

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

10:30 a.m.-12:15 p.m.	PLENARY SESSION 2: AUTOPHAGY AND METABOLISM Harbor Ballroom II and III Session Chair: Eileen P. White , Rutgers Cancer Institute of New Jersey, New Brunswick, NJ
10:30 a.m.-11:00 a.m.	Autophagy and cancer metabolism Eileen P. White
11:00 a.m.-11:30 a.m.	Identifying metabolic dependencies in pancreatic cancer Alec C. Kimmelman, New York University Langone Medical Center, New York, NY
11:30 a.m.-12:00 p.m.	Pooled CRISPR screens for novel autophagy-related factors identify TMEM41, an ER-resident protein predicted to be a channel Vlad Denic, Harvard University, Cambridge, MA
12:00 p.m.-12:15 p.m.	Phosphorylation of DEPDC5 by the Pim-1 protein kinase, a cancer driver, stimulates mTORC1 activity by regulating the DEPDC5-Rag GTPase interaction* Sathish Padi, University of Arizona Cancer Center, The University of Arizona, Tucson, AZ
12:15 p.m.-2:30 p.m.	FREE TIME (LUNCH ON OWN)
2:30 p.m.-4:15 p.m.	PLENARY SESSION 3: STRUCTURAL BIOLOGY Harbor Ballroom II and III Session Chair: Roger L. Williams , MRC Laboratory of Molecular Biology, Cambridge, MA
2:30 p.m.-3:00 p.m.	Control of PIP3 levels by PI3Kα and PTEN L. Mario Amzel, Johns Hopkins University School of Medicine, Baltimore, MD
3:00 p.m.-3:30 p.m.	Structure and dynamics of Rag heterodimers in a complex with mTORC1 Roger L. Williams
3:30 p.m.-3:45 p.m.	Structural and functional analyses of GATOR1, a negative regulator of the mTORC1 pathway* Kuang Shen, Whitehead Institute for Biomedical Research, Cambridge, MA
3:45 p.m.-4:00 p.m.	Selective degradation of mutant PIK3CA promotes increased mutant specificity in a subset of PI3K ATP-competitive inhibitors* Nicholas Endres, Genentech, South San Francisco, CA
4:00 p.m.-4:15 p.m.	4EBP1 reactivation by potent and selective bisteric inhibitors of mTORC1* Nidhi Tibrewal, Revolution Medicines, Redwood City, CA
4:30 p.m.-6:30 p.m.	POSTER SESSION A / RECEPTION 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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12:00 p.m.-2:15 p.m.	POSTER SESSION B / LUNCH Harbor Ballroom I
2:15 p.m.-4:30 p.m.	PLENARY SESSION 6: PI3K/MTOR IN LIQUID TUMORS AND IMMUNITY Harbor Ballroom II and III Session Chair: Kira Gritsman , Albert Einstein College of Medicine, New York, NY
2:15 p.m.-2:45 p.m.	Strategies to target the mTORC1/eIF4F axis in B-cell leukemia and lymphoma David A. Fruman, University of California, Irvine, Irvine, CA
2:45 p.m.-3:15 p.m.	The PI3 isoforms in myeloid leukemia and hematopoietic stem cells Kira Gritsman
3:15 p.m.-3:45 p.m.	PI3Kgamma control of antitumor immunity Judith A. Varner, UCSD Moores Cancer Center, La Jolla, CA
3:45 p.m.-4:00 p.m.	Pancreatic ductal adenocarcinoma requires PI3Kalpha activity to accelerate circulating DNA-positive metastatic disease* Julie Guillermet-Guibert, Inserm, Cancer Research Center of Toulouse, Toulouse, France
4:00 p.m.-4:15 p.m.	AKT mutant allele-specific activation dictates pharmacologic sensitivities* Tripti Shrestha Bhattarai, Memorial Sloan Kettering Cancer Center, New York, NY
4:15 p.m.-4:30 p.m.	Targeting glutamine addiction of PIK3CA mutant colorectal cancers: From preclinical models to clinical trials* Zhenghe (John) Wang, Case Western Reserve University, Cleveland, OH

MONDAY, DECEMBER 3

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

**Short talk from proffered abstract*

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- 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*