Conference Program

Monday, November 9

6:00 p.m.-7:00 p.m. Welcome and Keynote Presentation

Las Olas Ballroom

The Pediatric Cancer Genome Project: Lessons learned

James R. Downing, St. Jude Children's Research Hospital, Memphis, TN

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

Las Olas Ballroom Foyer

Tuesday, November 10

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

Atlantic Ballroom

8:00 a.m.-10:00 a.m. Plenary Session 1: Novel Strategies for Modeling Cancer

Las Olas Ballroom

Session Chairperson: Adolfo Ferrando, Columbia University, New York, NY

Human ES cells for modeling brain cancer

Viviane Tabar, Memorial Sloan Kettering Cancer Center, New York, NY

Insights into the origins and pathogenesis of embryonal rhabdomyosarcoma**

Mark E. Hatley, St. Jude Children's Hospital, Memphis, TN

Using genome editing to model MLL rearranged leukemias

Matthew Porteus, Stanford University School of Medicine, Palo Alto, CA

Oncogenic signaling pathways and resistance to therapy in T-ALL

Adolfo Ferrando

A novel MLL-AF4 in vivo model phenocopies t(4;11) pro-B ALL and reveals a lymphoid lineage bias of the fusion protein in human cells*

Shan Lin, Cincinnati Children's Hospital Medical Center, Cincinnati, OH

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

Las Olas Foyer I

10:30 a.m.-12:30 p.m. Plenary Session 2: Immunotherapy

Las Olas Ballroom

Session Chairperson: Lia Gore, University of Colorado Denver, Aurora, CO

Cell therapy for leukemia crosses the activity threshold

Stephan A. Grupp, Children's Hospital of Philadelphia, Philadelphia, PA

Chimeric antigen receptor T cells for cancer immunotherapy**

Kevin J. Curran, Memorial Sloan Kettering Cancer Center, New York, NY

Adoptive cell therapies for solid tumors: Progress and challenges

Crystal L. Mackall, National Cancer Institute, Bethesda, MD

GPC2 is a candidate immunotherapeutic target and putative oncogene in high-risk neuroblastoma and other pediatric cancers*

Kristopher R. Bosse, Children's Hospital of Philadelphia, Philadelphia, PA

Use of novel treatments for childhood ALL

Lia Gore

12:30 p.m.-1:45 p.m. Lunch on Own

1:45 p.m.-3:45 p.m. Plenary Session 3: Epigenetics

Las Olas Ballroom

Session Chairperson: Charles W.M. Roberts, St. Jude Children's Research

Hospital, Memphis, TN

MEDIATOR as a component of active enhancer complexes in hematopoiesis and leukemia

lannis Aifantis, NYU Langone Medical Center, School of Medicine, New York, NY

Meningioma-1 cooperates with MLL and DOT1L to induce leukemia**

Katherin M. Bernt, University of Colorado Denver, Aurora, CO

SWI/SNF (BAF) complex mutations in cancer

Charles W.M. Roberts

Prmt1 and Prmt1-dependent translation initiation are critical vulnerabilities of osteosarcoma*

Jessie Hao-Ru Hsu, Dana-Farber Cancer Institute, Boston, MA

Mechanisms of chromatin regulation by the EWS-FLI1 fusion protein in Ewing sarcoma

Miguel N. Rivera, Massachusetts General Hospital/Harvard Medical School, Boston, MA

3:45 p.m.-4:15 p.m. Special Session: Poster Session Highlights

(not eligible for CME credit)

Las Olas Ballroom

Session Chairperson: Charles G. Mullighan, St. Jude Children's Research

Hospital, Memphis, TN

Deregulated CDK2 corrupts Cyclin-D1 driven senescence and drives tumor progression in a model of pineoblastoma*

