# **Conference Program**

# Wednesday, May 27

7:00 p.m.-8:00 p.m. Welcome and Opening Keynote Address

Regency Ballroom

Session Chairperson: Franziska Michor, Dana-Farber Cancer Institute,

Boston, MA

Genomic alterations and targeted therapies in glioblastoma: Opportunities and challenges

Matthew L. Meyerson, Harvard Medical School/Dana-Farber Cancer Institute, Boston, MA

8:00 p.m.-9:30 p.m. Opening Reception

Empire Ballroom

Thursday, May 28

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

Regency Gallery/Bird Cage Walk

8:00 a.m.-8:45 a.m. Keynote Address

Regency Ballroom

Session Chairperson: Eric C. Holland, Fred Hutchinson Cancer Research Center,

Seattle, WA

Molecular pathogenesis of IDH mutant cancers and evolving treatment strategies

William G. Kaelin, Jr., Harvard Medical School/Dana-Farber Cancer Institute, Boston, MA

8:45 a.m.-10:45 a.m. Plenary Session 1: Computational Genomics and Evolutionary Dynamics:

**Creative Ways to Analyze Big Datasets** 

Regency Ballroom

Session Chairperson: Andrea Califano, Columbia University, New York, NY

How tumor evolution may subvert genomically targeted therapy in glioblastoma

Cameron W. Brennan, Memorial Sloan Kettering Cancer Center, New York, NY

Understanding tumor heterogeneity in glioblastoma

Simon Tavaré, Cancer Research UK Cambridge Institute, Cambridge, United Kingdom

Title to be announced

Franziska Michor, Dana-Farber Cancer Institute, Boston, MA

A precision medicine framework for brain tumors

Andrea Califano

10:45 a.m.-11:00 a.m. Break

Regency Gallery/ Bird Cage Walk

11:00 a.m.-1:00 p.m. Plenary Session 2: Emerging New Technologies: Application to Brain

**Tumors** 

Regency Ballroom

Session Chairperson: David Largaespada, University of Minnesota, Minneapolis,

MN

Clinical genomic studies of glioblastoma

Robert B. Darnell, Rockefeller University, New York, NY

Multilayered characterization of the cancer epigenome

Ari M. Melnick, Weill Cornell Medical College of Cornell University, New York, NY

Imaging to guide genomics and epigenomics of glioma

Joseph F. Costello, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, CA

Transposon-based mouse models of medulloblastoma and central nervous system-primitive neuroectodermal tumors: Molecular subtypes and novel drivers

David Largaespada

1:00 p.m.-1:45 p.m. Short Talks from Proffered Papers A

Regency Ballroom

Session Chairperson: Stephen C. Mack, Cleveland Clinic Lerner Research

Institute, Cleveland, OH

Modeling tumor stem cell heterogeneity through human glioblastoma organoids

Christopher Hubert, Cleveland Clinic Lerner Research Institute, Cleveland, OH

Somatic CRISPR/Cas9-mediated tumor suppressor disruption enables versatile brain tumor modeling

Jan Gronych, German Cancer Research Center, Heidelberg, Germany

Myxopapillary spinal ependymomas demonstrate a Warburg phenotype

Stephen C. Mack

1:45 p.m.-4:30 p.m. Poster Session A / Lunch

Ambassador Ballroom

#### 4:30 p.m.-6:30 p.m. Plenary Session 3: Metabolism/IDH/Epigenetics

Regency Ballroom

Session Chairperson: Suzanne J. Baker, St. Jude Children's Research Hospital,

Memphis, TN

### Targeting enhancers in CNS tumors

James E. Bradner, Harvard Medical School/Dana-Farber Cancer Institute, Boston, MA

