

Saturday, April 16, 2005

Educational Sessions

9:00 AM - 11:00 AM

Balancing Kinases and Phosphatases

Chairperson: John S. Lazo, University of Pittsburgh School of Medicine, Pittsburgh, PA

Protein and lipid phosphatases

Jack E. Dixon, University of California, San Diego, La Jolla, CA

Protein tyrosine phosphatases in cell signaling

Nicholas K. Tonks, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY

Tyrosine phosphatases and their binding proteins in cancer

Benjamin G. Neel, Beth Israel Deaconess Medical Center, Boston, MA

Small molecule inhibitors of protein tyrosine phosphatases

John S. Lazo, University of Pittsburgh School of Medicine, Pittsburgh, PA

Bioinformatics: Creating a Whole More Than the Sum of a Research Study's Parts

Chairperson: Kenneth H. Buetow, National Cancer Institute, Bethesda, MD

Integrating genomic information through the UCSC genome browser

Warren C. Lathe, III, OpenHelix, LLC, San Francisco, CA

Utilizing cancer genome anatomy project (CGAP) tools to interrogate cancer genomes

Carl Schaefer, National Cancer Institute, Bethesda, MD

Cytoscape: A software environment for integrated models of biomolecular interaction networks

Trey Ideker, University of California, La Jolla, CA

Integrating information through the cancer biomedical informatics grid (caBIG)

Kenneth H. Buetow, National Cancer Institute, Bethesda, MD

Clinical Trials, Session 1: Preclinical Studies to Phase I Trials

Chairperson: Peter J. Houghton, St. Jude Children's Research Hospital, Memphis, TN

Taking molecularly targeted agents into clinical trial

Julie M. Cherrington, Phenomix Corporation, San Diego, CA

Designing pharmacological studies and translational endpoints for targeted agents

Patricia LoRusso, Wayne State University, Detroit, MI

Learning from our mistakes: The translation of MMPs from laboratory to clinical trial

Barbara Fingleton, Vanderbilt University Medical Center, Nashville, TN

Human tumor xenografts as preclinical models: Value and limitations

Peter J. Houghton, St. Jude Children's Research Hospital, Memphis, TN

From Chemistry to the Clinic: Pathways for Drug Discovery and Development

Part 1: Target Identification and Validation in Cancer Drug Discovery

Chairperson: John T. Hunt, Bristol-Myers Squibb Company, Princeton, NJ

Pathway-oriented oncology target discovery

Matt V. Lorenzi, Bristol-Myers Squibb Company, Princeton, NJ

Novel therapeutic opportunities derived from a post genomic approach

Steven M. Ruben, Celera Genomics, Rockville, MD

ICG-001: A novel chemogenomic tool to investigate the Wnt pathway in cancer

Michael Kahn, University of Washington, Seattle, WA

The Ubiquitin Proteasome System: Roles and Targets in Cancer

Chairperson: Steven I. Reed, Scripps Research Institute, La Jolla, CA

Deregulation of Cyclin E in cancer

Steven I. Reed, Scripps Research Institute, La Jolla, CA

Control of the cell cycle by the ubiquitin-proteasome pathway and its deregulation in cancer

Michele Pagano, New York University Medical Center, New York, NY

Regulation of transcription factor activity by proteolysis-independent ubiquitination

Peter Kaiser, University of California, Irvine, CA

Targeting ubiquitin conjugation pathways for drug discovery

James E. Brownell, Millennium Pharmaceuticals, Inc., Cambridge, MA

Translating Antiangiogenesis Therapy to the Clinic: Emerging Concepts

Chairperson: Rakesh K. Jain, Massachusetts General Hospital, Boston, MA

Normalization of tumor vasculature: An emerging concept in anti-angiogenic therapy

Rakesh K. Jain, Massachusetts General Hospital, Boston, MA

Lymphangiogenesis and metastasis

Kari K. Alitalo, University of Helsinki, Helsinki, Finland

Guiding nerves and blood vessels: Common logic, common mechanisms?

