

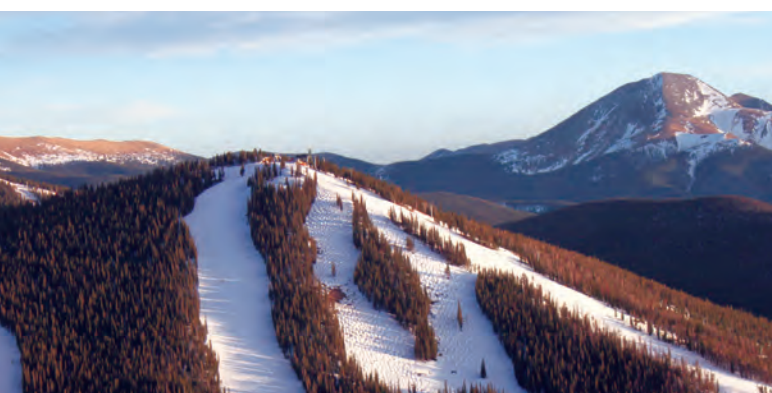
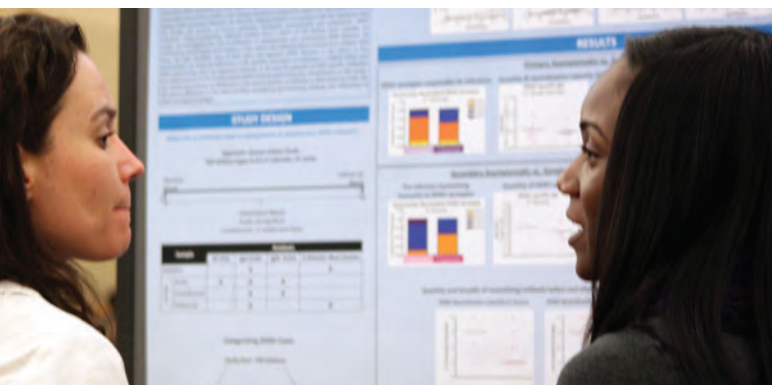
Keystone Symposia is pleased to present

PI 3-Kinase and Interplay with Other Signaling Pathways

joint with the meeting on **Tumor Metabolism**

Scientific Organizers: Christian Rommel, Kevan M. Shokat and José Baselga

February 24–March 1, 2013 | Keystone Resort | Keystone, Colorado | USA



How metabolic pathways are regulated to meet the unique needs of tumor cells is not well understood, but mounting evidence suggests that metabolic regulation in cancer cells is intimately linked with the signal transduction pathways that control cell growth and proliferation. The PI3K-Akt-mTOR signaling pathway is one of the primary mechanisms for controlling tumor cell growth, survival and motility in response to oncogenic signaling and extracellular cues. Genetic events resulting in inappropriate activation of this pathway are common in many cancers and, as a result, are a focus of both basic cancer research and drug discovery efforts in oncology. Although originally modeled as an independent and linear signaling cascade, today it is evident that the PI3K pathway also functions as a central hub for cross-talk in both vertical as well as reciprocal feedback regulation with other important signaling pathways. One of the most exciting advances in the field is the development of new inhibitors against this pathway. However, the rationale for inhibiting individual or multiple isoforms of PI3K/Akt/mTOR signaling remains a subject of intense debate. This meeting aims to bring together scientists and clinicians from academia and industry to discuss the opportunities and liabilities of targeting the PI3K- and related pathways in disease, drawing on human pathophysiology and genetics, preclinical models and clinical data with PI3K pathway inhibitors. A joint meeting addressing Tumor Metabolism will enhance opportunities for interdisciplinary interactions.

Session Topics:

- > PI3K/Akt/mTOR Pathway (Clinical)
- > PI3K/Akt/mTOR Pathway in Cancer (Clinical)
- > PI3K/Akt/mTOR Pathway in Cancer (Clinical Translational)
- > PI3K/mTOR Pathway – Signaling Networks (Preclinical)
- > PI3K-Related Pathways (Preclinical)
- > PI3K Pathway: Cross-Talk, Feedback, Scaffold (Preclinical)

Abstract & Scholarship Deadline: October 25, 2012

Late-Breaking Abstract Deadline: November 28, 2012

Early Registration Deadline: December 19, 2012

Note: Scholarships are available to students and postdoctoral fellows and require a brief application and submission of an abstract. Short talk speakers will also be selected from abstracts. Early registration saves US\$150 on later fee. Information shown is subject to possible change. Please visit meeting website for the most up-to-date program information.

