

Chemistry in Cancer Research:
A Vital Partnership in Cancer Drug Discovery and Development
*A joint conference presented by the American Association for Cancer Research
and the American Chemical Society*

February 8-11, 2009 • Westin New Orleans Canal Place • New Orleans, LA

Conference Chairperson:

John T. Hunt, Bristol-Myers Squibb, Princeton, NJ

Scientific Committee:

Matthew A. Marx, Pfizer, San Diego, CA

Brent R. Stockwell, Columbia University, New York, NY

David A. Wink, National Cancer Institute, Bethesda, MD

Cheryl L. Zimmerman, University of Minnesota College of Pharmacy, Minneapolis, MN

February 8

6:30-8:00 p.m.

Keynote Lectures

Introduction of Dr. Larry J. Marnett

John T. Hunt, Bristol-Myers Squibb, Princeton, NJ

Cyclooxygenase Inhibitors in Cancer Prevention and Treatment

Larry J. Marnett, Vanderbilt University, Nashville, TN

Introduction of Dr. Gregory L. Verdine

Brent R. Stockwell, Columbia University, New York, NY

Title to be announced

Gregory L. Verdine, Harvard University, Cambridge, MA

8:00 – 9:00 p.m.

Welcome Dessert Reception

February 9

7:00 – 8:00 a.m.

Continental Breakfast

8:00 – 9:45 a.m.

Session 1: Chemistry in Support of Cancer Target ID and Validation

Session Chair: Brent R. Stockwell, Columbia University, New York, NY

Chemical Genetics and Cell Death

Brent R. Stockwell

Multi-dimensional Chemical Genetics
Alexis Borisy, CombinatoRx, Inc., Cambridge, MA

Title to be announced
Benjamin F. Cravatt, Scripps, La Jolla, CA

9:45-10:15 a.m. Coffee Break

10:15 a.m.-12:00 p.m. **Session 2: Chemistry in Support of Lead Discovery/Chemical Libraries**

Session Chair: Michael Foley, Broad Institute, Cambridge, MA

Title to be announced
Derek S. Tan, Memorial Sloan-Kettering Cancer Center, New York, NY

Title to be announced
Michael Foley

Title to be announced
Scott A. Snyder, Columbia University, New York, NY

12:00 – 1:30 p.m. Lunch on own or Professional Advancement Session

1:30 – 3:15 p.m. **Session 3: Chemistry in Support of Lead Discovery/Screening, Hit Validation and Natural Products**

Session Chairperson: Steven E. Hall, Serenex, Durham, NC

Development and Use of Nucleotide Affinity Columns to Identify Leads for Hsp90 and Other Nucleotide Utilizing Enzymes
Steven E. Hall

Title to be announced
Jeremy Caldwell, Genomics Institute of the Novartis Research Foundation, San Diego, CA

Beyond Natural Products: Function Oriented Synthesis and New Leads for Cancer and Overcoming Cancer Resistance
Paul A. Wender, Stanford University, Stanford, CA

3:15 – 3:45 p.m. Coffee Break

3:45 – 5:30 p.m. **Session 4: Chemistry in Support of Lead Discovery/Chemoinformatics**

Session Chairperson: To be announced

High Throughput Kinase Profiling: Revealing the Relationship Between Chemical Structure and Kinase Interaction Patterns
Patrick Zarrinkar, Ambit Biosciences, San Diego, CA

A Systems Approach to Therapeutic Discovery
John Westwick, Odyssey Thera, San Ramon, CA

In Silico Discovery of Small Molecules Targeting Transcription Factors in Cancer

Alan C. Rigby, Harvard Medical School, Boston, MA

5:30 – 7:30 p.m.

Poster Session A and Cocktail Reception

February 10

7:00 – 8:00 a.m.

Continental Breakfast

8:00 – 9:45 a.m.

