## 2024

# Robert Steel Symposium in Developmental Oncology



## **Overview**

This Symposium brings together outstanding scientists from across the country to discuss the latest discoveries into the molecular mechanisms of cancers in children and young adults and the development of new approaches for their definitive therapy and control.

The program will provide a unique opportunity to discuss genetic and epigenetic regulation of developmental processes, the molecular characterization of childhood cancers, and the identification of novel therapeutic strategies. There are many unanswered questions that need to be addressed for childhood and young adult cancers:

- What causes cancer in children and young adults without inheritance of cancer-predisposing mutations or exposure to environmental mutagens?
- How do predisposing alleles and exposures contribute to cancer development?
- What developmental processes are dysregulated to cause mutations and cell transformation in otherwise healthy tissues?
- How do mutations in developmental pathways involving transcription factors and epigenetic signaling cause cancer?
- How do we design effective therapeutics to block, activate, and modulate protein interactions that control transcription factors and other developmental regulators?
- How do we identify targets for immune therapy in developmental tumors that have relatively few mutations?

This two-day live, in-person Symposium provides an intimate and exciting setting to share new advances for these questions. It will also allow an **opportunity for established and young investigators to discuss new questions and interdisciplinary approaches of relevance** to young-onset cancer biology.

#### **TARGET AUDIENCE**

The target audience for this Symposium includes scientists, physicians, APPs, nurses, and other healthcare providers i nterested in learning the latest advances in our understanding of the biology and therapy of childhood cancers. We invite students and trainees to attend this Symposium on a complimentary basis as well as registrants that reside and practice in low and lower-middle income countries.

#### **LOCATION**

This Symposium is set to be an **exclusively in-person event** on the campus of Memorial Sloan Kettering; a virtual option is not available. Ample time will be provided for networking and professional collaboration.

Mortimer B. Zuckerman Research Center 1417 East 68th Street



# **Schedule**

MONDAY, APRIL 29, 2024  ZUCKERMAN RESEARCH CENTER (ZRC) AUDITORIUM		
8:00 am	Registration and Breakfast ZRC LOBBY	
8:50 am	<b>Welcome and Introduction</b> Andrew Kung, MD, PhD	
9:00 am	Rewiring Cancer Drivers to Activate Apoptosis with Chemically Induced Proximity Gerald Crabtree, MD Stanford University	
9:40 am	Formaldehyde — An Endogenous Mutagen That Drives Clonal Blood Production KJ Patel, FRS, FMedSci University of Oxford	
10:20 ам	YBX1 as a Regulator of Medulloblastoma Initiation and Progression  Myron K. Evans II, PhD  Seattle Children's Research Institute	
10:40 ам	Epigenetic Effects of Histone 3.3 Mutations in Neural and Mesenchymal Development  Alva Annett, MSc  McGill University	
11:00 AM	When Things Go off TRK: The Intersection of Neuroscience and Oncology Siobhan S. Pattwell, PhD Seattle Children's Research Institute	
11:20 AM	Break	
11:40 AM	Modeling Kiaa1549-Braf Tandem Duplication Ylenia Cendon Florez, PhD Memorial Sloan Kettering Cancer Center	
12:00 рм	Polycomb Repressor Complex-Mediated Regulation of HOXA7 Signaling is Essential for Glioma Progression Sheila Alcantara Llaguno, MD, PhD Memorial Sloan Kettering Cancer Center	
12:20 рм	Big Data for Functional Precision Medicine in Myeloid Malignancies  Jeffrey Tyner PhD  OHSU Knight Cancer Institute	

