SUNDAY, DECEMBER 9

7:00 p.m.-8:00 p.m.  WELCOME AND KEYNOTE ADDRESS
Sapphire IJMN

7:00 p.m.-7:15 p.m.  Welcome
Frank McCormick, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, CA

7:15 p.m.-8:00 p.m.  Keynote Address: Deconstructing K-RAS oncogenic signaling in lung and pancreatic tumors
Mariano Barbacid, Spanish National Cancer Research Center (CNIO), Madrid, Spain

8:00 p.m.-9:30 p.m.  OPENING RECEPTION
Sapphire ABEF

MONDAY, DECEMBER 10

7:00 a.m.-8:00 a.m.  BREAKFAST
Sapphire Northwest Foyer and Sapphire ABEF

8:00 a.m.-10:40 a.m.  PLENARY SESSION 1: RAS STRUCTURE AND BIOPHYSICS
Sapphire IJMN

Session Chair: Gideon Bollag, Plexxikon, Berkeley, CA

8:00 a.m.-8:25 a.m.  New structural insights into KRAS biology
Dhirendra K. Simanshu, Frederick National Laboratory for Cancer Research, Frederick, MD

8:25 a.m.-8:50 a.m.  KRAS Q61H preferentially signals through the MAPK pathway in non-small cell lung cancer
Kenneth D. Westover, UT Southwestern Medical Center, Southlake, TX

8:50 a.m.-9:15 a.m.  Targeting RAS for anticancer therapy
Sharon L. Campbell, University of North Carolina at Chapel Hill, NC

9:15 a.m.-9:40 a.m.  Dimerization is critical for the functions of wild-type and mutant KRAS
Chiara Ambrogio, Dana Farber Cancer Institute, Boston, MA

9:40 a.m.-10:05 a.m.  Oncogenic Ras control of the tumor immune microenvironment
Julian Downward, Francis Crick Institute, London, United Kingdom
CONFERENCE PROGRAM

10:05 a.m.-10:20 a.m.  
**Novel state I structures of oncogeneic KRAS4b mutants bound to GTP analog**  
Albert Chan, Frederick National Laboratory for Cancer Research, Frederick, MD

10:20 a.m.-10:40 a.m.  
**Speaker panel discussion**

10:40 a.m.- 11:00 a.m.  
**BREAK**  
Sapphire Northwest Foyer

11:00 a.m.-1:15 p.m.  
**PLENARY SESSION 2: KRAS PROCESSING AND LOCALIZATION**  
Sapphire IJMN  
**Session Chair:** Frank McCormick, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, CA

11:00 a.m.-11:25 a.m.  
**KRAS4b's unique diffusion behavior is defined by plasma membrane and effector interactions**  
Thomas J. Turbyville, Frederick National Laboratory for Cancer Research, Frederick, MD

11:25 a.m.-11:50 p.m.  
**Lipid dependence of KRAS plasma membrane interactions**  
John F. Hancock, University of Texas, Health Science Center at Houston, Houston, TX

11:50 a.m.-12:15 p.m.  
**Targeting K-RAS4B on biologic membranes**  
Mitsu Ikura, University of Toronto, Toronto, ON, Canada

12:15 p.m.-12:40 p.m.  
**Multiscale simulations of k-Ras on lipid bilayers**  
Fred H. Streitz, Lawrence Livermore National Laboratory, Livermore, CA

12:40 p.m.-12:55 p.m.  
**Mutations in RABL3 alter KRAS prenylation and are associated with hereditary pancreatic cancer**  
Sahar Nissim, Brigham and Women's Hospital, Dana-Farber Cancer Institute, Harvard Medical School, Boston, MA

12:55 p.m.-1:15 p.m.  
**Speaker panel discussion**

1:30 p.m.-3:30 p.m.  
**POSTER SESSION A / LUNCH**  
Sapphire ABEF

3:30 p.m.-5:45 p.m.  
**PLENARY SESSION 3: LESSONS LEARNED FROM MOUSE MODELS**  
Sapphire IJMN  
**Session Chair:** Shiva Malek, Genentech, Inc., South San Francisco, CA

3:30 p.m.-3:55 p.m.  
**Tissue- and cell-specific functions of Hras, Kras4A, and Kras4B in skin and lung cancer**  
Allan Balmain, University of California, San Francisco, San Francisco, CA

*Short talk from proffered abstract

TARGETING RAS-DRIVEN CANCERS
CONFERENCE PROGRAM

3:55 p.m.-4:20 p.m.  Targeting KRAS-dependent metabolic processes for pancreatic cancer treatment
Channing J. Der, University of North Carolina at Chapel Hill, Chapel Hill, NC