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www.keystonesymposia.org/13X3

KEYSTONE SYMPOSIA

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PI 3-Kinase and Interplay with Other Signaling Pathways (X3)

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Tumor Metabolism (X4)

Scientific Organizers: Matthew G. Vander Heiden and Karen H. Vousden

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SUNDAY, FEBRUARY 24

Arrival and Registration

Welcome and Keynote Session (X3)

***Kevan M. Shokat**, University of California, San Francisco, USA

***José Baselga**, Massachusetts General Hospital, USA

***Christian Rommel**, Amgen, Inc., USA

Peter K. Vogt, The Scripps Research Institute, USA
Oncogenes in the PI3K Pathway

Roger L. Williams, Medical Research Council, UK
The PI3K Pathway by Protein Structures

MONDAY, FEBRUARY 25

Welcome and Keynote Address (X4)

Craig B. Thompson, Memorial Sloan-Kettering Cancer Center, USA
Metabolic Control of Tumor Cell Growth and Survival

PI3K/Akt/mTOR Pathway in Cancer (Clinical - Part 1) (X3)

***José Baselga**, Massachusetts General Hospital, USA
Breast Cancer

Charles L. Sawyers, Memorial Sloan-Kettering Cancer Center, USA
Overcoming Resistance to Targeted Therapies

Vito J. Palombella, Infinity Pharmaceuticals, Inc., USA
Development of Potent PI3K-delta/gamma Inhibitors

Yardena Samuels, NHGRI, National Institutes of Health, USA
Human Cancer Genetics

Short Talk(s) Chosen from Abstracts

Metabolic Regulation (X4)

Almut Schulze, Cancer Research UK, UK
The Role of Glucose and Lipid Metabolism in Growth and Survival of Cancer Cells

Sally A. Kornbluth, Duke University Medical Center, USA
Metabolic Control of Cell Physiology

Linda Z. Penn, Ontario Cancer Institute, Canada
Understanding and Exploiting the Oncogenic Capacity of the Mevalonate Pathway

Short Talk(s) Chosen from Abstracts

PI3K/Akt/mTOR Pathway (Clinical - Part 2) (X3)

***William R. Sellers**, Novartis Institutes for BioMedical Research, USA
PI3Kalpha

Kui Lin, Genentech, Inc., USA
Akt

Christian Rommel, Amgen, Inc., USA
TORC1/2

Nutrient Sensing (X4)

Eileen P. White, Rutgers University, USA
Autophagy as a Response to Nutrient Deprivation

Reuben J. Shaw, The Salk Institute, USA
Signaling Events to Cope with Energy Stress

David M. Sabatini, Whitehead Institute for Biomedical Research, USA
Amino Acid Sensing Mechanisms

Poster Session 1

TUESDAY, FEBRUARY 26

PI3K/Akt/mTOR Pathway in Cancer (Clinical Translational) (X3)

***Jeffrey Adam Engelman**, Massachusetts General Hospital, USA
Resistance Mechanisms

Sebastian Nijman, CeMM, Austria
Resistance Mechanisms

***Lori Friedman**, Genentech, Inc., USA
Combination Therapies

Speaker to be Announced

Short Talk(s) Chosen from Abstracts

Metabolic Adaptation (X4)

Chi Van Dang, University of Pennsylvania, USA
Glutamine and Cellular Energetics

Karen H. Vousden, Beatson Institute for Cancer Research, UK
Metabolic Adaptation Controlled by p53

Eyal Gottlieb, Beatson Institute for Cancer Research, UK
Revealing New Metabolic Networks in Cancer

Matthew G. Vander Heiden, Massachusetts Institute of Technology, USA
Metabolic Pathways Important for Cell Growth

Short Talk(s) Chosen from Abstracts

PI3K/mTOR Pathway - Signaling Networks (Preclinical) (X3)

***Kevan M. Shokat**, University of California, San Francisco, USA
Polypharmacological Targeting of The PI3K/mTOR and Raf/Mek Pathways of Cancer

John Blenis, Harvard University Medical School, USA
Convergence and Integration of mTOR and Ras-ERK Signaling in Cancer

David M. Sabatini, Whitehead Institute for Biomedical Research, USA
Regulation of Growth by the mTOR Pathway

Short Talk Chosen from Abstracts

Understanding the Metabolic Network (X4)

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Eytan Ruppin, Tel Aviv University, Israel

