FRIDAY, SEPTEMBER 28

5:00 p.m.-6:00 p.m.  WELCOME AND OPENING KEYNOTE LECTURE  
Salons D & E  
Lactate exchange promotes oxidative stress resistance and melanoma metastasis  
Sean J. Morrison, UT Southwestern, Dallas, TX

6:00 p.m.-7:30 p.m.  PLENARY SESSION 1: INFLUENCE OF METABOLISM ON METASTASIS / PROGRESSION  
Salons D & E  
Session Chair: Eileen P. White, Rutgers Cancer Institute of New Jersey, New Brunswick, NJ

6:00 p.m.-6:30 p.m.  Targeting cancer-specific vulnerabilities  
Ronald A. DePinho, The University of Texas MD Anderson Cancer Center, Houston, TX

6:30 p.m.-7:00 p.m.  Autophagy and cancer  
Eileen P. White

7:00 p.m.-7:15 p.m.  A new role for glycogen in metastasis*  
Ernst Lengyel, University of Chicago, Chicago, IL

7:15 p.m.-7:30 p.m.  Using clear cell like-RenCa and papillary like-RenCa models of kidney cancer to study metabolic influences on the microenvironment and metastasis*  
Bradley Reinfeld, Vanderbilt University School of Medicine, Nashville, TN

7:30 p.m.-9:30 p.m.  OPENING RECEPTION  
D & E Foyer

SATURDAY, SEPTEMBER 29

7:00 a.m.-8:00 a.m.  BREAKFAST  
Salons F, G, H, I

*Short talk from proffered abstract
CONFERENCE PROGRAM

8:00 a.m.-10:15 a.m.  PLENARY SESSION 2: THERAPEUTIC TARGETS
Salons D & E

Session Chair: M. Celeste Simon, University of Pennsylvania, Philadelphia, PA

8:00 a.m.-8:30 a.m.  Precision medicine in cancer metabolism
Kevin Marks, Agios Pharmaceuticals, Cambridge, MA

(not eligible for CME credit)

8:30 a.m.-9:00 a.m.  Linking oncogenic signaling to anabolic cell growth
Brendan D. Manning, Harvard T.H. Chan School of Public Health, Boston, MA

9:00 a.m.-9:30 a.m.  Uncovering metabolic bottlenecks in genetic subtypes of lung cancer
Thales Papagiannakopoulos, NYU School of Medicine, New York, NY

9:30 a.m.-9:45 a.m.  Therapeutic effects and metabolic rewiring upon glutaminase loss in T-ALL*
Daniel Herranz, Rutgers Cancer Institute of New Jersey, New Brunswick, NJ

9:45 a.m.-10:00 a.m.  Inhibition of mitochondrial ferredoxin 1 (FDX1) prevents adaptation to proteotoxic stress*
Peter Tsvetkov, Broad Institute of Harvard and MIT, Cambridge, MA

10:00 a.m.-10:15 a.m.  Characterization of a novel AICARFT inhibitor that potently elevates ZMP and has antitumor activity in murine models*
Harold Brooks, Eli Lilly and Company, Indianapolis, IN

10:15 a.m.-10:45 a.m.  BREAK
D & E Foyer

10:45 a.m.-1:00 p.m.  PLENARY SESSION 3: REDOX METABOLISM
Salons D & E

Session Chair: Karen H. Vousden, The Francis Crick Institute, London, United Kingdom

10:45 a.m.-11:15 a.m.  Oxygen and iron: Friends or foes
Richard Possemato, NYU School of Medicine, New York, NY

11:15 a.m.-11:45 a.m.  Folate metabolism: Potential vulnerabilities in cancers
Lewis C. Cantley, Weill Cornell Medical College, New York, NY

11:45 a.m.-12:15 p.m.  P53 pathways and cancer cell metabolism
Karen H. Vousden

12:15 p.m.-12:30 p.m.  Understanding natural tolerance to cancer-causing mutations: Imaging homeostatic equilibrium of oncogenic mutant clones in phenotypically normal tissue of live mice*
Anupama Hemalatha, Yale School of Medicine, New Haven, CT

*Short talk from proffered abstract
12:30 p.m.-12:45 p.m.  Deubiquitinas maintain protein homeostasis and survival of cancer cells upon glutathione depletion*
Isaac Harris, Ludwig Cancer Center, Harvard Medical School, Boston, MA

12:45 p.m.-1:00 p.m.  Cystine-glutamate antiporter xCT deficiency suppresses tumor growth without impairing antitumor immunity*
Michael Arensman, Pfizer, Pearl River, NY

