Memorial Sloan Kettering’s Tow Center for Developmental Oncology presents

The Robert Steel Symposium in Developmental Oncology

MAY 2-3, 2022
ZUCKERMAN RESEARCH CENTER
417 EAST 68TH STREET
NEW YORK, NY

This symposium will bring together expert faculty 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.

mskcc.org/DevelopmentalOncology
Overview

The Robert Steel Symposium in Developmental Oncology will bring 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 symposium is the first of its kind which is dedicated to new science at the interface of human development and cancer pathogenesis. This program will feature interactive discussions of fundamental and translational research to address unanswered questions in the field of developmental oncology.

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 will provide 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.

The target audience for this symposium includes scientists, physicians, APPs, nurses, and other healthcare providers interested in learning the latest advances in our understanding of the biology and therapy of childhood cancers. We are pleased to invite students and trainees to attend this symposium on a complimentary basis.

mskcc.org/DevelopmentalOncology
COURSE SPEAKERS

Sam Behjati, BMBCh, PhD
Group Leader, Wellcome Sanger Institute
Cambridge University

Ester Calvo Fernández, PharmD
PharmD, PhD Candidate
Columbia University

Jason Chan, MD, PhD
Instructor, Sarcoma Medical Oncology Service - Postdoc, Tammela lab
Memorial Sloan Kettering Cancer Center

Sisi Chen, PhD
Research Associate
Memorial Sloan Kettering Cancer Center

Adam Durbin, MD, PhD
Assistant Member
Division of Molecular Oncology
Department of Oncology
St. Jude Children's Research Hospital

Arielle Elkrief, MD
Research Fellow, Ladanyi Lab
Memorial Sloan Kettering Cancer Center

Katherine Gadek, PhD
Damon Runyon-Sohn Pediatric Cancer Fellow
St. Jude Children's Research Hospital

Liron Grossmann, MD
Hematology-oncology fellow
Children’s Hospital of Philadelphia

COURSE 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
Associate Professor
The Rockefeller University
COURSE SPEAKERS

Alejandro Gutierrez, MD
Associate Professor of Pediatrics
Boston Children’s Hospital

Luz Jubierre Zapater, PhD
Memorial Sloan Kettering Cancer Center

Claudia Kleinman, PhD
Assistant Professor
Department of Human Genetics
McGill University

Coraline Mlynarczyk, PhD
Research Associate in Medicine
Weill Cornell Medicine

Michelle Monje-Deisseroth, MD, PhD
Professor of Neurology and, by Courtesy, of Neurosurgery, of Pediatrics, of Pathology and of Psychiatry and Behavioral Sciences
Stanford University

Anand Patel, MD, PhD
Instructor
St. Jude Children’s Research Hospital

Maxim Pimkin, MD, PhD
Instructor in Pediatrics, Damon Runyon-Sohn Fellow
Harvard Medical School

Zulekha Qadeer, PhD
Postdoctoral Scholar
University of California, San Francisco

Miguel Rivera, MD
Associate Professor of Pathology
Massachusetts General Hospital
Harvard Medical School

Charles Roberts, MD, PhD
Director, Comprehensive Cancer Center
St. Jude Children’s Research Hospital

Kimberly Stegmaier, MD
Co-Director, Pediatric Hematologic Malignancy Program
Dana-Farber Cancer Institute
Harvard Medical School

Palaniraja Thandapani, PhD
Postdoctoral Fellow
NYU School of Medicine

Andrew Webster, PhD
Rockefeller University

Michelle Monje-Deisseroth, MD, PhD
Professor of Neurology and, by Courtesy, of Neurosurgery, of Pediatrics, of Pathology and of Psychiatry and Behavioral Sciences
Stanford University

Peng Wu, MD, PhD
Instructor
Stanford University School of Medicine

FACULTY DISCLOSURE

It is the policy of MSK to make every effort to insure balance, independence, objectivity, and scientific rigor in all continuing medical education activities which it provides as an ACCME accredited provider. In accordance with ACCME guidelines and standards, all faculty participating in an activity provided by MSK are expected to disclose any significant financial interest or other relationship with the manufacturer(s) of any commercial product(s) and/or provider(s) of commercial services which are discussed by the faculty members in an educational presentation. As required by the ACCME, when an unlabeled use of a commercial product or an investigational use not yet approved for any purpose is discussed during an educational activity, MSK requires the speaker to disclose that the product is not labeled for the use under discussion or that the product is still investigational.
# Agenda

Each presentation will conclude with a Q&A with the presenter.

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 AM</td>
<td>Breakfast and Check-in</td>
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<tr>
<td>9:00 AM</td>
<td>Welcome and Introduction</td>
<td>Alex Kentsis, MD, PhD</td>
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<tr>
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<td>Lessons Learned from the Pediatric Cancer Dependency Map</td>
<td>Kimberly Stegmaier, MD</td>
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<td>A Systems Biology Approach to Defining Tumor Heterogeneity, Prognostic and Targetable Master Regulator Protein Signatures from Bulk and Single Cell Rna-Seq in Diffuse Midline Glioma</td>
<td>Ester Calvo Fernández, PharmD</td>
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<td>11:20 AM</td>
<td>Break</td>
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<td>SWI/SNF (BAF) Complex Mutations in Cancer: Mechanisms and Vulnerabilities</td>
<td>Charles Roberts, MD, PhD</td>
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<tr>
<td>12:10 PM</td>
<td>Mechanisms of Chromatin Regulation by EWS Oncogenic Fusion Proteins</td>
<td>Miguel Rivera, MD</td>
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<td>12:45 PM</td>
<td>Lunch</td>
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<tr>
<td>1:45 PM</td>
<td>Reconstructing the Embryology of Childhood Tumours</td>
<td>Sam Behjati, BMBCh, PhD</td>
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<td>Coraline Mlynarczyk, PhD</td>
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<td>Impaired Ras Proteolysis Predisposes To Cancers and Drives Clonal Hematopoietic Transformation</td>
<td>Sisi Chen, PhD</td>
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<td>Epigenomic Engraving of Developmental Origins in High-grade Gliomas</td>
<td>Claudia Kleinman, PhD</td>
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<td>4:25 PM</td>
<td>Closing Remarks</td>
<td>Agata Smogorzewska, MD, PhD</td>
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<td>4:40 PM</td>
<td>Adjourn</td>
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## SIGNALING/TRANSCRIPTIONAL REGULATION