1:00 PM	Lunch ZRC LOBBY
1:40 рм	Second Somatic NF1 Mutations Pervade the Normal Tissues of the Nervous System in Neurofibromatosis Type 1 Thomas R. W. Oliver, MD Addenbrooke's Hospital
2:00 PM	Enhancing the Persistence and Anti-tumor Efficacy of CAR-T and CAR-NK cells for Pediatric Malignancies through Genetic Disruption of Death Receptors  Tal Cohen, MD  Memorial Sloan Kettering Cancer Center
2:20 PM	NUP98-fusion Proteins and KMT2A-MENIN Antagonize PRC1.1 to Drive Gene Expression in AML Emily B. Heikamp, MD, PhD, MSc Dana-Farber Cancer Institute Boston Children's Hospital Cancer and Blood Disorders Center
2:40 рм	Proteolytic Control of Oncogenic Gene Expression in Acute Myeloid Leukemia Masahiro Uni, MD, PhD Memorial Sloan Kettering Cancer Center
3:00 рм	Quiescent and Stem Like Signature with NUP98-NSD1 Fusion Driven Childhood Leukemia Elvin Wagenblast, PhD Icahn School of Medicine at Mount Sinai
3:20 рм	Pediatric BPDCN Associated MYB Fusions Regulate Cell Cycle Genes and Initiate Leukemia In Vivo Christopher Booth, PhD Dana-Farber Cancer Institute
3:40 рм	Break
4:00 рм	Transcriptional Condensates in Cell Fate Control and Cancer Liling Wan, PhD UPenn Perelman School of Medicine
4:40 PM	Interplay Between Epigenetic and Genetic Cancer Drivers Bradley Bernstein, MD, PhD Dana-Farber Cancer Institute
5:20 рм	Closing Remarks and Adjournment Agata Smogorzewska, MD, PhD
	NETWORKING RECEPTION AND DINNER

Upstairs at The Kimberly Hotel 6:00—9:00 PM 145 East 50th Street

## **TUESDAY, APRIL 30, 2024**

ZUCKERMAN RESEARCH CENTER (ZRC) AUDITORIUM

8:45 ам	Breakfast ZRC LOBBY
9:25 AM	<b>Welcome and Introduction</b> Alex Kentsis, MD, PhD
9:30 AM	Pediatric Fusion Oncogene Sarcomas: New Insights From Zebrafish Genetic Models James Amatruda, MD, PhD Children's Hospital Los Angeles
10:10 ам	ETV6 Dependency in Ewing Sarcoma Through Antagonism of Ews-FLI1-Mediated Enhancer Activation Yuan Gao, PhD Cold Spring Harbor Laboratory
10:30 ам	Epigenetic Control of Neuroblastoma Differentiation Through Inhibiting KAT6A/B Activity Nina Weichert-Leahey, MD Harvard Medical School, Dana-Farbar Cancer Institute
10:50 ам	MYCN Overexpression Biases Human Sympatho-Adrenergic Development Towards Progenitor Cells Causing Neuroblastoma-Like Tumor Xenografts Stephen Roberts, MD Oregon Health and Science University
11:30 AM	Break
11:50 AM	Developmental Deconvolution for Classification of Cancer Origin  Enrico Moiso, PhD, MSc  Memorial Sloan Kettering Cancer Center
12:10 рм	Medulloblastoma Arises Secondary to Failure of Differentiation of the Homo Sapiens Rhombic Lip Michael Taylor, MD, PhD Texas Children's Hospital
12:50 рм	Closing Remarks and Adjournment Alex Kentsis, MD, PhD
1:00 PM	<b>Lunch</b> ZRC LOBBY

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We invite attendees to join the symposium faculty for a **complimentary networking reception and dinner**.

Monday, April 29, 2024 6:00—9:00 PM

**Upstairs at The Kimberly Hotel** 145 East 50<sup>th</sup> Street **upstairsnyc.com** 

Upstairs at The Kimberly Hotel is a one-of-a-kind rooftop experience in the heart of New York City, focused on refined service in a relaxed luxurious setting. RSVP to the reception is required during Symposium registration.

This Symposium is presented by the MSK Tow Center for Developmental Oncology, which unites scientists across MSK to develop fundamental insights into the molecular mechanisms of cancers in children and young adults, and to devise new approaches for definitive therapy and control.

