

POSTER LISTING

PROFFERED PRESENTATIONS

LIGHTNING LECTURES

POSTER SESSION A

POSTER SESSION B

Proffered Presentations

PR001, A002 TFE3 fusions link tryptophan metabolism to AhR activation in tRCC: a targetable vulnerability. Xiang Li, The University of Texas Southwestern Medical Center, Dallas, Texas.

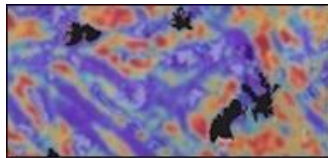
PR002, A014 Domain-specific oncogenic functions of VGLL2::NCOA2 in infantile rhabdomyosarcoma. Chinmay S. Sankhe, Center for Childhood Cancer Research, Nationwide Children's Hospital, Columbus, Ohio.

PR003, A008 KLIPP: Targeting fusion oncogenes with CRISPR. Mats Ljungman, University of Michigan, Ann Arbor, Michigan.

PR004, B006 Targeting aberrant condensate formation in fusion-positive cancers with an integrated discovery platform. Andrew Seeber, Transition Bio, Somerville, Massachusetts.

PR005, B018 Targeting chromatin–cell cycle vulnerabilities in high-risk pediatric acute myeloid leukemia. Gabriel E. Boyle, Seattle Children's Research Institute, Seattle, Washington.

PR006, B022 CBFA2T3–GLIS2 fusion reprograms enhancer-linked DNA methylation to enforce apoptotic resistance and defines an epigenetic vulnerability in pediatric AML. Samrat Roy Choudhury, Arkansas Children's Research Institute, University of Arkansas for Medical Sciences, Little Rock, Arkansas.



Lightning Lectures

Wednesday, January 14 • 6:30-7pm

LT001, B001 Exploiting the dependency on DDX19A to induce transcriptional catastrophe in Ewing sarcoma. Saikat Chakraborty, St. Jude Children's Research Hospital, Memphis, Tennessee.

LT002, B007 Low-order assemblies drive RTK fusion signaling without condensation. David Gonzalez-Martinez, University of Pennsylvania, Philadelphia, Pennsylvania.

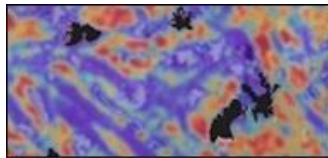
LT003, B004 Fetal differentiation programs afford a protective barrier to NUP98 fusion-driven AML initiation. Jihye Yoon, Washington University School of Medicine, St. Louis, Missouri.

LT004, B002 Dominant malignant clones leverage lineage restricted epigenomic programs to drive ependymoma development. Alisha Kardian, St. Jude Children's Research Hospital, Memphis, Tennessee.

LT005, B028 Uncovering novel molecular vulnerabilities in PICALM::MLLT10 driven pediatric acute myeloid leukemia. Lauren J. Ezzell, St. Jude Children's Research Hospital, Memphis, Tennessee.

LT006, B009 PAX3::FOXO1-targeting PROTACs in fusion-positive rhabdomyosarcoma. Nikola Knoll, Georgetown University, Washington, District of Columbia.

LT007, B003 YAP1::TFE3 fusion protein promotes transformation and EndMT plasticity in epithelioid hemangioendothelioma. Jason A. Hanna, Purdue University, West Lafayette, Indiana.



Poster Session A

Tuesday, January 13 • 7-9pm

A001 Loss of MLL1's H3K4 methyltransferase activity activates a leukemic stem cell program characteristic of fusion-driven leukemias. Michael S. Cosgrove, SUNY Upstate Medical University, Syracuse, New York.

A003 Adaptor sequestration and drug-induced potentiation of EGFR are widespread features of oncogenic RTK fusions. Yuzhi Gao, University of Pennsylvania, Philadelphia, Pennsylvania.

A004 Establishing the first integrated research infrastructure and preclinical models for EWSR1 fusion-positive myoepithelial carcinoma. Jamie D. Barber, cureMEC, Hanover, Massachusetts.

A005 Detection of fusion oncogenes in routinely collected biorepository samples. Zoran Gatalica, Reference Medicine, Phoenix, Arizona.

A006 Transcriptomic landscape of fusion-driven CNS tumors for the design and validation of junction-specific antisense oligonucleotide-mediated targeting of fusion oncogenes. Hyojeong Hwang, University of Pennsylvania, Philadelphia, Pennsylvania.

A007 EcDNA-derived structural variants: A common pathway to oncogenic fusion transcript amplification in cancer. Shu Zhang, Stanford University, Stanford, California.