Caitlin Devitt, UT Southwestern Medical School, Dallas, TX Poster A03

Modeling pediatric malignancies by transforming primary neural crest cells*

Kevin W. Freeman, St. Jude Children's Research Hospital, Memphis, TN Poster A04

A novel patient-derived xenograft model to define the role of TSLP-induced CRLF2 signals and identify therapies for Ph-like B-ALL*

Kimberly J. Payne, Loma Linda University, Loma Linda, CA Poster A07

An alveolar soft part sarcoma model to explore the mechanisms of tumorigenesis and metastasis*

Miwa Tanaka, Japanese Foundation for Cancer Research, Tokyo, Japan Poster A11

The PRC1 protein RING1B contributes to Ewing sarcoma tumorigenesis by blocking the NaV1.6 sodium channel and modulating the NF-KB pathway, independently of the fusion oncoprotein*

Jaume Mora, Hospital Sant Joan de Déu, Barcelona, Spain Poster A21

Epigenetic mechanisms underlying retinoid mediated reprogramming of high-risk neuroblastoma*

Carol J. Thiele, National Cancer Institute, Bethesda, MD Poster A23

Reprogramming RAS-driven rhabdomyosarcoma via MEK inhibition*

Marielle Yohe, National Cancer Institute, Bethesda, MD Poster A25

Impact of liquid biopsy on the identification of the relapse seeding clone*

M. Reza Abbasi, Children's Cancer Research Institute, Vienna, Austria Poster A26

Balanced translocations disrupting SMARCB1 are hallmark recurrent genetic alterations in renal medullary carcinomas*

Franck Bourdeaut, Curie Institut, Paris, France Poster A29

Mutational dynamics between primary and relapse neuroblastoma involve genes relevant for mesenchymal transition*

Angelika Eggert, Charite University Medicine, Berlin, Germany Poster A30

Activation of the RAS-MAPK pathway in primary neuroblastoma tumors is associated with poor prognosis*

Thomas F. Eleveld, University of Amsterdam, Amsterdam, The Netherlands

Poster A31

Alternative splicing in Ewing sarcoma may be driven by phase separation of spliceosome proteins*

Jeffrey Toretsky, Georgetown University, Washington, DC Poster A39

TRICEPS: A feasibility study of personalized targeted therapy in relapsed/refractory childhood cancers*

Sylvie Langlois, Ste. Justine University Health Center, Montreal, QC, Canada Poster A41

Unusual suspects identified in neuroblastoma an unexpected tumor suppression pathway*

Zhi Xiong Chen, National University of Singapore, Singapore Poster A47

Investigation of p53 restoration therapy in a mouse model of pineoblastoma*

Raya H. Saab, American University of Beirut, Beirut, Lebanon Poster A52

The ALK inhibitor PF-06463922 shows significant response as a single agent in ALK/MYCN-driven models of neuroblastoma*

Bengt Hallberg, Institute of Biomedicine, Sahlgrenska Academy, University of Gothenburg, Gothenburg, Sweden

Poster B12

Hsp90-inhibitor drug conjugate STA-12-8666 demonstrates complete tumor regression in preclinical models of pediatric sarcoma

Christine Heske, National Cancer Institute, Bethesda, MD Poster B14

Activated ALK signals through the ERK-ETV5-RET pathway to drive neuroblastoma oncogenesis*

Isabelle Janoueix-Lerosey, Institut Curie, Paris, France Poster B15

Inactivation of KLF4 in T cell acute lymphoblastic leukemia promotes the expansion of leukemia cells by activating the Map2k7/Jnk pathway*

Daniel Lacorazza, Baylor College of Medicine, Houston, TX Poster B19

Genetic characterization and therapeutic targeting of MYC translocated pediatric T-cell acute lymphoblastic leukemia*

Gloria Milani, Center for Medical Genetics, Gent, Belgium Poster B21

Therapeutic targeting of sarcomas driven by EWSR1 fusion oncogenes by modulation of the fusion oncogene pre-mRNA*

Emily Slotkin, Memorial Sloan Kettering Cancer Center, New York City, NY Poster B26