## TUMOR LINEAGE/DEVELOPMENT

<table>
<thead>
<tr>
<th>NETWORKING RECEPTION</th>
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</thead>
<tbody>
<tr>
<td>6:00-9:00 PM</td>
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<tr>
<td>We invite symposium attendees and faculty to a networking reception after the symposium adjourns on day one.</td>
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</tbody>
</table>

**Upstairs at The Kimberly Hotel**
145 E 50th Street
New York, NY

[mskcc.org/DevelopmentalOncology](mskcc.org/DevelopmentalOncology)
Agenda

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<td><strong>MECHANISMS OF RESISTANCE/NEW TARGETS</strong></td>
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**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 9.00 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

**Instructions for how to complete an evaluation and claim credit will be emailed to attendees after the symposium concludes.**
All Healthcare Providers: $25  
Industry Professionals: $45*  
Students and Trainees: complimentary**

Register online at: mskcc.org/DevelopmentalOncology

*Industry professionals may attend MSK CME activities for their own education. Marketing, sales, and promotion of products and services is strictly prohibited at MSK CME activities. For more information, please visit website.

In-person Attendance Requirements
All in-person attendees at MSK CME events must be fully vaccinated against COVID-19 at least two (2) weeks prior to the event. A copy of your COVID-19 vaccination card(s) must be uploaded during registration. All in-person attendees are required to wear masks at all times at all MSK locations (regardless of vaccination status). Please review the current Health & Safety Guidelines on our website for more information.

Registration Discounts/Promotions

• **We are pleased to invite students and trainees to attend this symposium on a complimentary basis. If you are a student or trainee interested in attending, please email devonc@mskcc.org for a promotional code (registration is required in order to attend).

• For students, residents, fellows, and postdocs in need of financial support for travel and hotel, please email devonc@mskcc.org a request explaining your needs in 250 words or less.

• A registration discount is available for MSK Alumni and MSK Cancer Alliance to attend a MSK CME course. If you are a member of one of these groups, contact cme@mskcc.org for details.

• Registration is complimentary for all MSK employees; however, you must complete registration through the ‘Register’ tab above in order to attend this course. If you are registered for this course and are unable to attend, please notify cme@mskcc.org.

• Please note that after your payment has been processed, no further promotional discounts or adjustments will be made to your registration.

Cancellation Policy
Registration for this symposium is non-refundable. MSK CME reserves the right to cancel or postpone any course due to unforeseen circumstances. In the unlikely event, we must cancel or postpone this course, you will be notified via email from MSK CME (cme@mskcc.org). We will refund the registration fee in full but are not responsible for any related costs, charges, or expenses to participants, including fees incurred by airline/travel/lodging agencies. At any time, you may substitute another registrant in your place after contacting MSK CME with the relevant information. Please note that if it has been more than 120 days since payment was processed, a W9 form must be submitted in order to process your refund and your refund will be issued in the form of check payment. Refunds are not subject to tax.

If you are not feeling well or exhibiting any symptoms of COVID-19 please refrain from attending and contact MSK CME (cme@mskcc.org).
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<td>Choline Kinase A Is Required for Alkylating Agent Resistance In High-Risk Acute Childhood Leukemias</td>
<td>Alejandro Gutierrez, MD</td>
<td>Kimberly Bodaar, MD, Anais Barthe, PharmD, PhD, Angelo D'Alessandro, PhD, Eric Aboagye, PhD, Maxim Pimkin, MD, PhD, Kim Harada, MS, Jeremie Kalfon, MS, Monika Perez, BS, Kenneth Eagle, PhD, MBA, MS, Kimberly Stegmaier, MD, MPH, Stuart Orkin, MD, PhD</td>
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<td>Mesoderm Progenitor States Drive Drug Resistance and Recurrence in Pediatric Rhabdomyosarcoma</td>
<td>Anand Patel, MD, PhD</td>
<td>Xiang Chen, PhD, Xin Huang, PhD, Elizabeth Stuart, MD, Michael Dyer, PhD</td>
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<td>Zulekha Qadeer, PhD</td>
<td>William Weiss, MD, PhD</td>
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<td>Palaniraja Thandapani, Phd</td>
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We are pleased to offer symposium attendees a special discounted rate at two hotels in the vicinity of Memorial Sloan Kettering:

**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.

**Hotels**

We are pleased to offer symposium attendees a special discounted rate at two hotels in the vicinity of Memorial Sloan Kettering:

**Courtyard Marriot, Midtown East**
866 3rd Avenue
New York, NY 10022

To receive the MSK discounted rate, please identify yourself as attending an MSKCC event when booking over the phone at +1 (212) 644-1300.

**The Kimberly Hotel**
145 E 50th Street
New York, NY 10022

Please email reservations@kimberlyhotel.com or call +1 (212) 702-1600 and identify yourself as attending an event at “Memorial Sloan Kettering” to receive the MSK discounted rate on any room.