

2nd Principal Investigators Meeting Agenda

2nd Principal Investigators Meeting
Innovative Molecular Analysis Technologies Programs
June 27-29, 2001
Ritz-Carlton
Washington, DC

Agenda

WEDNESDAY, JUNE 27, 2001

- 6:30 a.m. - 8:30 a.m. **Registration**
- 7:30 a.m. - 8:30 a.m. **Breakfast**
- 8:30 a.m. - 8:50 a.m. **Welcoming Remarks**
Dr. Carol Dahl, Director, Office of Technology and Industrial Relations (OTIR), NCI
- 8:50 a.m. - 9:00 a.m. **Session 1: Highlights in DNA Analysis**
Session Chair: D r. Graham Brock, University of Glasgow
- 9:00 a.m. - 9:25 a.m. **Identification of m5CpG Alterations Associated with Breast Carcinomas**
Dr. Graham Brock, University of Glasgow
- 9:25 a.m. - 9:50 a.m. **DNA Damage Quantitation by Single Molecule Laser Sizing**
Dr. John Sutherland, Brookhaven National Laboratory
- 9:50 a.m. - 10:15 a.m. **Detecting Gene Copy Number Fluctuations with Microarrays of Genomic**
Dr. Michael Wigler, Cold Spring Harbor Laboratory
- 10:15 a.m. - 10:40 a.m. **Break**
- 10:40 a.m. - 11:05 a.m. **Four Color Array-bound SNP/Mutation Detection in Cancer**
Dr. Paolo Fortina, The Children's Hospital of Philadelphia
- 11:05 a.m. - 11:30 a.m. **Digital Optical Chemistry; A Novel System for the Rapid Fabrication of Custom Oligonucleotide Arrays**
Dr. Harold Garner, University of Texas Southwestern

- 11:30 a.m. - 12:00 noon **The Early Detection Research Network**
Dr. Sudhir Srivastava, Chief, Cancer Biomarkers Research Group, NCI
- 12:05 p.m. - 1:00 p.m. **Lunch**
- 1:00 p.m. - 1:10 p.m. **Session 2: Emerging Technologies for RNA Analysis**
Session Chair: Dr. Peter Tolias, Center for Applied Genomics, Public Health Research Institute
- 1:10 p.m. - 1:35 p.m. **Cancer Classification Based on mRNA Isoforms**
Dr. Xiang-Dong Fu, University of California at San Diego
- 1:35 p.m. - 2:00 p.m. **PNA Interference Mapping: A New Technique for RNA Structural Analysis**
Dr. William Strauss, Harvard Institute of Human Genomics
- 2:00 p.m. - 2:25 p.m. **Strategies for Functional Cloning, Sorting and Expression Profiling of Genes That May Be Relevant to Cancer**
Dr. Peter Tolias, Center for Applied Genomics, Public Health Research Institute
- 2:25 p.m. - 2:50 p.m. **Spectral Imaging for Phenotyping Analysis of Cancer Cells**
Dr. Heinz-Ulrich Weier, E.O. Lawrence Berkeley National Laboratory
- 2:50 p.m. - 3:10 p.m. **Break**
- 3:10 p.m. - 3:35 p.m. **Statistical Design and Analysis for Gene Expression Microarrays**
Dr. Gary Churchill, The Jackson Laboratory
- 3:35 p.m. - 4:00 p.m. **Web Presentations:**
- 4:00 p.m. - 5:30 p.m. **NCI Resources**
Ms. Susan Waldrop, Director, Office of Scientific Opportunities, NCI
- 4:00 p.m. - 4:45 p.m. **Tissue Resources**
Dr. Roger Aamodt, Chief, Resources Development Branch, NCI
- 4:45 p.m. - 5:30 p.m. **Technology and Industrial Relations**
Dr. Carol Dahl, Director, OTIR, NCI

5:30 p.m. - 10:00
p.m.

POSTER SESSION AND RECEPTION

THURSDAY, JUNE 28, 2001

6:30 a.m. - 8:00 a.m. **Registration**

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

8:00 a.m. - 8:10 a.m. **Session 3: Advances in Protein Expression Analysis**

Session Chair: Dr. John Yates, The Scripps Research Institute

8:10 a.m. - 8:35 a.m. **Protein Detection using Aptamer Beacons**

Dr. Martin Stanton, Brandeis University

8:35 a.m. - 9:00 a.m. **Development of Quantum Dot Based Probes for Multiplexed Breast Cancer Analysis**

Dr. Marcel Bruchez, Quantum Dot Corporation

9:00 a.m. - 9:25 a.m. **Integrated Isolation & Molecular Analysis of Tumor Cells**

Dr. Peter Gascoyne, UT M.D. Anderson Medical Center

9:25 a.m. - 9:50 a.m. **The Single Cell Proteome Project: Cancer Prognosis**

Dr. Norman Dovichi, University of Washington

9:50 a.m. - 10:10
a.m.

