

# CONFERENCE PROGRAM

## FRIDAY, NOVEMBER 30

6:00 p.m.-7:00 p.m.

### OPENING KEYNOTE SESSION

Harbor Ballroom II and III

#### Welcome remarks and keynote introduction

Lewis C. Cantley, Cornell Medical College, New York-Presbyterian Hospital, New York, NY

#### PI3Kinase inhibitors: Challenges and lessons learned in clinical development

Samit Hirawat, Novartis, East Hanover, NJ

*(not eligible for CME credit)*

7:00 p.m.-9:00 p.m.

### WELCOME RECEPTION

Harbor Ballroom I

## SATURDAY, DECEMBER 1

7:30 a.m.-8:30 a.m.

### CONTINENTAL BREAKFAST

Harbor Ballroom I

8:30 a.m.-10:00 a.m.

### PLENARY SESSION 1: BIOLOGY OF THE PI3K/MTOR PATHWAY

Harbor Ballroom II and III

**Session Chair: David M. Sabatini**, Whitehead Institute for Biomedical Research, Cambridge, MA

8:30 a.m.-9:00 a.m.

#### The PI3K-mTOR signaling network and tumor cell metabolism

Brendan D. Manning, Harvard School of Public Health, Boston, MA

9:00 a.m.-9:30 a.m.

#### Regulation of growth by the mTOR pathway

David M. Sabatini

9:30 a.m.-10:00 a.m.

#### Stroma-driven resistance to PI3K/mTOR inhibition

Taru E. Muranen, Beth Israel Deaconess Medical Center, Boston, MA

10:00 a.m.-10:30 a.m.

### BREAK

Harbor Ballroom Foyer

# CONFERENCE PROGRAM

<b>10:30 a.m.-12:15 p.m.</b>	<b>PLENARY SESSION 2: AUTOPHAGY AND METABOLISM</b> Harbor Ballroom II and III  <b>Session Chair: Eileen P. White</b> , Rutgers Cancer Institute of New Jersey, New Brunswick, NJ
10:30 a.m.-11:00 a.m.	<b>Autophagy and cancer metabolism</b> Eileen P. White
11:00 a.m.-11:30 a.m.	<b>Identifying metabolic dependencies in pancreatic cancer</b> Alec C. Kimmelman, New York University Langone Medical Center, New York, NY
11:30 a.m.-12:00 p.m.	<b>Pooled CRISPR screens for novel autophagy-related factors identify TMEM41, an ER-resident protein predicted to be a channel</b> Vlad Denic, Harvard University, Cambridge, MA
12:00 p.m.-12:15 p.m.	<b>Phosphorylation of DEPDC5 by the Pim-1 protein kinase, a cancer driver, stimulates mTORC1 activity by regulating the DEPDC5-Rag GTPase interaction*</b> Sathish Padi, University of Arizona Cancer Center, The University of Arizona, Tucson, AZ
<b>12:15 p.m.-2:30 p.m.</b>	<b>FREE TIME (LUNCH ON OWN)</b>
<b>2:30 p.m.-4:15 p.m.</b>	<b>PLENARY SESSION 3: STRUCTURAL BIOLOGY</b> Harbor Ballroom II and III  <b>Session Chair: Roger L. Williams</b> , MRC Laboratory of Molecular Biology, Cambridge, MA
2:30 p.m.-3:00 p.m.	<b>Control of PIP3 levels by PI3K<math>\alpha</math> and PTEN</b> L. Mario Amzel, Johns Hopkins University School of Medicine, Baltimore, MD
3:00 p.m.-3:30 p.m.	<b>Structure and dynamics of Rag heterodimers in a complex with mTORC1</b> Roger L. Williams
3:30 p.m.-3:45 p.m.	<b>Structural and functional analyses of GATOR1, a negative regulator of the mTORC1 pathway*</b> Kuang Shen, Whitehead Institute for Biomedical Research, Cambridge, MA
3:45 p.m.-4:00 p.m.	<b>Selective degradation of mutant PIK3CA promotes increased mutant specificity in a subset of PI3K ATP-competitive inhibitors*</b> Nicholas Endres, Genentech, South San Francisco, CA
4:00 p.m.-4:15 p.m.	<b>4EBP1 reactivation by potent and selective bisteric inhibitors of mTORC1*</b> Nidhi Tibrewal, Revolution Medicines, Redwood City, CA
<b>4:30 p.m.-6:30 p.m.</b>	<b>POSTER SESSION A / RECEPTION</b> Harbor Ballroom I

*\*Short talk from proffered abstract*

# CONFERENCE PROGRAM

## SUNDAY, DECEMBER 2

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

### CONTINENTAL BREAKFAST

Harbor Ballroom I

8:00 a.m.-9:45 a.m.

### PLENARY SESSION 4: TRANSLATIONAL CONTROL OF CANCER

Harbor Ballroom II and III

**Session Chair: Davide Ruggerio**, University of California, San Francisco Helen Diller Family Comprehensive Cancer Center, San Francisco, CA

8:00 a.m.-8:30 a.m.

#### **Translating the cancer genome one codon at a time and its therapeutic implications**

Davide Ruggero

8:30 a.m.-9:00 a.m.

#### **Coordination of mRNA processing, translation, and metabolism by mTORC1**

John Blenis, Weill Cornell Medical College, New York, NY

9:00 a.m.-9:30 a.m.

#### **An mTOR/eIF4E-independent translation mechanism promotes breast cancer metastasis**

Robert J. Schneider, New York University School of Medicine, New York, NY

9:30 a.m.-9:45 a.m.