Marc Tessier-Lavigne, Genentech, Inc., S. San Francisco, CA

Challenges in translating anti-angiogenic therapy from bench to bedside

Lee M. Ellis, UT M.D. Anderson Cancer Center, Houston, TX

Educational Sessions

11:15 AM - 1:15 PM

Advances in Molecular Epidemiology: Biomarkers of Exposure and Susceptibility—Old School/New School

Chairperson: Douglas A. Bell, National Institutes of Health, Research Triangle Park, NC

Validation strategies for biomarkers: Old and new
John D. Groopman, Johns Hopkins University, Baltimore, MD

Tobacco carcinogen biomarkers: Old and new
Stephen S. Hecht, University of Minnesota Cancer Center, Minneapolis, MN

The use of intermediate biomarkers in molecular epidemiology studies: Historical perspective and recent developments
Nathaniel Rothman, National Cancer Institute, Bethesda, MD

Emerging role of gene promoter hypermethylation in population-based screening for cancer
Steven A. Belinsky, Lovelace Respiratory Research Institute, Albuquerque, NM

Clinical Trials, Session 2: Phase I and II Trials

Chairperson: Susan G. Hilsenbeck, Baylor College of Medicine, Houston, TX

Features of a high quality phase I trial

S. Gail Eckhardt, University of Colorado Health Sciences Center, Denver, CO

Features of a high quality phase 2 trial

Mace L. Rothenberg, Vanderbilt-Ingram Cancer Center, Nashville, TN

Statistical issues in early phase trials

Susan G. Hilsenbeck, Baylor College of Medicine, Houston, TX

Ethical issues in early phase trials

Thomas G. Roberts, Jr., Massachusetts General Hospital, Boston, MA

Drug Resistance in Solid Tumors

Chairperson: Ian F. Tannock, Princess Margaret Hospital, Toronto, Ontario, Canada

Limited drug access and repopulation of surviving tumor cells between courses of chemotherapy: Important and neglected causes of clinical drug resistance

Ian F. Tannock, Princess Margaret Hospital, Toronto, Ontario, Canada

Interstitial transport in tumors: Barriers and strategies for improvement

Rakesh K. Jain, Massachusetts General Hospital, Boston, MA

Epigenetic aspects of environmentally mediated “multicellular” drug resistance

Robert S. Kerbel, Toronto-Sunnybrook Regional Cancer Center, Toronto, ON, Canada

Drug resistance: The role of genes involved in apoptosis

J. Martin Brown, Stanford University School of Medicine, Stanford, CA

From Chemistry to the Clinic: Pathways for Drug Discovery and Development

Part 2: Drug Lead Generation

Chairperson: Sonya D. Zabudoff, AstraZeneca, Waltham, MA

Overview of multiple approaches to lead generation

Sonya D. Zabudoff, AstraZeneca, Waltham, MA

Molecular-targeted drug screening at the NCI Center for Cancer Research

James B. McMahon, National Cancer Institute, Frederick, MD

Rational and structure-based approaches to lead discovery

Paul D. Lyne, AstraZeneca, Waltham, MA

Chemical approaches to lead generation

Martin Pass, AstraZeneca, Macclesfield, United Kingdom

Oncolytic Viruses

Chairperson: Glen N. Barber, University of Miami, Miami, FL

Next generation CRAds for virotherapy of cancer

Glen N. Barber, University of Miami, Miami, FL

Measles virus: A potent, versatile, retargetable oncolytic platform

Stephen J. Russell, Mayo Clinic, Rochester, MN

Oncolytic viral therapeutics based on herpes simplex virus type I

Ennio A. Chiocca, Ohio State University Medical Center, Columbus, OH

Next generation CRAds for virotherapy of cancer

David T. Curiel, University of Alabama, Birmingham, AL

Therapeutic Antibodies in Cancer: Focus on Mechanism of Action

Co-Chairpersons: Mark X. Sliwkowski, Genentech, Inc., S. San Francisco, CA; Mary L. Disis, University of Washington, Seattle, WA

Designer antibody-based therapeutics for oncology

Paul J. Carter, Seattle Genetics, Bothell, WA

Molecular determinants of trastuzumab response/resistance

Mark D. Pegram, UCLA School of Medicine, Los Angeles, CA

Contributions of circulatory dynamics and cellular microenvironment in anti-CD20 mAb immunotherapy

Andrew C. Chan, Genentech, Inc.,
S. San Francisco, CA

Antibody immunity to cancer associated proteins

Mary L. Disis, University of Washington,
Seattle, WA

Therapeutic Targeting of Mitosis

Chairperson: Pearl S. Huang, GlaxoSmithKline,
Collegeville, PA

Mitotic kinesins as targets for anticancer therapy

Lisa D. Belmont, Cytokinetics, Inc., S. San
Francisco, CA

Aurora kinases and cancer therapy

Nicholas Keen, AstraZeneca, Alderley Park,
Cheshire, United Kingdom

Why don't all tumors respond to all anti-mitotic therapies?