Harnessing Genome Scale Metabolic Modeling to Study Cancer Metabolism

Joshua D. Rabinowitz, Princeton University, USA

Measuring Metabolic Flux

Linda C. Hsieh-Wilson, California Institute of Technology, USA

O-GlcNAc Signaling Regulates Cancer Metabolism

Short Talk Chosen from Abstracts

Poster Session 2

WEDNESDAY, FEBRUARY 27

PI3K-Related Pathways (Preclinical) (X3)

***Lewis C. Cantley**, Harvard Medical School, USA

PI3K and Cancer Metabolism

Judith A. Varner, University of California, San Diego, USA

PI3Kgamma Control of Innate Immunity in Cancer

Karen M. Cichowski, Brigham and Women's Hospital, Harvard Medical School, USA

Developing Combination Therapies with PI 3-K/mTOR Pathway Inhibitors

Hong Wu, University of California, Los Angeles, USA

Hormone Cross-Talk Signaling

Short Talk(s) Chosen from Abstracts

Influence of the Microenvironment on Metabolism (X4)

Jacques Pouyssegur, University of Nice, France

Role of Oxygen in Controlling Cancer Metabolism

M. Celeste Simon, University of Pennsylvania, USA

Tumor Cell Adaptation to the Microenvironment

Amato J. Giaccia, Stanford University, USA

Oxygen Sensing and Metabolic Control

Salvador Moncada, University College London, UK

Sensing the Microenvironment to Influence Metabolism

Short Talk(s) Chosen from Abstracts

PI3K Pathway: Cross-Talk, Feedback, Scaffold (Preclinical) (X3)

***Christian Rommel**, Amgen, Inc., USA

Julian H. Downward, Cancer Research UK, UK

Links between RAS Family GTPases and PI3K Signaling

Neal Rosen, Memorial Sloan-Kettering Cancer Center, USA

Interplay Signaling

Pier Paolo Pandolfi, Beth Israel Deaconess Medical Center/Harvard Medical School, USA

Talk Title to be Determined

Short Talk Chosen from Abstracts

Insights from in vivo Experiments (X4)

Tak W. Mak, Campbell Family Institute for Breast Cancer Research at Princess Margaret Hospital, UHN, Canada

Tumor Metabolism Insight from Mouse Models

Yanping Zhang, University of North Carolina, Chapel Hill, USA

Ribosomal Protein-Mdm2-p53 Signaling and Energy Metabolism

Ralph J. DeBerardinis, University of Texas-Southwestern Medical Center, USA

Measuring Metabolism and Metabolites in vivo

Norman Koglin, Piramal Imaging

PET Imaging of Glutamate/Cystine Transporter Activity in Cancer Patients

Poster Session 3

THURSDAY, FEBRUARY 28

PI3K-Related Pathways (Preclinical) (X3)

***Bart Vanhaesebroeck**, Barts and The London School of Medicine

Isoforms of PI3K in Cancer Biology and Metabolism

Davide Ruggero, University of California, San Francisco, USA

Ribosome Signaling

Jonathan Hart, The Scripps Research Institute, USA

PI3K/mTOR/STAT Signaling

William A. Weiss, University of California, San Francisco, USA

Autophagy

Short Talk(s) Chosen from Abstracts

Targeting Metabolism (X4)

Bing Lim, Genome Institute of Singapore, Singapore

Targeting Glycine Metabolism for Cancer Therapy

Susan Critchlow, AstraZeneca, UK

Targeting Lactate Metabolism

Joan S. Brugge, Harvard Medical School, USA

Use of 3D Culture Models to Understand the Impact of Targeted Therapy on Metabolism

Short Talk(s) Chosen from Abstracts

PI3K-Related Pathways (Preclinical) (X3)

David A. Fruman, University of California, Irvine, USA

Mechanism of mTOR Inhibitor Action in Lymphocytes

Brendan D. Manning, Harvard School of Public Health, USA

The TSC-mTOR Network in Cancer and Metabolism

Ramon Parsons, Columbia University, USA

PTEN Signaling

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Influence of Metabolism on Epigenetic Regulation (X4)

Yue Xiong, University of North Carolina at Chapel Hill, USA

Influence of Metabolism on Signal Transduction

Kathryn E. Wellen, University of Pennsylvania, USA

Use of Metabolic Pathways to Sense Cell State

Katherine Yen, Agios Pharmaceuticals, USA

Influence of IDH Mutations on the Epigenetic State of Cells

FRIDAY, MARCH 1

Departure