### Investigating the functional consequences of ATRX deficiency in glioma

Jason T. Huse, Memorial Sloan Kettering Cancer Center, New York, NY

# Elucidating and targeting the molecular foundations of IDH mutant glioma

Timothy A. Chan, Memorial Sloan Kettering Cancer Center, New York, NY

# The unique genomic landscape of pediatric high-grade glioma

Suzanne J. Baker

#### 6:30 p.m.- Evening Off/Dinner on Own

#### Friday, May 29

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

Regency Gallery/Bird Cage Walk

# 8:00 a.m.-8:45 a.m. Keynote Address

Regency Ballroom

Session Chairperson: Martine F. Roussel, St. Jude Children's Research Hospital,

Memphis, TN

#### Brain metastasis niches and vital pathways

Joan Massagué, Memorial Sloan Kettering Cancer Center, New York, NY

# 8:45 a.m.-10:15 a.m. Plenary Session 4: Mutational Landscape in Brain Tumors

Regency Ballroom

Session Chairperson: Nada Jabado, Montreal Children's Hospital Research

Institute, Montreal, QC, Canada

#### Genomic landscape of meningiomas

Murat Günel, Yale University, New Haven, CT

#### Genomic-epigenomic interplay in medulloblastoma

Paul Northcott, St. Jude Children's Research Hospital, Memphis, TN

# Epigenetic addiction in pediatric high-grade gliomas

Nada Jabado

#### 10:15 a.m.-10:30 a.m. Break

Regency Gallery/Bird Cage Walk

# 10:30 a.m.-12:30 p.m. Plenary Session 5: Preclinical Therapeutics/Trials/Models

Regency Ballroom

Session Chairperson: Oren J. Becher, Duke University, Durham, NC

### Modeling blood-CNS barriers in zebrafish

Michael R. Taylor, University of Wisconsin, Madison, WI

#### Modeling brain tumors in mice

Eric C. Holland, Fred Hutchinson Cancer Research Center, Seattle, WA

# Pediatric medulloblastoma: Drug screens and preclinical studies

Martine F. Roussel, St. Jude Children's Research Hospital, Memphis, TN

#### Developing improved diffuse intrinsic pontine glioma mouse models

Oren J. Becher

12:30 p.m.-3:00 p.m. Free Time/Lunch on Own

#### 3:00 p.m.-3:45 p.m. Short Talks from Proffered Papers B

Regency Ballroom

Session Chairperson: Priscilla K. Brastianos, Harvard Medical School/

Massachusetts General Hospital, Boston, MA

# Genomic characterization of brain metastases reveals branched evolution and metastasisspecific mutations

Priscilla K. Brastianos

Interrogation of subclonal genetic diversity of human GBM reveals genetic heterogeneity in tumor-propagating cells in GBM, which display variable competitive capacity for tumor propagation in vivo

Colin Watts, University of Cambridge, Cambridge, United Kingdom

#### CSF1 signaling is a potential therapeutic target for glioma

Lara S. Collier, University of Wisconsin Comprehensive Cancer Center, Madison, WI

3:45 p.m.-6:30 p.m. Poster Session B

Ambassador Ballroom

6:30 p.m.- Evening Off/Dinner on Own

#### Saturday, May 30

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

Regency Gallery/ Bird Cage Walk

8:00 a.m.-9:30 a.m. Plenary Session 6: Tumor Microenvironment

Regency Ballroom

Session Chairperson: Johanna A. Joyce, Memorial Sloan Kettering Cancer

Center, New York, NY

Medulloblastoma subgroup-specific mutations model the tumor microenvironment

Richard J. Gilbertson, St. Jude Children's Research Hospital, Memphis, TN

Understanding and tackling differing vascular niches in glioma

Gabriele Bergers, University of California, San Francisco, California

Deciphering mechanisms of resistance to microenvironment-targeted therapies

Johanna A. Joyce

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

Regency Gallery/Bird Cage Walk

9:45 a.m.-11:15 a.m. Plenary Session 7: Metastasis

Regency Ballroom

Session Chairperson: Michael D. Taylor, University of Toronto Hospital for Sick

Children, Toronto, ON, Canada

Genomic analyses of brain metastases

Rameen Beroukhim, Dana-Farber Cancer Institute, Boston, MA

Functional genomics identifies drivers of medulloblastoma dissemination

Daniel W. Fults, University of Utah, Salt Lake City, UT

Facts and fictions in the dissemination of medulloblastoma

Michael D. Taylor

11:15 a.m. Departure