#### **Regulation of mRNA N6-adenosine methylation by the mTOR signaling\***

Gina Lee, Weill Cornell Medicine, New York, NY

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

### BREAK

Harbor Ballroom Foyer

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

### PLENARY SESSION 5: IMMUNOLOGY

Harbor Ballroom II and III

**Session Chair: Jonathan D. Powell**, Johns Hopkins Sidney Kimmel Comprehensive Cancer Center, Baltimore, MD

10:15 a.m.-10:45 a.m.

#### **mTOR as a central regulator of T-cell activation, differentiation, and function**

Jonathan D. Powell

10:45 a.m.-11:15 a.m.

#### **Title to be announced**

Douglas R. Green, St. Jude Children's Research Hospital, Memphis, TN

11:15 a.m.-11:45 a.m.

#### **Role of PI3K signaling in T cell-mediated immune responses**

Laurence A. Turka, Rheos Medicines, Cambridge, MA

11:45 a.m.-12:00 p.m.

#### **Developmentally regulated mTOR degradation in normal and malignant hematopoiesis\***

Christina Spevak, NYU Health, New York, NY

*\*Short talk from proffered abstract*

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<b>12:00 p.m.-2:15 p.m.</b>	<b>POSTER SESSION B / LUNCH</b> Harbor Ballroom I
<b>2:15 p.m.-4:30 p.m.</b>	<b>PLENARY SESSION 6: PI3K/MTOR IN LIQUID TUMORS AND IMMUNITY</b> Harbor Ballroom II and III  <b>Session Chair: Kira Gritsman</b> , Albert Einstein College of Medicine, New York, NY
2:15 p.m.-2:45 p.m.	<b>Strategies to target the mTORC1/eIF4F axis in B-cell leukemia and lymphoma</b> David A. Fruman, University of California, Irvine, Irvine, CA
2:45 p.m.-3:15 p.m.	<b>The PI3 isoforms in myeloid leukemia and hematopoietic stem cells</b> Kira Gritsman
3:15 p.m.-3:45 p.m.	<b>PI3Kgamma control of antitumor immunity</b> Judith A. Varner, UCSD Moores Cancer Center, La Jolla, CA
3:45 p.m.-4:00 p.m.	<b>Pancreatic ductal adenocarcinoma requires PI3Kalpha activity to accelerate circulating DNA-positive metastatic disease*</b> Julie Guillermet-Guibert, Inserm, Cancer Research Center of Toulouse, Toulouse, France
4:00 p.m.-4:15 p.m.	<b>AKT mutant allele-specific activation dictates pharmacologic sensitivities*</b> Tripti Shrestha Bhattarai, Memorial Sloan Kettering Cancer Center, New York, NY
4:15 p.m.-4:30 p.m.	<b>Targeting glutamine addiction of PIK3CA mutant colorectal cancers: From preclinical models to clinical trials*</b> Zhenghe (John) Wang, Case Western Reserve University, Cleveland, OH

## MONDAY, DECEMBER 3

<b>7:00 a.m.-8:00 a.m.</b>	<b>CONTINENTAL BREAKFAST</b> Harbor Ballroom I
<b>8:00 a.m.-10:00 a.m.</b>	<b>PLENARY SESSION 7: PRECLINICAL MODELS FOR DRUG DEVELOPMENT</b> Harbor Ballroom II and III  <b>Session Chair: Jean J. Zhao</b> , Dana-Farber Cancer Institute, Harvard Medical School, Boston, MA
<b>8:00 a.m.-8:30 a.m.</b>	<b>Integrating immunotherapy and targeted therapy in cancer: From mouse models to human therapy</b> Jean J. Zhao
<b>8:30 a.m.-9:00 a.m.</b>	<b>Title to be announced</b> Pier Paolo Pandolfi, Beth Israel Deaconess Medical Center, Boston, MA

*\*Short talk from proffered abstract*

# CONFERENCE PROGRAM

- 9:00 a.m.-9:30 a.m.**      **Enhancing responses to targeted therapies through metabolic intervention**  
Lewis C. Cantley, Meyer Cancer Center, Weill Cornell Medical College, New York-  
Presbyterian Hospital, New York, NY
- 9:30 a.m.-10:00 a.m.**      **PI3K inhibitors as a backbone for combination treatments for breast and  
ovarian cancer**  
Gerburg M. Wulf, Beth Israel Deaconess Medical Center, Boston, MA
- 10:00 a.m.-10:15 a.m.**      **BREAK**  
Harbor Ballroom Foyer
- 10:15 a.m.-12:00 p.m.**      **PLENARY SESSION 8: TRANSLATION TO THE CLINIC**  
Harbor Ballroom II and III  
  
**Session Chair: Lori S. Friedman**, Genentech, Inc., South San Francisco, CA
- 10:15 a.m.-10:45 a.m.**      **AKTing to PIK the right patients**  
Lori S. Friedman
- 10:45 a.m.-11:15 a.m.**      **Development of PI3K inhibitors in breast cancer**  
Cynthia X. Ma, Washington University Siteman Cancer Center, St. Louis, MO
- 11:15 a.m.-11:45 a.m.**      **Reprogramming tumor-associated macrophages by targeting PI3K-gamma  
with IPI-549**  
Jeffery L. Kutok, Infinity Pharmaceuticals, Cambridge, MA
- 11:45 a.m.-12:00 p.m.**      **PIK3CA mutations in plasma cell-free DNA predict survival and treatment  
outcomes in patients with advanced cancers\***  
Ecaterina Ileana Dumbrava, The University of Texas MD Anderson Cancer Center,  
Houston, TX
- 12:00 p.m.**      **CLOSING REMARKS / DISCUSSION**

*\*Short talk from proffered abstract*