A009 Role of Myc family proteins in fusion-positive rhabdomyosarcoma. Pawan Raut, National Cancer Institute, Bethesda, Maryland.

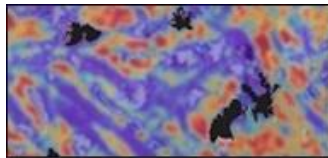
A010 GGAA repeat binding by EWSR1/FLI1 drives chromatin destabilization: A mechanistic and drug discovery platform. Ayah Salameh, Roswell Park Comprehensive Cancer Center, Buffalo, New York.

A011 A single-center experience with gene fusion testing in sarcomas. Kevin C. Halling, Mayo Clinic, Rochester, Minnesota.

A012 Mis-annotation of an HMGA2::NCOR2 fusion in FFPE sarcoma samples: A case illustrating bioinformatic limitations in fusion detection. Ganesh P. Pujari, Mayo Clinic, Rochester, Minnesota.

A013 Hi-C DNA sequencing of solid tumors for rearrangements and fusions detects targetable biomarkers missed by RNA sequencing. Alex Hastie, Arima Genomics, San Diego, California.

A015 Lowering barriers to studying CIC- and ATXN1-rearranged cancers. Cuyler Luck, University of California, San Francisco, California.



A016 Overcoming promiscuous tumor formation: a controlled genetically engineered mouse model of CIC::DUX4 sarcoma. MaKenna R. Browne, Duke University/University of Toronto, Toronto, Ontario, Canada.

A017 A new mouse model of SS18-SSX fusion oncogene driven synovial sarcomas. Malay Haldar, University of Pennsylvania, Philadelphia, Pennsylvania.

A018 Investigating the fibroblastic phenotype of dermatofibrosarcoma protuberans in primary tumors and non-fusion-bearing fibroblasts. Olena Kondrachuk, University of Michigan Medical School, Ann Arbor, Michigan.

A019 Investigating of the impact of COL1A1::PDGFB fusion in mouse Col1a2+ dermal embryonic fibroblasts as a potential cell of origin of dermatofibrosarcoma protuberans. Elisabeth A. Pedersen, University of Michigan Medical School, Ann Arbor, Michigan.

A020 Insights into human alveolar rhabdomyosarcoma initiation using a human t(2;13) induced pluripotent stem cell model. Bradley T. Stevens, St. Jude Children's Research Hospital, Memphis, Tennessee.

A021 CLK inhibition induces mis-splicing of SOX8 in alveolar rhabdomyosarcoma. Vincent A. Terta, St. Jude Children's Research Hospital, Memphis, Tennessee.

A022 Development of a mechanistic understanding and novel therapeutic strategies for TFE3-rearranged renal cell carcinoma. Debleena Basu, University Hospital Zürich, Zürich, Switzerland.

A023 ASPSCR1::TFE3 promotes angiogenesis via RAB27A/SYTL2 upregulation in alveolar soft part sarcoma. Miwa Tanaka, Cancer Institute, Japanese Foundation for Cancer Research, Tokyo, Japan.

A024 High-throughput characterization of inhibitor impacts on chromatin dysregulation induced by oncofusions. James E. Corban, University of Wisconsin-Madison, Madison, Wisconsin.

A025 Targeted degradation of leukemogenic fusion proteins in non-APL leukemia. Yongkui Jing, Shenyang Pharmaceutical University, Shenyang, China.

A026 Targeting PAX3-FOXO1 expression through translational and transcriptional control. Sinead Carse, University of California San Francisco, San Francisco, California.

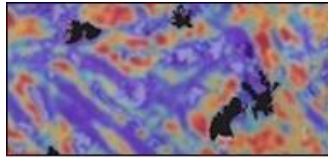
A027 Combined AKT and XPO1 inhibition to target chimeric transcription-factor driven pediatric sarcoma pathogenesis. Casey G. Langdon, Medical University of South Carolina, Charleston, South Carolina.

A028 PROTACs for targeted degradation of FGFR3-TACC3 fusion oncoprotein. Eugen Dhimolea, Albert Einstein College of Medicine, New York, New York.



A029 Larotrectinib long-term efficacy and safety in pediatric patients with TRK fusion non-primary CNS tumors: Analysis update. Leo Mascarenhas, Cedars-Sinai Medical Center, Los Angeles, California.

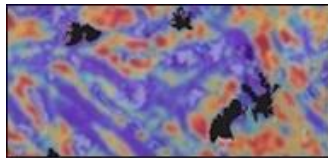
A030 Detection of clinically actionable RNA fusions across multiple cancer types using optimized cfRNA extraction from diverse sample matrices. Nafiseh Jafari, nRichDX, Irvine, California.



