SUNDAY, JANUARY 16
Arrival and Registration

MONDAY, JANUARY 17
Welcome and Keynote Address (Joint)
Speaker to be Announced

Metabolic Regulation of the Anti-Cancer Immune Response (Joint)
Jeffrey C. Rathmell, Vanderbilt University, USA
*T Cell Metabolism and the Tumor Microenvironment
Erika L. Pearce, Johns Hopkins University, USA
Metabolic Regulation of Immune Cells in Cancer
Lydia Lynch, Harvard Medical School, USA
Interplay between Obesity, Immune Cells, and Cancer
Marcia C. Haigis, Harvard Medical School, USA
Nutrient Competition between Immune Cells and Cancer Cells
Short Talk(s) Chosen from Abstracts

Workshop 1 (J2)
Short Talks Chosen from Abstracts

Workshop 1: Fundamentals of Immunometabolism (J1)
Short Talks Chosen from Abstracts

Metabolic Regulation by Kinases (J2)
Reuben J. Shaw, The Salk Institute for Biological Studies, USA
AMP Kinase
Brendan D. Manning, Harvard School of Public Health, USA
Mitochondrial Metabolism in Cancer
John Blenis, Weill Cornell Medical College, USA
Metabolic Regulation of Metastasis
Short Talk(s) Chosen from Abstracts

Metabolic Reprogramming for Improved Immunotherapy (J1)
Susan M. Kaech, The Salk Institute, USA
Immunometabolism of Long-Term Immunity
Ping-Chih Ho, University of Lausanne, Switzerland
Fat Fuels Tumor Tregs
Russell G. Jones, Van Andel Research Institute, USA
In vivo Immunometabolism
Short Talk(s) Chosen from Abstracts

Poster Session 1

TUESDAY, JANUARY 18
Amino Acid Metabolism and Nutrient Balance (Joint)
Craig B. Thompson, Memorial Sloan Kettering Cancer Center, USA
Identifying Metabolic Limitations in Cancer
Karen H. Vousden, Francis Crick Institute, UK
Serine Metabolism and Cancer Development
Matthew G. Vander Heiden, Massachusetts Institute of Technology, USA
Metabolic Interactions between Cancer and Host
Hongbo Chi, St. Jude Children's Research Hospital, USA
Nutrient Sensing and Signaling in Immune Function
Short Talk(s) Chosen from Abstracts

Meet the Editors (Joint)

Metabolic Control of Differentiation and Immune Escape (J2)
Lydia Finley, Memorial Sloan Kettering Cancer Center, USA
Metabolism, Epigenetics and Cancer
Jared Rutter, University of Utah, USA
Pyrurate Metabolism and Cellular Decisions
Alec Kimmelman, New York University Langone Medical Center, USA
Metabolic Control of Immune Tolerance in Cancer
Short Talk(s) Chosen from Abstracts

Microbial Metabolites, Nutrients and Cancer (J1)
Dan R. Littman, HHMI/New York University School of Medicine, USA
Host and Microbial Metabolites in Th17 Immunity
Janelle S. Ayres, The Salk Institute for Biological Studies, USA
Microbiota Metabolites in Health and Disease
Mark A. Febbraio, Monash Institute of Pharmaceutical Sciences, Australia
Role of the Gut Liver Axis in NASH Driven Cancer
Short Talk(s) Chosen from Abstracts

Poster Session 2

WEDNESDAY, JANUARY 19
Redox Metabolism (J2)
Gina DeNicola, Moffitt Cancer Center, USA
Cysteine Metabolism in Cancer
Navdeep S. Chandel, Northwestern University, USA
Mitochondrial Metabolism in Cancer
Christina Towers, The Salk Institute for Biological Studies, USA
Circumventing Autophagy Inhibition in Cancer Cells
Thales Papagiannakopoulos, New York University School of Medicine, USA
KEAP1/NRF2 Pathway in Cancer
Short Talk(s) Chosen from Abstracts

* Session Chair † Invited but not yet accepted Program current as of September 19, 2021. Meal formats are based on meeting venue. For the most up-to-date details, visit https://www.keystonesymposia.org.
Immune Interactions with Systemic and Tissue Metabolism (J1)
Catherine Postic, INSERM Institut Cochin, France
ChREBP, a Master Switch Linking Glucose and Lipid Metabolism and Diet
Giuseppe Matarese, Università degli Studi di Napoli Federico II, Italy
Systemic Metabolism, Leptin and Tregs
Zuri Sullivan, Harvard University, USA
Intestinal Response to Nutrient Sensing
Ananda W. Goldrath, University of California, San Diego, USA
Immunometabolism in Cancer
Short Talk(s) Chosen from Abstracts

Tumor Interaction with Host and Microbes (Joint)
Yasmine Belkaid, NIAID, National Institutes of Health, USA
Nutritional Control of Immunity
Eileen P. White, Rutgers Cancer Institute of New Jersey, USA
Immune Response Regulation by Autophagy in Cancer
Joshua D. Rabinowitz, Princeton University, USA
NADPH and Fat Sources in Tissues and Tumors
Short Talk(s) Chosen from Abstracts

Poster Session 3
THURSDAY, JANUARY 20

Targeting Metabolism (J2)
Ralph J. DeBerardinis, University of Texas Southwestern Medical Center, USA
Metabolic Dependencies in Tumors in Humans
Maria Yuneva, Francis Crick Institute, UK
Identifying Metabolic Vulnerabilities and Flexibilities of Tumours
Ayelet Erez, Weizmann Institute of Science, Israel
Targeting the Urea Cycle
Susan M. Molineaux†, Calithera Biosciences, USA
GLS1 Inhibitor in Cancer
Short Talk(s) Chosen from Abstracts

High-Fat Diet, Lipids and Cancer (J1)
Salvador Aznar Benitah, ICREA and Institute for Research in Biomedicine, Spain
Targeting Metastasis through Lipid Metabolism
Rachel J. Perry, Yale University, USA
Breaking the Link between Obesity and Cancer
Weiping Zou, University of Michigan, USA
Improving Metabolic Responses to Immunotherapy

Semir Beyaz, Cold Spring Harbor Laboratory, USA
Dietary Control of Tumor Metabolism
Short Talk(s) Chosen from Abstracts

Workshop 2 (J2)
Short Talks Chosen from Abstracts

Workshop 2: Translational Immunometabolism in Disease (J1)
Short Talks Chosen from Abstracts

Metabolic Vulnerabilities (J2)
Kivanc Birsoy, Rockefeller University, USA
Metabolic Dependencies of Cancer Cells in vivo
Heather Christofk, University of California, Los Angeles, USA
Metabolic Transitions in Cancer
Roberto Zoncu, University of California, Berkeley, USA
Regulation of Cancer Metabolism by the Lysosome

Frontiers in Immunometabolism (J1)
Donal Brennan, University College Dublin, Ireland
Intentional Weight Loss to Treat Cancer
Ido Amit, Weizmann Institute, Israel
The Power of ONE: Immunology in the Age of Single Cell Genomics
Luke A. J. O’Neill, Trinity Biomedical Sciences Institute, Ireland
Warburg and Mitochondrial Metabolism in Inflammation
Short Talk(s) Chosen from Abstracts

Meeting Wrap-Up: Outcomes and Future Directions (Organizers) (J2)
Meeting Wrap-Up: Outcomes and Future Directions (Organizers) (J1)
FRIDAY, JANUARY 21
Departure