## **Accreditation**

Memorial Sloan Kettering Cancer Center is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

#### AMA CREDIT DESIGNATION STATEMENT

Memorial Sloan Kettering Cancer Center designates this live activity for a maximum of **10.25** *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

#### ABP MOC RECOGNITION STATEMENT

Successful completion of this CME activity, which includes participation in the evaluation component, enables the learner to earn up to 10.25 MOC points in the American Board of Pediatrics' (ABP) Maintenance of Certification (MOC) program. It is the CME activity provider's responsibility to submit learner completion information to ACCME for the purpose of granting ABP MOC credit





## **Symposium Organizers**



Alex Kentsis, MD, PhD

Associate Member

Molecular Pharmacology Program

Director, Tow Center for Developmental Oncology

Memorial Sloan Kettering Cancer Center



Andrew Kung, MD, PhD
Chair, Department of Pediatrics
Memorial Sloan Kettering Cancer Center



**Agata Smogorzewska, MD, PhD**Professor
The Rockefeller University

### **Peer Reviewer**



Makiko Yamada, MD, PhD Senior Research Scientist Memorial Sloan Kettering Cancer Center

#### RELEVANT FINANCIAL RELATIONSHIPS

Memorial Sloan Kettering Cancer Center adheres to the ACCME's Standards for Integrity and Independence in Accredited Continuing Education. Any individuals in a position to control the content of a CE activity, including faculty, planners, reviewers, or others are required to disclose all financial relationships with ineligible companies (commercial interests). All relevant financial relationships have been mitigated prior to the commencement of the activity.

# **Speakers**

#### SHEILA ALCANTARA LLAGUNO, MD, PHD

Senior Research Scientist, Cancer Biology & Genetics Program and Brain Tumor Center Memorial Sloan Kettering Cancer Center New York, NY, USA

#### JAMES AMATRUDA, MD, PHD

Interim Chief and Interim Director, Cancer and Blood Disease Institute Childrens Hospital Los Angeles Los Angeles, CA, USA

#### **ALVA ANNETT, MSC**

PhD. Student,
Department of Human Genetics
McGill University
Montreal, Quebec, Canada

#### **BRADLEY BERNSTEIN, MD, PHD**

Chair of Cancer Biology Dana-Farber Cancer Institute Boston, MA, USA

#### **CHRISTOPHER BOOTH, PHD**

Research Fellow Dana-Farber Cancer Institute Boston, MA, USA

#### YLENIA CENDON FLOREZ, PHD

Research Scholar, Department of Cancer Biology and Genetics Memorial Sloan Kettering Cancer Center New York, NY, USA

#### TAL COHEN, MD

Clinical Fellow, Department of Pediatrics Memorial Sloan Kettering Cancer Center New York, NY, USA

#### **GERALD CRABTREE, MD**

David Korn Professor Stanford University School of Medicine Stanford, CA, USA

#### **MYRON K. EVANS II, PHD**

Assistant Professor, Ben Towne Center for Childhood Cancer Research Seattle Children's Research Institute Seattle, WA, USA

#### YUAN GAO, PHD

Postdoctoral Fellow Cold Spring Harbor Laboratory Cold Spring Harbor, NY, USA

#### **EMILY B. HEIKAMP, MD, PHD, MSC**

Instructor in Pediatric Oncology and Stem Cell Transplant Dana-Farber Cancer Institute Boston Children's Hospital Cancer and Blood Disorders Center Boston, MA, USA

#### **ENRICO MOISO, PHD, MSC**

Senior Computational Biologist, Computational Oncology Department of Epidemiology and Biostatistics Memorial Sloan Kettering Cancer Center New York, NY, USA

#### THOMAS R. W. OLIVER, MD

Paediatric and Perinatal Pathology Specialty Registrar Department of Histopathology and Cytology Addenbrooke's Hospital Cambridge, UK

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# **Speakers**

#### KJ PATEL, FRS, FMEDSCI

Director of the Weatherall Institute for Molecular Medicine University of Oxford Oxford, UK

#### SIOBHAN S. PATTWELL, PHD

Assistant Professor, Ben Towne Center for Childhood Cancer Research Seattle Children's Research Institute Seattle, WA, USA