Jeffrey R. Jackson, GlaxoSmithKline, Inc., King of
Prussia, PA

Educational Sessions

2:00 PM - 4:00 PM

**Breast and Prostate Clinical Prevention Trials,
Including Biomarker End-Point Evaluation**

Chairperson: Peter Greenwald, National Cancer
Institute, Bethesda, MD

Hormonal interventions: From adjuvant therapy to breast cancer prevention

Barbara K. Dunn, National Cancer Institute,
Bethesda, MD

Breast cancer chemoprevention: Biomarker end-point trials

Powel Brown, Baylor College of Medicine,
Houston, TX

Prostate cancer: Phase III prevention trials

Howard L. Parnes, National Cancer Institute,
Bethesda, MD

Biomarkers in prostate cancer

William E. Grizzle, University of Alabama,
Birmingham, AL

Clinical Trials, Session 3: Randomized Controlled Trials

Chairperson: Ian F. Tannock, Princess Margaret
Hospital, Toronto, Ontario, Canada

Principles of design in phase III trials

Sylvan B. Green, Arizona Cancer Center, Tucson,
AZ

Features of a high quality phase III trial

Ian F. Tannock, Princess Margaret Hospital,
Toronto, ON, Canada

Bringing new agents to market: Navigating the regulatory requirements for investigators

Margaret Mooney, National Cancer Institute,
Rockville, MD

Patient views on clinical trials

Deborah E. Collyar, UCSF Breast SPORE
Advocacy Core, Blackhawk, CA

**From Chemistry to the Clinic: Pathways for Drug Discovery and Development
Part 3: Drug Lead Optimization**

Chairperson: Michael J. Luzzio, Pfizer Global Research
and Development, Groton, CT

The importance and complexities of target class selectivity in drug discovery

Robert A. Mook, Jr., GlaxoSmithKline,
Research Triangle Park, NC

Optimization of potency, selectivity, pharmacokinetics, and ancillary activity of anti-proliferative agents

George D. Hartman, Merck & Co., Inc.,
West Point, PA

Impact of PK/PD evaluation of targeted therapies on early drug discovery and clinical development

Jonathan M. Yingling, Eli Lilly & Company,
Indianapolis, IN

Gene-Gene Interactions in Cancer Etiology

Chairperson: Jason H. Moore, Dartmouth Medical School, Lebanon, NH

Gene-gene interaction in candidate gene studies

W. James Gauderman, University of Southern California, Los Angeles, CA

A review of computational approaches for detecting interactions

Marylyn D. Ritchie, Vanderbilt University, Nashville, TN

Bayesian modeling of complex metabolic pathways

Duncan C. Thomas, University of Southern California, Los Angeles, CA

Interpreting gene-gene interaction models

Jason H. Moore, Dartmouth Medical School, Lebanon, NH

Novel Drug Targets in DNA Replication

Chairperson: Mary-Ann Bjornsti, St. Jude Children's Research Hospital, Memphis, TN

Anticancer therapy against initiation of DNA replication

Anindya Dutta, University of Virginia Health Sciences Center, Charlottesville, VA

The functions and fidelity of human DNA polymerases

Thomas A. Kunkel, NIH-NIEHS, Research Triangle Park, NC

Cellular responses to replication stress:

Lessons from yeast

Mary-Ann Bjornsti, St. Jude Children's Research Hospital, Memphis, TN

Chk1, a novel target to sensitize tumor cells to replication inhibitors

Larry M. Karnitz, Mayo Clinic, Rochester, NY

Role of Mitochondria in Cancer Biology

Chairperson: Lawrence A. Loeb, University of Washington, Seattle, WA

Mitochondrial DNA: A critical target for genotoxic agents

Susan P. LeDoux, University of South Alabama, Mobile, AL

Mitochondria, reactive oxygen species, and aging

Peter S. Rabinovitch, University of Washington, Seattle, WA

Mitochondrial DNA and cancer

Lawrence A. Loeb, University of Washington, Seattle, WA

Mitochondria and programmed cell death in cancer

Gerard I. Evan, UCSF Cancer Center and Research Institute, San Francisco, CA

The Use of Mouse Models to Investigate the Influence of Genetic Background on Tumorigenesis