4:20 p.m.-4:45 p.m.  Targeting redox dependencies in pancreatic cancer
Christine Chio, Columbia University, New York, NY

4:45 p.m.-5:10 p.m.  Exploiting the metabolic dependencies of mutant KRAS lung tumors
Carla P. Martins, University of Cambridge, Cambridge, United Kingdom

5:10 p.m.-5:25 p.m.  Modeling the genetic heterogeneity of KRAS mutant lung adenocarcinomas for therapeutic discovery*
Kate Sutherland, The Walter and Eliza Hall Institute of Medical Research, Melbourne, VIC, Australia

5:25 p.m.-5:45 p.m.  Speaker panel discussion

5:45 p.m.  EVENING OFF / DINNER ON OWN

TUESDAY, DECEMBER 11

7:00 a.m.-8:00 a.m.  BREAKFAST
Sapphire Northwest Foyer and Sapphire ABF

8:00 a.m.-9:25 a.m.  PLENARY SESSION 4: TARGETING KRAS: IMMUNOTHERAPY AND IMMUNOTARGETS
Sapphire IJMN

Session Chair: Karen M. Cichowski, Harvard Medical School, Brigham & Women’s Hospital, Boston, MA

8:00 a.m.-8:25 a.m.  T-cells targeting mutated RAS—clinical trials
James C. Yang, National Cancer Institute, Bethesda, MD

8:25 a.m.-8:50 a.m.  The interplay between RAS/MAPK signaling and tumor immunology
Priti S. Hegde, Genentech, Inc., South San Francisco, CA

8:50 a.m.-9:05 a.m.  Antipeptide–HLA (TCR-like) antibodies specific for the KRAS G12V neoantigen*
Ben Kiefel, Affinity Biosciences, Melbourne, VIC, Australia

9:05 a.m.-9:25 a.m.  Speaker panel discussion

9:25 a.m.-9:40 a.m.  BREAK
Sapphire Northwest Foyer

*Short talk from proffered abstract
CONFERENCE PROGRAM

9:40 a.m.-11:20 a.m.  PLENARY SESSION 5—PART I: TARGETING KRAS AND KRAS-EFFECTOR COMPLEXES
Sapphire IJMN

Session Chair: Frank McCormick, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, CA

9:40 a.m.-10:05 a.m.  Molecular mechanisms that regulate Raf kinase signaling
Deborah K. Morrison, National Cancer Institute at Frederick, Frederick, MD

10:05 a.m.-10:30 a.m.  Targeting K-Ras directly
Kevan M. Shokat, University of California, San Francisco, San Francisco, CA

10:30 a.m.-10:55 a.m.  Insight towards therapeutic susceptibility of KRAS mutant cancers from MRTX1257, a novel KRAS G12C mutant-selective small-molecule inhibitor
James G. Christensen, Mirati Therapeutics, San Diego, CA

10:55 a.m.-11:20 a.m.  Unlocked groove—developing covalent inhibitors of KRAS
J. Russell Lipford, Amgen, Department of Oncology Research, Thousand Oaks, CA

11:20 a.m.- 11:35 a.m.  BREAK
Sapphire Northwest Foyer

11:35 a.m.- 1:00 p.m.  PLENARY SESSION 5—PART II: TARGETING KRAS AND KRAS-EFFECTOR COMPLEXES
Sapphire IJMN

Session Chair: Frank McCormick, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, CA

11:35 a.m.-12:00 p.m.  Preventing KRAS processing
Frank McCormick

12:00 p.m.-12:25 p.m.  Leveraging RAF dimer inhibitors to target RAS mutant tumors
Shiva Malek, Genentech, Inc., South San Francisco, CA

12:25 p.m.-12:40 p.m.  Selective contribution of the SHOC2 phosphatase complex to ERK pathway dynamics highlights its potential as a therapeutic target*
Isabel Boned Del Rio, University College London, Cancer Institute, London, United Kingdom

12:40 p.m.-1:00 p.m.  Speaker panel discussion

1:00 p.m.-2:30 p.m.  FREE TIME / LUNCH ON OWN

*Short talk from proffered abstract
**PLENARY SESSION 6: IDENTIFYING NEW VULNERABILITIES AND NEW THERAPIES**

Sapphire IJMN

Session Chair: Karen Cichowski, Harvard Medical School, Brigham & Women’s Hospital, Boston, MA