Poster Session B

Wednesday, January 14 • 7-9pm

- B005 Emergent condensate behaviors of the EWS::FLI1 fusion protein in Ewing sarcoma.** David S. Libich, University of Texas Health San Antonio, San Antonio, Texas.
- B008 Personalized antisense oligonucleotide treatment in a patient with relapsed NFIA::CBFA2T3 acute myelogenous leukemia.** Monica Pomaville, Children's Hospital of Philadelphia, Philadelphia, Pennsylvania.
- B010 Immunoediting of fusion-positive rhabdomyosarcoma after NK cell-based immunotherapy.** Zhiyu Song, The Ohio State University, Columbus, Ohio.
- B011 Molecularly guided treatment pathways in ependymoma: Integrating surgery, radiotherapy, and systemic strategies.** Charlene Mansour, Rutgers New Jersey Medical School, Newark, New Jersey.
- B012 Clinical outcomes and characterization of the tumor microenvironment in fusion-positive cutaneous melanoma.** Matthew J. Hadfield, Brown University/Legorreta Cancer Center, Providence, Rhode Island.
- B013 EWS::FLI1 activity at GGAA repeats is essential for maintenance of Ewing-like splicing.** David V. Allegakoen, Georgetown University, Washington, District of Columbia.
- B014 NSD3 regulates BRD4-NUT-driven chromatin 3D organization and gene regulation in NUT carcinoma.** Kyle P. Eagen, Baylor College of Medicine, Houston, Texas.
- B015 PAX3::FOXO1 establishes dosage-dependent transcriptional states in rhabdomyosarcoma.** Rachel A. Hoffman, Nationwide Children's Hospital, Columbus, Ohio.
- B016 Biochemical mechanisms of PAX3::FOXO1 chromatin invasion in rhabdomyosarcoma.** Chamithi Karunanayake, Nationwide Children's Hospital, Columbus, Ohio.
- B017 Spatial proteomic landscape of ovarian clear cell carcinoma with MET fusion transcripts.** Ruby Yun-Ju Huang, National Taiwan University, Taipei, Taiwan.
- B019 Full-length EWSR1::FLI1 reveals low-complexity domain regulation of DNA and nucleosome binding.** Ruo-Wen Chen, Ohio State Biochemistry Program, Columbus, Ohio.
- B020 Establishing roles for the FLI1-EWSR1 reciprocal fusion protein in Ewing sarcoma.** Sarah Gawlak, Roswell Park Comprehensive Cancer Center, Buffalo, New York.
- B021 In vivo activation of neural gene signatures in fusion-positive rhabdomyosarcoma.** Jack Kucinski, Nationwide Children's Hospital, Columbus, Ohio.



- B023 ConFusion: The unexpected presence of non-coding RNA fusions in fusion-positive soft tissue sarcomas.** Emily Isenhardt, Roswell Park Comprehensive Cancer Center, Buffalo, New York.
- B024 SRF fusion oncogenes encode constitutively activated chimeric transcription factors in myoid soft tissue tumors.** Constance Pirson, de Duve Institute, Bruxelles, Belgium.
- B025 Elucidating the role of ZFTA-RELA in radiation resistance in ependymoma.** Blake Holcomb, St. Jude Children's Research Hospital, Memphis, Tennessee.
- B026 O-mannosylation and protein maturation checkpoints represent therapeutic opportunities in BRAF fusion protein oncogenesis.** Sean Misek, Broad Institute of MIT and Harvard, Cambridge, Massachusetts.
- B027 A global analysis of fusion transcripts and recurrence in NSCLC primary-lymph node pairs.** Kelly M. Cagin, Rush University Medical Center, Chicago, Illinois.
- B029 Oncogenic MIR17HG expression is transcriptionally regulated by PAX3::FOXO1 and MYCN in fusion-positive rhabdomyosarcoma.** Shabir Zargar, National Institutes of Health, Bethesda, Maryland.
- B030 Overcoming off-target resistance to therapy in tumors driven by kinase fusions.** Shaza M. Sayed Ahmed, University of Miami, Miami, Florida.
- B031 The fibrolamellar carcinoma database.** Daniel F. Guevara-Diaz, The Rockefeller University, New York, New York.
- B032 STING agonist-loaded nanoparticles in ALK-driven lung cancer inhibit tumor growth through local and systemic immune microenvironment remodeling.** Marisa E. Aikins, University of Michigan Medical School, Ann Arbor, Michigan.