Chairperson: Glenn Merlino, National Cancer Institute, Bethesda, MD

Strategies for dissecting complex traits associated with cancer: Lessons from plasma cell tumors

Beverly A. Mock, National Cancer Institute, Bethesda, MD

Effects of genetic background on molecular pathways, tumor histopathology and progression

David W. Threadgill, University of North Carolina, Chapel Hill, NC

Identifying modifiers of mammary tumor initiation, progression and metastasis

Kent W. Hunter, National Cancer Institute, Bethesda, MD

The hunt for human and mouse tumor susceptibility genes

Allan Balmain, UCSF Cancer Center, San Francisco, CA

Educational Sessions

4:15 PM - 6:15 PM

Apoptosis Mechanisms in the Cause and Cure of Cancer

Chairperson: David L. Vaux, Walter and Eliza Hall Institute of Medical Research, Parkville, Australia

BH3-only proteins and Bcl-2 family members

David C. S. Huang, Walter and Eliza Hall Institute of Medical Research, Melbourne, Australia

TNF family ligands and receptors in cell death signaling

Pascal Schneider, University of Lausanne, Epalinges, Switzerland

The role of the death inducing signaling complex for Fas signaling

Marcus E. Peter, The Ben May Institute for Cancer Research, Chicago, IL

Requirements for caspases in apoptosis and for cell death

David L. Vaux, Walter and Eliza Hall Institute of Medical Research, Parkville, Australia

From Chemistry to the Clinic: Pathways for Drug Discovery and Development

Part 4: From Drug Candidate to the Clinic

Chairperson: Homer L. Pearce, Eli Lilly & Co., Indianapolis, IN

Application of biomarkers to oncology drug development

Christopher A. Slapak, Eli Lilly & Company, Indianapolis, IN

Patient selection for early phase clinical trials

Richard A. Messmann, Great Lakes Cancer Institute, Flint, MI

Clinical trial strategies to facilitate the transition to registration-directed trials

William J. Slichenmyer, Pfizer, Inc., New London, CT

Human Specimen Research: Promise, Problems and Practical Approaches

Chairperson: Roger L. Aamodt, National Cancer Institute, Rockville, MD

Best practices for collection, storage, and use of specimens: Possibilities and constraints

William E. Grizzle, University of Alabama, Birmingham, AL

Comprehensive molecular analysis of human specimens

James W. Jacobson, National Cancer Institute, Rockville, MD

Resources available to the cancer research community

Marianna Bledsoe, National Cancer Institute, Rockville, MD

Human specimen research: Regulation, policy, and ethical issues

Roger I. Aamodt, National Cancer Institute, Rockville, MD

Nanotechnology: Accelerating Progress in Cancer Research

Chairperson: Anna D. Barker, NIH-NCI, Bethesda, MD

Pharmacogenomics and Cancer: Status, Strategies and Mechanisms

Chairperson: Richard Weinshilboum, Mayo Foundation, Rochester, MN

Pharmacogenetics in the endocrine treatment of breast cancer

Vered Stearns, Sidney Kimmel Comprehensive Cancer Center, Baltimore, MD

Personalized cancer pharmacogenetics: Moving beyond single gene analysis

Howard L. McLeod, Washington University School of Medicine, St. Louis, MO

Alternative splicing: Rules governing a program that generates diversity

Erin G. Schuetz, St. Jude Children's Research Hospital, Memphis, TN

The Jak/Stat Pathway in Cancer Immunology

Chairperson: Xin-Yuan Fu, Indiana University School of Medicine, Indianapolis, IN

STATs in Action

James E. Darnell, Jr., The Rockefeller University, New York, NY

Targeting STAT proteins for cancer therapy

Richard Jove, H. Lee Moffitt Cancer Center & Research Institute, Tampa, FL

STATs in inflammation and immunity

Xin-Yuan Fu, Indiana University School of Medicine, Indianapolis, IN

Signaling by cytokines that share the common cytokine receptor gamma chain: From immunodeficiency to oncogenesis

