Tuesday, May 16, 2017

Welcome and Opening Keynote
5:00 p.m. – 6:00 p.m.

SWI/SNF (BAF) complex mutations in cancer: Mechanisms and vulnerabilities
Charles W. M. Roberts, St. Jude Children’s Research Hospital, Memphis, Tennessee

Welcome Reception
6:00 p.m. – 8:30 p.m.

Wednesday, May 17, 2017

Plenary Session 1: Genomics
Session Chair: David Malkin, The Hospital for Sick Children, Toronto, Ontario, Canada
8:00 a.m. – 10:00 a.m.

Modeling sarcoma susceptibility: The Li-Fraumeni syndrome paradigm
David Malkin

Translating genomic risk into an early detection strategy for sarcoma
David M. Thomas, Garvan Institute of Medical Research, Darlinghurst, New South Wales, Australia

Targeting the expression of EWS-FLI1
Natasha J. Caplen, National Cancer Institute, Bethesda, Maryland

A DNA methylation-based classifier for accurate molecular diagnosis of bone sarcomas*
Shengyang Wu, NYU School of Medicine, New York City, New York
Lnc-ing Ewing sarcoma susceptibility to translational stress response*
Heinrich Kovar, Children’s Cancer Research Institute, Vienna, Austria

Plenary Session 2: ‘Omics
Session Chair: Todd R. Golub, Broad Institute of MIT and Harvard, Cambridge, Massachusetts
10:30 a.m. – 12:30 p.m.

Genomic approaches to drug discovery
Todd R. Golub

Targeting ATP-dependent chromatin remodeling complexes in human sarcomas
Cigall Kadoch, Dana-Farber Cancer Institute, Boston, Massachusetts

Cancer drug target identification using domain-focused CRISPR screening
Christopher R. Vakoc, Cold Spring Harbor Laboratory Cancer Center, Cold Spring Harbor, New York

Enhancer reprogramming mediates metastatic competence in osteosarcoma*
James J. Morrow, Case Western Reserve University School of Medicine, Cleveland, Ohio

Progress towards development of an exosome-based biomarker assay in Ewing sarcoma*
Glenson Samuel, The Children’s Mercy Hospital, Kansas City, Missouri

Plenary Session 3: New Model Systems
Session Chair: David M. Langenau, Massachusetts General Hospital, Charlestown, Massachusetts
2:30 p.m. – 4:30 p.m.

Analysis of a histiocytic carcinoma in the dog: The canine’s utility in fetching disease gene
Elaine A. Ostrander, NIH-NHGRI, Bethesda, Maryland

A dog in the fight: How pet dogs with cancer can inform clinical research
William C. Eward, Duke University, Durham, North Carolina

Vangl2 regulates stem cell self-renewal programs and growth in rhabdomyosarcoma
David M. Langenau

Familial cancer patient specific iPSCs based study of a potential oncogenic factor, sFRP2 in osteosarcoma*
Huen Suk Kim, Icahn School of Medicine, New York, New York

Functional genomics of CIC-dux4 fusions in zebrafish recapitulates the spectrum of human CIC-rearranged cancers*
Poster Session A / Reception
4:30 p.m. – 7:00 p.m.

Thursday, May 18, 2017

Plenary Session 4: Signaling Perturbations and Targeted Therapeutics
Session Chair: Benjamin A. Alman, Duke University, Durham, North Carolina
8:00 a.m. – 10:00 a.m.

CDK4 inhibition and senescence: Pathway understanding leads to rational drug combinations
Andrew Koff, Memorial Sloan Kettering Cancer Center, New York, New York

Epigenetic deregulation of the Hippo pathway mediates NF-κB driven sarcomagenesis
T. S. Karin Eisinger, Univ. of Pennsylvania School of Medicine, Philadelphia, Pennsylvania

Dynamic cell populations are responsible for sarcoma propagating potential
Benjamin A. Alman

Stress associated selective mRNA translation and sarcoma metastasis*
Amal M. EL-Naggar, British Columbia Cancer Research Centre, Vancouver, BC, Canada

Ubiquitin-specific protease 6 (USP6) oncogene confers sensitivity of Ewing sarcoma to interferon cytotoxicity*
Ian Henrich, University of Pennsylvania, Philadelphia, Pennsylvania

Plenary Session 5: Neurofibromatosis and MPNST
Session Chair: Ping Chi, Memorial Sloan Kettering Cancer Center, New York, New York
10:30 a.m. – 12:45 p.m.