Break

10:10 a.m. - 10:35
a.m.

Profiling Proteome using Multi-Dimensional Separations for Protein and Peptide Analysis

Dr. John Yates, The Scripps Research Institute

10:35 a.m. - 11:00
a.m.

Reliable Protein Identification from Stained or Unstained 2D Gels using High Throughput MALDI TOF/TOF MS

Dr. Maria Pallavicini, University of California at San Francisco

11:00 a.m. - 12:30
p.m.

Special Session: Phased Innovation Awards: Review and Transitions

Ms. Kay Etzler, NCI Small Business Programs Coordinator, OTIR, NCI

Dr. Dan Gallahan, Chief, Structural Biology and Molecular Applications Branch, NCI

Dr. Sherwood Githens, Scientific Review Administrator, Division of

Extramural Activities, NCI

12:30 p.m. - 1:30
p.m.

Lunch

1:30 p.m. - 1:40 p.m.

Session 4: New Strategies for Protein Structure and Function Analysis

Session Chair: Dr. Brian Chait, Rockefeller University

1:40 p.m. - 2:05 p.m.

Comprehensive Map of Cellular Protein Interactions

Dr. Brian Chait, Rockefeller University

2:05 p.m. - 2:30 p.m.

Novel Proteomics Methodologies for Examining Protein-Protein Interactions in Cancer Biology

Dr. Mark Chance, Albert Einstein College of Medicine

2:30 p.m. - 2:55 p.m.

Integrated Optical/Magnetic Resonance Microscopy for Cellular Research

Dr. Robert Wind, Pacific Northwest National Laboratory

2:55 p.m. - 3:15 p.m.

Break

3:15 p.m. - 3:40 p.m.

Visible Animal Models of Neoplastic Disease

Dr. Christopher Contag, Stanford University

3:40 p.m. - 4:05 p.m.

***In vivo* Imaging of Matrix Metalloprotease**

Dr. Ching Tung, Massachusetts General Hospital

4:05 p.m. - 4:30 p.m.

Androgen Receptor Bio-Chips: Yeast Based Micro-Bioassays for Serum Androgens

Dr. Tanya Kanigan, BioTrove

4:30 p.m. - 6:00 p.m.

Web Presentations:

4:30 p.m. - 5:15 p.m.

Cancer Genomics: Molecular Signatures to Targets

Dr. Bob Strausberg, Director, Cancer Genomics Office, NCI

5:15 p.m. - 10:00
p.m.

POSTER SESSION AND RECEPTION

FRIDAY, JUNE 29, 2001

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

Breakfast

- 8:00 a.m. - 9:00 a.m. **Plenary Lecture: Technology Transfer: Defining and Capturing Intellectual Property**
Dr. Kathleen Sybert, Chief, Technology Transfer Branch, NCI
- 9:00 a.m. - 9:10 a.m. **Session 5: Molecular Analysis in Cancer Research**
Session Chair: Dr. Donna Albertson, University of California at San Francisco
- 9:10 a.m. - 9:35 p.m. **Genome-Wide Measurement of DNA Copy Number on BAC Microarrays**
Dr. Donna Albertson, University of California at San Francisco
- 9:35 a.m. - 9:50 a.m. **Molecular Analysis of a Large Series of B-Cell non-Hodgkin's Lymphoma**
Dr. Wing Chan, University of Nebraska Medical Center
- 9:50 a.m. - 10:20 a.m. **Break**
- 10:20 a.m. - 10:45 a.m. **Identification of Ovarian Cancer Biomarkers by Protein Chip Array and SELDI/Mass Spectroscopy**
Dr. Samuel Mok, Brigham and Women's Hospital
- 10:45 a.m. - 11:10 a.m. **The National Ovarian Early Detection Program: Combining Science and Technology to Improve Patient Care**
Dr. David Fishman, Northwestern University
- 12:10 p.m. **Closing Remarks**
Dr. Carol Dahl, Director, OTIR, NCI