Warren Leonard, National Institutes of Health, MD

Transcription as a Target for Cancer Therapeutics

Chairperson: Varsha V. Gandhi, UT M. D. Anderson Cancer Center, Houston, TX

Gene silencing in cancer

Stephen B. Baylin, Johns Hopkins University, Baltimore, MD

DNA methyltransferase inhibitors in cancer therapy

Peter A. Jones, USC/Norris Comprehensive Cancer Center, Los Angeles, CA

Inhibition of oncogene expression by RNA-directed agents

Varsha V. Gandhi, UT M. D. Anderson Cancer Center, Houston, TX

Sequential blockade of oncogenic kinases

William Plunkett, UT M. D. Anderson Cancer Center, Houston, TX

Methods Workshops

9:00 AM - 1:00 PM

Mouse Models

Chairperson: Anton J. M. Berns, Netherlands Cancer Institute, Amsterdam, The Netherlands

The hollow fiber assay in cancer efficacy testing in the Developmental Therapeutics Program at the National Cancer Institute

Melinda G. Hollingshead, National Cancer Institute, Frederick, MD

Conditional transgenic mouse models of tumorigenesis

Dean W. Felsher, Stanford University School of Medicine, Stanford, CA

Development and use of allelic series for investigating cancer gene function

David W. Threadgill, University of North Carolina, Chapel Hill, NC

Title to be announced

Gustavo W. Leone, Ohio State University, Columbus, OH

Methods Workshops

2:00 PM - 4:00 PM

Cell Based Screening Approaches and Automation

Chairperson: Lucienne V. Ronco, AstraZeneca, Waltham, MA

Why use cellular assays for drug discovery?

Lucienne V. Ronco, AstraZeneca R & D, Waltham, MA

HTS using cell-based assays for drug discovery

Michael Boisclair, OSI Pharmaceuticals,
Farmingdale, NY

**High content biology applied to hit identification
and HTS**

Emma-Louise Cooke, AstraZeneca, LEICS,
United Kingdom

**Dynamic cellular imaging to identify and
characterize small molecules that perturb mitosis**

Randall W. King, Harvard Medical School,
Boston, MA

**RNAi, Part 1: Improving the Efficiency of RNAi in
Mammals**

Chairperson: Vivek Mittal, Cold Spring Harbor
Laboratory, Cold Spring Harbor, NY

**The nuts and bolts of hairpin-mediated RNA
interference**

Michael T. McManus, University of California,
San Francisco, CA

**Controls in a RNAi experiment: Measuring
and minimizing off-targeting, stress/
interferon responses**

John J. Rossi, Beckman Research Institute,
Duarte, CA

**Screening for effective siRNAs and their inducible
expression in mammalian cells**

Vivek Mittal, Cold Spring Harbor Laboratory, Cold
Spring Harbor, NY

Methods Workshops

2:00 PM - 6:00 PM

New Genomic Technologies

Chairperson: William R. Sellers, Dana-Farber Cancer
Institute, Boston, MA

**Genomic characterization of the cancer
genomes in human and mouse**

Lynda Chin, Dana-Farber Cancer Institute, Boston,
MA

**A sequenced based approach to analysis of tumor
genome structures**

Colin C. Collins, UCSF Cancer Center, San
Francisco, CA

**Large scale resequencing to identify
new cancer genes**

Phillip A. Futreal, Wellcome Trust Sanger Institute,
Hixton, United Kingdom

**The application of high-density SNP arrays to
cancer genome analysis**

William R. Sellers, Dana-Farber Cancer Institute,
Boston, MA

Methods Workshops

4:00 PM - 6:00 PM

**RNAi, Part 2: Application of siRNA in Cancer Target
Identification**

Chairperson: René Bernards, The Netherlands Cancer
Institute, Amsterdam, The Netherlands

**Identification of novel cancer drug targets using
high throughput RNAi screens**

René Bernards, The Netherlands Cancer Institute,
Amsterdam, The Netherlands

Target validation using siRNA

Christophe J. Echeverri, Cenix BioScience GmbH,
Dresden, Germany

RNAi in drug discovery

Pedro Aza-Blanc, Genomics Institute of the Novartis
Research Foundation, San Diego, CA