Molecular pathogenesis of malignant peripheral nerve sheath tumor
Ping Chi

Using gene expression analyses to identify MPNST therapeutics
Nancy Ratner, Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio
Natural history of peripheral nerve sheath tumors in NF1: Identification and characterization of malignant precursor lesions
Brigitte C. Widemann, National Cancer Institute, Bethesda, Maryland

Molecular pathogenesis and drug synergy in a zebrafish model of NF1-associated MPNST
A. Thomas Look, Dana-Farber Cancer Institute, Boston, Massachusetts

Modeling the tumor microenvironment in sarcoma: The impact on MPNST biology and chemotherapeutic response*
Rebecca Dodd, University of Iowa, Iowa City, Iowa

Development and characterization of novel/genetically-defined mouse models of malignant peripheral nerve sheath tumor for preclinical therapeutics testing*
Amish J. Patel, Memorial Sloan Kettering Cancer Center, New York, New York

Poster Session B / Lunch
12:45 p.m. – 3:15 p.m.

Plenary Session 6: Novel Biologic Mechanisms
Session Chair: Cristina K. Antonescu, Memorial Sloan Kettering Cancer Center, New York, New York
3:15 p.m. – 5:15 p.m.

Integrin-alpha 10 signaling pathway drives sarcomagenesis in mxyofibrosarcoma and undifferentiated pleomorphic sarcoma
Samuel Singer, Memorial Sloan Kettering Cancer Center, New York, New York

Emerging genetic mechanisms in undifferentiated round cell sarcomas
Cristina Antonescu

Autophagy in alveolar soft part sarcomagenesis
Kevin B. Jones, University of Utah Huntsman Cancer Institute, Salt Lake City, Utah

SSX-mediated chromatin engagement and targeting of BAF complexes activates oncogenic transcription in synovial sarcoma*
Matthew J. McBride, Dana-Farber Cancer Institute and Harvard Medical School, Boston, Massachusetts

Histone H3K36 mutations promote sarcomagenesis through altered histone methylation landscape*
Chao Lu, The Rockefeller University, New York, New York
Friday, May 19, 2017

Plenary Session 7: Immune Modulation and Microenvironment
Session Chair: Irene L. Andrulis, University of Toronto Mount Sinai Hospital, Toronto, Ontario, Canada
8:00 a.m. – 10:00 a.m.

Immune mechanisms in gastrointestinal stromal tumor
Ronald P. DeMatteo, Memorial Sloan Kettering Cancer Center, New York, New York

Injury promotes sarcomagenesis
David G. Kirsch, Duke University Medical Center, Durham, North Carolina

Variation in the immune cell infiltrate and expression of PD-L1 in sarcoma subtypes
Irene L. Andrulis

Pivotal role of Interleukin 23 in osteosarcoma development and its link with Glutamate Metabotropic 4. Identification of novel therapeutic targets for osteosarcoma*
Maya Kansara, Kinghorn Cancer Centre/ Garvan Institute of Medical Research, Sydney, NSW, Australia

Immune cell transcript levels, metastatic progression and survival in osteosarcoma: a comparative transcriptome analysis*
Aaron Sarver, University of Minnesota, Minneapolis, Minnesota

Plenary Session 8: Disease Progression
Session Chair: Jonathan A. Fletcher, Brigham and Women's Hospital, Boston, Massachusetts
10:30 a.m.-12:30 p.m.

Identification of therapies for plexiform neurofibromas, a precursor of malignant peripheral nerve sheath tumors
D. Wade Clapp, Indiana University School of Medicine, Indianapolis, Indiana

Title to be announced
Jonathan A. Fletcher

Cell plasticity and metastatic progression of Ewing sarcoma
Elizabeth R. Lawlor, University of Michigan, Ann Arbor, Michigan

Hypoxia, polyploidy, neuropeptide Y and Ewing sarcoma bone metastases is there a link?*
Akanksha Mahajan, Georgetown University, Washington, DC

Multi-platform analysis of paired primary and recurrent well- and dedifferentiated liposarcoma samples defines copy number alterations as dominant drivers of initiation and progression*
Aimee M. Crago, Memorial Sloan Kettering Cancer Center, New York, New York
Closing Remarks
12:30 p.m.