

Studying the Context and Complexity of Oncogenes and Oncogene Addiction Paradigms in Malignancies (SCOPE)

Think Tank

December 9 - 10, 2024

AGENDA

DAY 1: December 9, 2024, 8:30 AM – 5:30 PM EST

7:30 – 8:30 AM Greetings/Check In

PLENARY SESSION (8:30 – 9:45 AM)

TIME	TOPIC
8:30 – 8:35 AM	Call the Meeting to Order (NCI)
8:35 – 8:45 AM	Opening Remarks Dr. Daniel Gallahan (Director, Division of Cancer Biology [DCB], NCI)
8:45 – 8:50 AM	Charge to the Meeting Dr. Sharmi Ghosh-Janjigian (DCB, NCI)
8:50 – 9:00 AM	SCOPE Think Tank Objectives (SCOPE Chairs) Dr. Dafna Bar-Sagi (New York University [NYU]) Dr. Robert Eisenman (Fred Hutchinson Cancer Center [FHCC])
9:00 – 9:45 AM	<i>KEYNOTE PRESENTATION</i>
9:00 – 9:05 AM	Keynote Speaker Introduction Dr. Robert Eisenman (FHCC)
9:05 – 9:35 AM	Focusing Attention on the Dosage, Dependencies, and Interactions of Oncogenic Proteins in Cancer Cells Dr. Harold Varmus (Cornell University)
9:35 – 9:45 AM	Q & A

COFFEE BREAK (9:45 – 10:00 AM)

**SESSION I: ONCOGENE ACTIVITIES AND THE ACQUISITION OF MALIGNANT PHENOTYPE
(10:00 AM – 12:15 PM)**

Chairs: Dr. Dean Felsher (Stanford University) and Dr. Elizabeth Jaffee (Johns Hopkins University [JHU])

TIME	TOPIC
10:00 – 10:05 AM	Session Aims Dr. Dean Felsher (Stanford University) Dr. Elizabeth Jaffee (J)
10:05 – 10:20 AM	MYC-Driven Oncogenesis: It Takes a Network Dr. Robert Eisenman (FHCC)
10:20 – 10:35 AM	Contextual Determinants of RAS-Dependent Oncogenesis Dr. Dafna Bar-Sagi (NYU)
10:35 – 10:50 AM	Mechanisms of Tissue Tropism for Oncogenic RAS Dr. Kevin Haigis (Dana-Farber Cancer Institute [DFCI])
10:50 – 11:05 AM	Cooperative and Antagonistic Interactions between KRAS and HRAS in Skin and Lung Cancer Development Dr. Allan Balmain (University of California San Francisco [UCSF])
11:05 – 11:10 AM	Short Break
11:10 – 12:10 PM	PANEL DISCUSSION AND Q&A <i>Primary Discussants:</i> Dr. Allan Balmain (UCSF) Dr. Dafna Bar-Sagi (NYU) Dr. Lukas Dow (Cornell University) Dr. Robert Eisenman (FHCC) Dr. Dean Felsher (Stanford University) Dr. Kevin Haigis (DFCI) Dr. Elizabeth Jaffee (JHU) Dr. Sita Kugel (FHCC) Additional Thoughts from Meeting Guests
12:10 – 12:15 PM	Highlights of the Session Dr. Lukas Dow (Cornell University) Dr. Sita Kugel (FHCC)

LUNCH BREAK (12:15 – 1:15 PM)

SESSION II: ONCOGENIC EFFECTS AND DETERMINANTS OF CELL FATE
(1:15 – 3:30 PM)
Chairs: Dr. Trever Bivona (UCSF) and Dr. Anirban Maitra (MD Anderson Cancer Center)

TIME	TOPIC
1:15 – 1:20 PM	Session Aims Dr. Trever Bivona (UCSF) Dr. Anirban Maitra (MD Anderson)
1:20 – 1:35 PM	MYC Cooperates with Cell of Origin to Dictate Tumor Plasticity Dr. Trudy Oliver (Duke University)
1:35 – 1:50 PM	Metabolic Vulnerabilities of MYC-Driven Tumors: Opportunities and Challenges Dr. Chi Van Dang (JHU)
1:50 – 2:05 PM	Regenerative Plasticity as an Oncogene-Induced Driver of Malignancy Dr. Ronald Evans (Salk Institute)
2:05 – 2:20 PM	Investigating Amplified Oncogenes in the 3D Cancer Genome Dr. Xiaoyang Zhang (University of Utah)
2:20 – 2:25 PM	Short Break
2:25 – 3:25 PM	PANEL DISCUSSION AND Q&A Primary Discussants: Dr. Chi Van Dang (JHU) Dr. Trever Bivona (UCSF) Dr. Ronald Evans (Salk) Dr. Katja Lamia (Scripps Research Institute) Dr. Anirban Maitra (MD Anderson) Dr. Trudy Oliver (Duke University) Dr. Ashani Weeraratna (JHU) Dr. Xiaoyang Zhang (U Utah) Additional Thoughts from Meeting Guests
3:25 – 3:30 PM	Highlights of the Session Dr. Katja Lamia (Scripps Research Institute) Dr. Ashani Weeraratna (JHU)