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<th>Speaker(s)</th>
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<td>2:30 p.m.-2:55 p.m.</td>
<td>Developing therapies for Ras-driven cancers</td>
<td>Karen Cichowski</td>
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<td>2:55 p.m.-3:20 p.m.</td>
<td>Oncogenic Ras-dependent tumor cell vulnerabilities</td>
<td>Dafna Bar-Sagi, New York University Medical Center, New York, NY</td>
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<td>3:20 p.m.-3:45 p.m.</td>
<td>Pancreatic cancer models and medicine</td>
<td>David A. Tuveson, Cold Spring Harbor Laboratory Cancer Center, Cold Spring Harbor, NY</td>
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<td>3:45 p.m.- 4:10 p.m.</td>
<td>Targeting KRAS mutant cancers</td>
<td>Jeffery A. Engelman, Novartis, Cambridge, MA</td>
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<td>4:10 p.m.-4:35 p.m.</td>
<td>Context-dependent role of Kras in GI malignancies</td>
<td>Prasenjit Dey, The University of Texas MD Anderson Cancer Center, Houston, TX</td>
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<td>4:35 p.m.-4:50 p.m.</td>
<td>Combinations with CDK4/6 inhibitors to treat cancers with mutations in both KRAS and CDKN2A*</td>
<td>Sean Buchanan, Eli Lilly, Indianapolis, IN</td>
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<td>4:50 p.m.-5:10 p.m.</td>
<td>Speaker panel discussion</td>
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**POSTER SESSION B / RECEPTION**

Sapphire ABEF

5:25 p.m.-7:25 p.m.

**EVENING OFF / DINNER ON OWN**

**WEDNESDAY, DECEMBER 12**

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<tr>
<th>Time</th>
<th>Session Title</th>
<th>Speaker(s)</th>
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<tr>
<td>7:30 a.m.-8:30 a.m.</td>
<td>BREAKFAST</td>
<td>Sapphire Northwest Foyer and Sapphire ABEF</td>
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<tr>
<td>8:30 a.m.-10:45 a.m.</td>
<td>PLENARY SESSION 7: SYSTEMS APPROACHES</td>
<td>Sapphire IJMN</td>
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<td><strong>Session Chair:</strong> Shiva Malek, Genentech, Inc., South San Francisco, CA</td>
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<td>8:30 a.m.-8:55 a.m.</td>
<td>Systematic interrogation of KRAS in cancer</td>
<td>William C. Hahn, Dana-Farber Cancer Institute, Boston, MA</td>
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*Short talk from proffered abstract*
CONFERENCE PROGRAM

8:55 a.m.-9:20 a.m.  Global proteomics reveals the context-dependence of K-Ras signaling
Kevin M. Haigis, Beth Israel Deaconess Medical Center, Boston, MA

9:20 a.m.-9:45 a.m.  Dissecting the playbook of cancer: Genomic analysis of 100,000 human tumors reveals elaborate patterns of activation of the RTK-RAS-MAPK pathway
Gerard Manning, Genentech, South San Francisco, CA

9:45 a.m.-10:10 a.m.  Genetic approaches for testing candidate drug targets for Ras-induced tumorigenesis in vivo
Kevin M. Shannon, University of California, San Francisco, San Francisco, CA

10:10 a.m.-10:25 a.m.  Combinatorial knockout of RA1GDS1 and RhoA leads to lethality in KRAS-driven non-small cell lung cancer*
Kaja Kostyrko, University of California, San Francisco, San Francisco, CA

10:25 a.m.-10:45 a.m.  Speaker panel discussion

10:45 a.m.-11:00 a.m.  BREAK
Sapphire Northwest Foyer

11:00 a.m.-12:35 p.m.  PLENARY SESSION 8: PERSPECTIVES: OPPORTUNITIES FROM BENCH TO CLINIC
Sapphire IJMN

   Session Chair: Gideon Bollag, Plexxikon, Berkeley, CA

11:00 a.m.-11:25 a.m.  Interplay between RAF inhibitors and RAS
Ying Zhang, Plexxikon, Berkeley, CA

11:25 a.m.-11:50 a.m.  Development of effective therapies for neurofibromatosis type 1 and other pediatric RAS-driven tumors
Brigitte C. Widemann, National Cancer Institute, Bethesda, MD

11:50 a.m.-12:15 p.m.  Biochemical and structural analysis of the neurofibromin (NF1) protein and a potential role for protein destabilization in Rasopathy diseases*
Dominic Esposito, Frederick National Laboratory for Cancer Research, Frederick, MD

12:15 p.m.-12:35 p.m.  Speaker panel discussion

12:35 p.m.  CLOSING REMARKS

*Short talk from proffered abstract