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
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| 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**

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| 7:00 a.m.-8:00 a.m. | **BREAKFAST**  
Sapphire Northwest Foyer and Sapphire ABEF |
| 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\textsuperscript{G12C}
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

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2:30 p.m.-5:10 p.m. PLENARY SESSION 6: IDENTIFYING NEW VULNERABILITIES AND NEW THERAPIES
Sapphire IJMN

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

2:30 p.m.-2:55 p.m.
Developing therapies for Ras-driven cancers
Karen Cichowski

2:55 p.m.-3:20 p.m.
Oncogenic Ras-dependent tumor cell vulnerabilities
Dafna Bar-Sagi, New York University Medical Center, New York, NY

3:20 p.m.-3:45 p.m.
Pancreatic cancer models and medicine
David A. Tuveson, Cold Spring Harbor Laboratory Cancer Center, Cold Spring Harbor, NY

3:45 p.m.-4:10 p.m.
Targeting KRAS mutant cancers
Jeffery A. Engelman, Novartis, Cambridge, MA

4:10 p.m.-4:35 p.m.
Context-dependent role of Kras in GI malignancies
Prasenjit Dey, The University of Texas MD Anderson Cancer Center, Houston, TX

4:35 p.m.-4:50 p.m.
Combinations with CDK4/6 inhibitors to treat cancers with mutations in both KRAS and CDKN2A*
Sean Buchanan, Eli Lilly, Indianapolis, IN

4:50 p.m.-5:10 p.m.
Speaker panel discussion

5:25 p.m.-7:25 p.m.
POSTER SESSION B / RECEPTION
Sapphire ABEF

7:25 p.m.
EVENING OFF / DINNER ON OWN

WEDNESDAY, DECEMBER 12

7:30 a.m.-8:30 a.m. BREAKFAST
Sapphire Northwest Foyer and Sapphire ABF

8:30 a.m.-10:45 a.m. PLENARY SESSION 7: SYSTEMS APPROACHES
Sapphire IJMN

Session Chair: Shiva Malek, Genentech, Inc., South San Francisco, CA

8:30 a.m.-8:55 a.m.
Systematic interrogation of KRAS in cancer
William C. Hahn, Dana-Farber Cancer Institute, Boston, MA

*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