COFFEE BREAK (3:30 – 3:45 PM)
SESSION III: ONCOGENE ADDICTION: POSSIBLE MECHANISMS AND POTENTIAL VULNERABILITIES
(3:45 – 5:30 PM)
Chairs: Dr. Robert Coffey (Vanderbilt University Medical Center [VUMC]) and Dr. Eileen White (Rutgers University)

TIME	TOPIC
3:45 – 3:50 PM	Session Aims Dr. Robert Coffey (VUMC) Dr. Eileen White (Rutgers University)
3:50 – 4:05 PM	Oncogene Addiction: Identifying Tumor Intrinsic Mechanisms That Can be Generally Exploited as Therapeutic Vulnerabilities Dr. Dean Felsher (Stanford University)
4:05 – 4:20 PM	Dividing and Conquering Cancer by Understanding Oncogenic Dependencies Dr. Lou Staudt (Center for Cancer Research [CCR], NCI)
4:20 – 4:35 PM	Shifting Mechanisms of Escape from Oncogene Targeted Therapies Dr. Charles Sawyers (Memorial Sloan Kettering Cancer Center [MSKCC])
4:35 – 5:25 PM	PANEL DISCUSSION AND Q&A Primary Discussants: Dr. Cory Abate-Shen (Columbia University) Dr. Robert Coffey (VUMC) Dr. Angelo De Marzo (JHU) Dr. Dean Felsher (Stanford University) Dr. Charles Sawyers (MSKCC) Dr. Lou Staudt (CCR, NCI) Dr. Eileen White (Rutgers University) Additional Thoughts from Meeting Guests
5:25 – 5:30 PM	Highlights of the Session Dr. Cory Abate-Shen (Columbia University) Dr. Angelo De Marzo (JHU)

ADJOURNMENT (5:30 PM)

DAY 2: December 10, 2024, 8:00 AM – 12:30 PM EST

7:00 – 8:00 AM Greetings/Check In

KEY POINTS FROM DAY 1 (8:00 – 8:35 AM)

Chair: Dr. Marston Linehan (CCR, NCI)

TIME	TOPIC
8:00 – 8:35 AM	<p>Speakers (5 Minutes Each):</p> <p>Dr. Angelo De Marzo (JHU) Dr. Anirban Maitra (MD Anderson) Dr. Trudy Oliver (Duke University) Dr. Julien Sage (Stanford University) Dr. Eileen White (Rutgers University)</p> <p>Q & A (10 Minutes)</p>

SESSION IV: LEVERAGING RESOURCES, TOOLS, AND MODELS (8:35 – 11:00 AM)

Chairs: Dr. Kevin Haigis (DFCI) and Dr. Linghua Wang (MD Anderson)

TIME	TOPIC
8:35 – 8:40 AM	<p>Session Aims</p> <p>Dr. Kevin Haigis (DFCI) Dr. Linghua Wang (MD Anderson)</p>
8:40 – 8:55 AM	<p>The Complexity of Oncogenes in the Germline</p> <p>Dr. Stephen Chanock (Division of Cancer Epidemiology and Genetics [DCEG], NCI)</p>
8:55 – 9:10 AM	<p>Modeling Small-Cell Lung Cancer Development and Response to Therapy</p> <p>Dr. Julien Sage (Stanford University)</p>
9:10 – 9:25 AM	<p>Oncogene Biology: Tools and Approaches</p> <p>Dr. Linghua Wang (MD Anderson)</p>
9:25 – 9:40 AM	<p>Braking Bad: How Oncogenes Drive Ectopic Mutagenesis, Tumor Heterogeneity, and Therapy Resistance</p> <p>Dr. Ping Mu (Yale University)</p>
9:40 – 9:55 AM	<i>Coffee Break</i>
9:55 – 10:55 AM	<p>PANEL DISCUSSION AND Q&A</p> <p>Primary Discussants:</p> <p>Dr. Stephen Chanock (NCI) Dr. Kevin Haigis (DFCI) Dr. Ping Mu (Yale University) Dr. Trudy Oliver (Duke University) Dr. Julien Sage (Stanford University) Dr. Charles Sawyers (MSKCC) Dr. Linghua Wang (MD Anderson) Additional Thoughts from Meeting Guests</p>

10:55 – 11:00 AM	<p>Highlights of the Session</p> <p>Dr. Trudy Oliver (Duke University) Dr. Charles Sawyers (MSKCC)</p>
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SESSION V: KEY TAKEAWAYS AND CHARTING A PATH FORWARD (11:00 AM – 12:00 PM)
Chairs: Dr. Dafna Bar-Sagi (NYU) Dr. Robert Eisenman (FHCC)

PARTICIPANTS: ALL MEETING GUESTS

What are some guiding principles for conducting groundbreaking mechanistic studies on oncogenes while keeping the clinical context at the forefront?

SESSION VI: CONCLUDING SESSION (12:00 – 12:30 PM)

TIME	TOPIC
12:00 – 12:20 PM	<p>Think Tank Highlights</p> <p>Dr. Dafna Bar-Sagi (NYU) Dr. Robert Eisenman (FHCC)</p>
12:20 – 12:30 PM	<p>Closing Remarks</p> <p>Dr. Rihab Yassin (DCB, NCI) Dr. Sharmi Ghosh-Janjigian (DCB, NCI)</p>

ADJOURNMENT (12:30 PM)