First-in-class cytoskeletal targeting drug, Anisina, enhances effectiveness of microtubule inhibitors in a preclinical model of neuroblastoma*

Justine R. Stehn, Novogen Pty Ltd., Sydney, Australia Poster B27

Genomic analysis of osteosarcoma for identification of targeted therapies*

Alejandro Sweet-Cordero, Stanford University, Stanford, CA Poster B28

Combined siRNA and small molecule screening identifies Aurora B kinase as an effective target in MYCNdriven neuroblastoma*

Jun Wei, National Cancer Institute, Bethesda, MD Poster B31

Plasticity of the Ewing sarcoma invasive program: How microenvironmental stresses alter the drivers and repressors of metastasis*

Kelly Bailey, University of Michigan, Ann Arbor, MI Poster B33

Enhanced antitumor efficacy by combining oncolytic herpes simplex virus and Aurora A kinase inhibition in models of neuroblastoma and malignant peripheral nerve sheath tumor*

Timothy P. Cripe, Nationwide Children's Hospital, Columbus, OH Poster B35

NQO1 as a therapeutic target for atypical teratoid/rhabdoid tumor*

Julia Meade, UT Southwestern Medical School, Dallas, TX Poster B39

Autocrine and paracrine IL-6 and IL-8 drive osteosarcoma lung tropism and facilitate metastasis*

Ryan D. Roberts, The Research Institute at Nationwide Children's Hospital, Columbus, OH Poster B40

4:30 p.m.-7:00 p.m. **Poster Session A with Reception**

Atlantic Ballroom/Atlantic Foyer

7:00 p.m.-**Dinner on Own**

Wednesday, November 11, 2015

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

Las Olas Foyer I

8:00 a.m.-10:00 a.m. Plenary Session 4: Genetics and Genomics

Las Olas Ballroom

Session Chairperson: Akiko Shimamura, Fred Hutchinson Cancer, Seattle,

WA

The genetic basis of treatment failure in acute lymphoblastic leukemia

Charles G. Mullighan, St. Jude Children's Research Hospital, Memphis, TN

Internal tandem duplications of BCOR are a major oncogenic event in clear cell sarcoma of the kidney*

D. William Parsons, Baylor College of Medicine, Houston, TX

Genetic and phenotypic diversity in Ewing sarcoma

Olivier Delattre, Institut Curie, Paris, France

Inflammatory immune responses as driver of clonal evolution in childhood acute lymphoblastic leukemia*

Srividya Swaminathan, University of California, San Francisco, CA

Genetic studies of cancer predisposition

Akiko Shimamura

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

Las Olas Ballroom Foyer

10:30 a.m.-12:30 p.m. Plenary Session 5: Applied and Clinical Genomics

Las Olas Ballroom

Session Chairperson: Mignon L. Loh, University of California, San Francisco,

CA

Next generation personalized neuroblastoma therapy

Yael P. Mosse, The Children's Hospital of Philadelphia, Philadelphia, PA

TERT rearrangements are frequent in neuroblastoma and identify aggressive tumors*

Jan Koster, Academic Medical Center, Amsterdam, The Netherlands

Children, adolescents, and young adult ALL: Translating novel discoveries into therapeutic opportunities

Mignon L. Loh

The landscape of molecular aberrations in pediatric and young adult cancer patients undergoing clinical sequencing for disease management: Novel biological findings from the Peds-MiOncoSeg study*

John R. Prensner, Boston Children's Hospital, Boston, MA

Genome-epigenome interplay in medulloblastoma

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

12:30 p.m.-3:00 p.m. Poster Session B with Lunch

Atlantic Ballroom/Atlantic Foyer

3:00 p.m.-5:00 p.m. Plenary Session 6: Update on Targeted Therapeutics and Resistance

Las Olas Ballroom

Session Chairperson: Scott A. Armstrong, Memorial Sloan Kettering Cancer

Center, New York, NY

Targeting hyperactive Ras signaling in acute leukemia

Kevin M. Shannon, University of California, San Francisco, CA

Neuroblastoma is biphasic and includes classical neuroepithelial cells and chemoresistant mesenchymal cells*