Session 5: Chemistry in Support of Lead Optimization/Case Histories I

Session Chair: Matthew Marx, Pfizer, San Diego, CA

The Discovery of Novel Androgen Receptor Antagonists

Aaron Balog, Bristol-Myers Squibb, Princeton, NJ

GDC-0449: A Small Molecule Antagonist of the Hedgehog Pathway

James Marsters, Genentech, Inc., South San Francisco, CA

Discovery of Eltrombopag, a Small-Molecule, Oral

Thrombopoietin Receptor Agonist: From Screening to the Clinic

Juan I. Luengo, GlaxoSmithKline, Collegeville, PA

9:45-10:15 a.m.

Coffee Break

10:15 a.m.-12:00 p.m.

Session 6: Chemistry in Support of Cancer Drug Discovery I/Case Histories II

Session Chairperson: Danzhou Yang, University of Arizona, Tucson, AZ

DNA G-quadruplexes as potential anticancer drug targets

Danzhou Yang

The Discovery and Development of Diaryl-acylsulfonamide

(ASAP): A Novel Class of Antitumor Agents for Solid Tumors

Chuan Joe Shih, Eli Lilly Research Laboratories, Indianapolis, IN

From HTS to Clinic: Discovery of PF-4217903 as Potent and Exquisitely Selective C-Met Inhibitor

Jean Cui, Pfizer Global R & D, San Diego, CA

12:00 - 2:00 p.m.

Poster Session B and Light Lunch

2:00 – 3:45 p.m.

Session 7: Chemistry in Support of Cancer Drug Targeting, Drug Delivery and Drug Disposition I

Session Chairperson: To be announced

Potent Immunoconjugates for Cancer Therapy
Peter D. Senter, Seattle Genetics, Bothel, WA

Chemical Modifications for Making Drugs out of DNA Interference
Muthiah Manoharan, Alnylam, Cambridge, MA

Title to be announced
Representative from the laboratory of Kevin Foote, AstraZeneca, Inc., Macclesfield, United Kingdom

3:45 – 4:15 p.m.

Coffee Break

4:15 – 6:00 pm.

Session 8: Chemistry in Support of Cancer Drug Targeting, Drug Delivery and Drug Disposition II

Session Chairperson: Cheryl Zimmerman, University of Minnesota, Minneapolis, MN

Multifunctional Nanotherapeutics for Cancer Treatment and Imaging

Tamara Minko, Rutgers University, New Brunswick, NJ

Surface-functionalization of Nanoparticles for Multi-targeted Drug Delivery

Jayanth Panyam, University of Minnesota, Minneapolis, MN

Folate Targeted Therapies for Cancer

Christopher Leamon, Endocyte, West Lafayette, IN

February 11

7:00 – 8:00 a.m.

Continental Breakfast

8:00 – 9:45 a.m.

Session 9: Chemistry in Support of Cancer Drug Discovery and Development I

Session Chairperson: David A. Wink, Jr., National Cancer Institute, Bethesda, MD

Molecular Imaging Studies in Cancer

Murali Krishna, National Cancer Institute, Bethesda, MD

Role of Hyperpolarized C Spectroscopic Imaging in Drug Development

John Kurhanewicz, University of California, San Francisco, San Francisco, CA

Measuring Spatial and Temporal Molecular Changes in Tissues Using Mass Spectrometry

Richard M. Caprioli, Vanderbilt University, Nashville, TN

9:45 – 10:15 a.m.

Coffee Break

10:15 a.m. - 12:00 p.m.

**Session 10: Chemistry in Support of Cancer Drug
Development II**

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

Synthesis and Scale-up of Sagopilone

Johannes Platzek, Bayer Schering Pharma AG, Berlin, Germany

Microheterogeneity and Analytical Approaches to Macromolecules

Randal B. Bass, Amgen, Inc., Seattle, WA

Systems and Controls for Handling Potent Anticancer Agents

Rebecca Ahn, Ash Stevens, Inc., Detroit, MI

Departure