 2:00 p.m. - 2:30 p.m. ***Developing Proteomic Technologies for Rapid, Real-Time, Label-Free Detection of Protein Interactions***
Niroshan Ramachandran, Ph.D.
Harvard Medical School/Dana-Farber Cancer Institute
- 2:30 p.m. - 3:00 p.m. ***Clinical Application of Multispectral Imaging Flow Cytometry***
Hans Minderman, Ph.D.
Roswell Park Cancer Institute
- 3:00 p.m. - 3:30 p.m. ***Phosphoprotein Profiling for Quantitative Analysis of Protein Phosphorylation Patterns***
Stephen Kron, M.D., Ph.D.
The University of Chicago
- 3:30 p.m. **Adjournment and Poster Removal**