Rogier Versteeg, Academic Medical Center, Amsterdam, The Netherlands

Targeting amplified MYCN through CDK7 inhibition in high-risk neuroblastoma

Rani E. George, Dana-Farber Cancer Institute, Boston, MA

CK2 inhibition exerts a therapeutic effect in high-risk ALL by restoring IKZF1-mediated repression of cell cycle progression and the PI3K pathway*

Sinisa Dovat, Pennsylvania State University College of Medicine, Hershey, PA

Targeting Hox gene expression in MLL-rearranged leukemia

Scott A. Armstrong

5:15 p.m.-6:15 p.m. Special Session: Hot Topics in Pediatric Cancer Research from Highly

Rated Abstracts

Las Olas Ballroom

Session Chairperson: Kevin M. Shannon, University of California, San

Francisco, CA

The chromatin remodeler CHD4 as a potential specific target for alveolar rhabdomyosarcoma therapy* Joana Marques, University Children's Hospital, Zurich, Switzerland

Targeted engagement of B cell autoimmunity checkpoints to overcome drug resistance in pediatric Ph-like ALL*

Zhengshan Chen, University of California, San Francisco, CA

Ewing sarcoma is defective in BRCA1, R-loop and recombination repair biology: Insights into derivation and targets for treatment*

Alexander J. Bishop, The University of Texas Health Science Center at San Antonio, San Antonio, TX

DNA methylation mapping and computational modeling in a large Ewing sarcoma cohort identifies principles of tumor heterogeneity and their impact on clinical phenotypes*

Eleni M. Tomazou, Children's Cancer Research Institute, Vienna, Austria

Harnessing the power of big data to advance pediatric cancer care*

Olena Morozova, University of California, Santa Cruz, CA

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**Early career presenter

6:15 p.m. - Dinner on Own

Thursday, November 12, 2015

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

Las Olas Ballroom Foyer

8:00 a.m.-10:00 a.m. Plenary Session 7: Late Effects

Las Olas Ballroom

Session Chairperson: Gregory T. Armstrong, St. Jude Children's Research

Hospital, Memphis, TN

The overall health burden on aging survivors of childhood cancer

Gregory T. Armstrong

The science of surviving cancer: Lessons learned from our cancer survivors

Smita Bhatia, University of Alabama, Birmingham, AL

Longitudinal characterization of hypertension in childhood cancer survivors: A report from the St. Jude Lifetime Cohort Study*

Todd M. Gibson, St. Jude Children's Research Hospital, Memphis, TN

Prevention in survivors: Reducing the "cost" of surviving childhood cancer

Lisa R. Diller, Dana-Farber Cancer Institute, Boston, MA

10:15 a.m.-12:15 p.m. Plenary Session 8: Refractory Malignancies and Difficult to Treat Pediatric

Cancers

Las Olas Ballroom

Session Chairperson: Kimberly Stegmaier, Dana-Farber Cancer Institute,

Boston, MA

Oncogenic mechanisms in diffuse intrinsic pontine gliomas

Suzanne J. Baker, St. Jude Children's Research Hospital, Memphis, TN

Targeting the chromatin architecture established by PAX3-FOXO1 in rhabdomyosarcoma*

Berkley E. Gryder, Genetics Branch, National Cancer Institute, Bethesda, MD

Glioma stem cells: What are they?

Luis F. Parada, UT Southwestern Medical Center, Dallas, TX

High-throughput small-molecule screen identifies inhibitors of aberrant chromatin accessibility in Ewing sarcoma*

lan J. Davis, University of North Carolina, Chapel Hill, NC

New targeted approaches for high-risk pediatric malignancies

Kimberly Stegmaier

12:15 p.m.-12:30 p.m. Closing Remarks/Departure

Las Olas Ballroom