

1st Principal Investigators Meeting Agenda

1st Principal Investigators Meeting
Innovative Molecular Analysis Technologies Program
July 6-8, 2000
Westfields International Conference Center
Chantilly, Virginia

Agenda

THURSDAY, JULY 6, 2000

- 5:00-6:30 p.m. **Registration**
- 6:30 p.m. **Welcome** Dr. Carol Dahl, National Cancer Institute
- 6:45 p.m. **Plenary Lecture: Future Directions in Cancer Research**
Dr. Richard Klausner, Director, National Cancer Institute
- 7:30 p.m. **Session 1: Highlights in DNA Analysis**
Session Chair: Dr. Deirdre Meldrum, University of Washington
- 7:40 p.m. **Multiparameter Analysis of Human Epithelial Tumors by Laser Scanning Cytometry**
Dr. Stanley Shackney, Allegheny-Singer Research Institute
- 8:05 p.m. **Optomechanical Detection of Biomolecular Recognition and Interactions**
Dr. Arun Majumdar, University of California, Berkeley
- 8:30 p.m. **High-Throughput Methylation Analysis using CpG Island Microarray**
Dr. Tim Hui-Ming Huang, University of Missouri
- 8:55 p.m. **Highly Selective Isolation of Unknown Mutations in Diverse DNA Fragments: New Potential for Multiplex Screening in Cancer**
Dr. G. Mike Makrigiorgos, Dana-Farber Cancer Institute
- 9:20 p.m. **High-Resolution Sequencing of Mixed Population of DNA Molecules**
Dr. Nadia Lifshitz, Biophotonics Corporation
- 9:45 p.m. **Detection of Genomic Alteration by Molecular Combing**

Dr. Aaron Bensimon - Pasteur Institute

10:10 p.m. **Adjourn**

FRIDAY, JULY 7, 2000

Registration

6:30-8:00 a.m.

7:00 a.m. **Breakfast**

Poster set up

Plenary Lecture: The Cancer Genome Anatomy Project

8:00 a.m. Dr. Robert Strausberg, National Cancer Institute

8:30 a.m. **Session 2: Emerging Technologies for RNA Analysis**

Session Chair: Dr. Mark Chee, Illumina, Inc.

8:40 a.m. **Messenger RNA Profiling by Single Molecule Counting**

Dr. Paul Lizardi, Yale University

9:10 a.m. **Randomly Self-Assembled Bead-Based Arrays for Highly Parallel Analysis of Nucleic Acids**

Dr. Mark Chee, Illumina, Inc.

9:40 a.m. **Fish & Chips**

Dr. Robert Singer, Albert Einstein College of Medicine

10:10 a.m. **Break**

10:45 a.m. **Session 3: Advances in Protein Expression Analysis**

Session Chair: Dr. Richard Smith, Pacific Northwest National Laboratory

10:50 a.m. **Proteomics Applied to the Search for Cancer Markers in Human Body Fluids**

Dr. N. Leigh Anderson, Large Scale Proteomics Corporation

11:15 a.m. **Quantitative Proteome Analysis: Methods and Applications**

Dr. Reudi Aebersold, University of Washington

11:40 a.m. **Microfabricated Fluidic Devices for Protein and Peptide Mapping**

Dr. J. Michael Ramsey, Oak Ridge National Laboratory

12:05 p.m.

Lunch

1:30 p.m.

Session 3: Advances in Protein Expression Analysis

Session Chair: Dr. Richard Smith, Pacific Northwest National Laboratory

1:40 p.m.

The *C. elegans* ORFeome Cloning Project

Dr. Marc Vidal, Dana-Farber Cancer Institute

2:05 p.m.

Sigma Receptors as a Biomarker of the Proliferative Status of Solid Tumors

Dr. Robert Mach, Wake Forest University

2:30 p.m.

Plenary Lecture: The Director's Challenge

Dr. Barbara Conley, National Cancer Institute

3:00 p.m.

Break

3:30 p.m.

Session 4: New Strategies for Protein Structure and Function Analysis

Dr. Daniel Jay, Tufts University

3:40 p.m.

Structural Genomics Target Selection for Cancer-Related Proteins Across Complete Genomes

Dr. Terry Gaasterland, The Rockefeller University

4:10 p.m.

The Electronic Detection of Interactions Between Ligands and Cell Surface Receptors

Dr. Cynthia Bamdad, Minerva Biotechnologies Corporation

4:40 p.m.

Identification of Novel Breast Cancer Agents Using Functional Genomics

Dr. Marek Liyanage, Aurora Biosciences

5:10 p.m.

A High Throughput Screen for Cancer Cell Invasiveness Using Chromophore-Assisted Laser Inactivation

Dr. Daniel Jay, Tufts University

5:30-10:00 p.m.

Poster Session and Reception

7:00 p.m.

Special Session

NCI Resources: Tools to Speed Cancer Research

8:00 p.m.

Special Session

Phased Innovation Awards: Review and Transitions

SATURDAY, JULY 8, 2000

7:00 a.m.

Breakfast

8:00 a.m.

Plenary Lecture:

Molecular Epidemiology and the Genetic Annotation Initiative

Dr. Kenneth Buetow, National Cancer Institute

8:30 a.m.

Highlights in DNA Analysis

Dr. Deirdre Meldrum, University of Washington

8:50 a.m.

Emerging Technologies for RNA Analysis

Dr. Mark Chee, Illumina, Inc.

9:10 a.m.

Advances in Protein and Functional Analysis

Dr. Richard Smith, Pacific Northwest National Laboratory

9:30 a.m.

New Strategies for Protein Structure and Function Analysis

Dr. Daniel Jay, Tufts University

9:50 a.m.

Discussion

10:15 a.m.

Closing Remarks

Lunch