#### STEPHEN ROBERTS, MD

Professor of Pediatrics Robert C. Neerhout Chair of Pediatric Oncology Oregon Health and Science University Portland, OR, USA

#### MICHAEL TAYLOR, MD, PHD

Director of the Pediatric Neuro-Oncology Research Program Texas Children's Hospital, Baylor College of Medicine Houston, TX, USA

#### **JEFFREY TYNER, PHD**

Professor, Cell, Developmental and Cancer Biology Co-Lead, Translational Oncology Program OHSU Knight Cancer Institute Portland, OR, USA

#### MASAHIRO UNI, MD, PHD

Senior Research Scientist, Molecular Pharmacology Program Memorial Sloan Kettering Cancer Center New York, NY, USA

#### **ELVIN WAGENBLAST, PHD**

Assistant Professor Icahn School of Medicine at Mount Sinai New York, NY, USA

#### **LILING WAN, PHD**

Assistant Professor, Department of Cancer Biology University of Pennsylvania Philadelphia, PA, USA

#### **NINA WEICHERT-LEAHEY, MD**

Instructor Harvard Medical School, Dana-Farbar Cancer Institute Boston, MA, USA

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#### REGISTRATION FEES

Physicians (MDs, PhDs, and DOs) \$225
Other Healthcare Providers \$40
Employees of Pharma and Medical Devices\* \$350

Students, Trainees, and Registrants in

Low-and Lower-Middle-Income Countries\*\*

MSK Employees Complimentary

Complimentary

\*Employees who are currently employed by a Pharmaceutical and Medical Device may attend MSK CME activities for their own education. Marketing, sales, and promotion of products and services is strictly prohibited at MSK CME activities.

\*\*We are pleased to offer complimentary registration for students and trainees, and registrants residing in low and lower-middle income countries as defined by The World Bank. Please visit the symposium website for details.

#### **CANCELLATION POLICY**

If you wish to cancel your participation in this Symposium, you must email cme@mskcc.org at least seven (7) days prior to the start of the Symposium, and your refund will be subject to a \$25 administrative fee if attending virtually or a \$100 administrative fee if attending in-person. Cancellations or no-shows within seven (7) days of the Symposium are not eligible for a refund. Please note that if it has been more than 120 days since payment was processed, a W9 form must be submitted in order process your refund and your refund will be issued in the form of a check payment. Refunds are not subject to tax. You may substitute another registrant in your place at any time by contacting cme@mskcc.org with the appropriate information.

MSK CME reserves the right to cancel or postpone any Symposium due to unforeseen circumstances. In the unlikely event we must cancel or postpone this Symposium, you will be notified via email from MSK CME (cme@mskcc.org). A full refund will be issued for your registration. MSK CME is not responsible for any related costs, charges, or expenses to participants, including fees incurred by airline/travel/lodging agencies.

Please note the fee for 'Other Healthcare Providers' is non-refundable.

The **Tow Foundation** has been a leading benefactor of Memorial Sloan Kettering since 1976, supporting areas including cell therapies, inflammation and cancer, radiotheranostics, skin cancer research, and, especially, pediatric cancer research. The Foundation's visionary and generous 2018 commitment established the **Tow Center for Developmental Oncology**, which seeks to unite scientists across MSK to develop fundamental insights into the molecular mechanisms of cancers in children and young adults and to devise new approaches for definitive therapy and control.

The Robert Steel Foundation for Pediatric Cancer Research was established to honor the memory of Robert Steel, who died in 1984 at the age of eighteen after a heroic two-year struggle against rhabdomyosarcoma. Throughout the years, the Foundation supported MSK programs and initiatives devoted to speeding progress against childhood cancers, and its farsighted generosity has made The Robert Steel Symposium in Developmental Oncology possible. By bringing together leading scientists to address the latest challenges and opportunities in pediatric cancer research and treatment, The Robert Steel Symposium in Developmental Oncology continues to advance the vital work launched by the Robert Steel Foundation for Pediatric Cancer Research more than three decades ago.