1:00 p.m.-3:30 p.m.  LUNCH AND POSTER SESSION A
Salons F, G, H, I

3:30 p.m.-5:00 p.m.  PLENARY SESSION 4: CIRCADIAN AND ORGANISMAL METABOLISM
Salons D & E
Session Chair: Joshua D. Rabinowitz, Princeton University, Princeton, NJ

3:30 p.m.-4:00 p.m.  Metabolic exchange between tissues (and tumors)
Joshua D. Rabinowitz

4:00 p.m.-4:30 p.m.  Convergence of MYC, metabolism, the circadian clock, and immunity
Chi Van Dang, Ludwig Institute for Cancer Research, New York, NY

4:30 p.m.-5:00 p.m.  Cellular mechanism of insulin resistance: Implications for obesity, type 2 diabetes, and cancer
Gerald I. Shulman, Yale School of Medicine, New Haven, CT

DINNER ON OWN

SUNDAY, SEPTEMBER 30

7:00 a.m.-8:00 a.m.  BREAKFAST
Salons F, G, H, I

8:00 a.m.-10:15 a.m.  PLENARY SESSION 5: CANCER HETEROGENEITY AND MICROENVIRONMENT
Salons D & E
Session Chair: Trudy Oliver, Huntsman Cancer Institute, Salt Lake City, UT

8:00 a.m.-8:30 a.m.  Identifying metabolic dependencies in pancreatic cancer
Alec C. Kimmelman, NYU Langone Health, New York, NY

*Short talk from proffered abstract
CONFERENCE PROGRAM

8:30 a.m.-9:00 a.m.  Metabolic complexity in cancer cells and tumors
Ralph J. DeBerardinis, UT Southwestern Medical Center, Dallas, TX

9:00 a.m.-9:30 a.m.  MYC drives unique metabolic vulnerabilities in small-cell lung cancer
Trudy Oliver

9:30 a.m.-9:45 a.m.  Regulation of nutrient stress-induced macropinocytosis in pancreatic cancer*
Cosimo Commissio, Sanford Burnham Prebys Medical Discovery Institute, La Jolla, CA

9:45 a.m.-10:00 a.m.  A stromal lysolipid-autotaxin signaling axis promotes pancreatic tumor progression*
Mara Sherman, Oregon Health and Science University, Portland, OR

10:00 a.m.-10:15 a.m.  A regulatory multienzyme complex for glucose metabolism and its contributions to the Warburg effect in single cancer cells*
Songon An, University of Maryland, Baltimore County, Baltimore, MD

10:15 a.m.-10:45 a.m.  BREAK
D & E Foyer

10:45 a.m.-12:30 p.m.  PLENARY SESSION 6: METABOLISM AND DEVELOPMENT
Salons D & E
Session Chair: Aimee L. Edinger, University of California, Irvine, Irvine, CA

10:45 a.m.-11:15 a.m.  Metabolic adaptation in hemopoietic malignancies
Tak W. Mak, Princess Margaret Cancer Centre, Toronto, ON, Canada

11:15 a.m.-11:45 a.m.  Mitochondria, metabolism, and cellular decisions
Jared P. Rutter, University of Utah, Salt Lake City, UT

11:45 a.m.-12:15 p.m.  Nutrient scavenging fuels tumor anabolism
Aimee L. Edinger

12:15 p.m.-12:30 p.m.  The p53-p21 axis suppresses metabolic stress-induced ferroptosis*
Amy Tarangelo, Stanford University, Stanford, CA

12:30 p.m.-2:30 p.m.  LUNCH ON OWN

2:30 p.m.-4:30 p.m.  PLENARY SESSION 7: IMMUNOMETABOLISM
Salons D & E
Session Chair: Janelle Ayres, Salk Institute for Biological Studies, La Jolla, CA

2:30 p.m.-3:00 p.m.  Examining T-cell metabolic reprogramming in vivo
Russell Jones, Center for Cancer and Cell Biology, Van Andel Institute, Grand Rapids, MI

*Short talk from proffered abstract
CONFERENCE PROGRAM

3:00 p.m.-3:30 p.m. Host-microbiota interactions and metabolism
Janelle Ayres

3:30 p.m.-4:00 p.m. Mitochondria control adaptive immunity
Navdeep S. Chandel, Northwestern Medicine, Chicago, IL

4:00 p.m.-4:15 p.m. Nutrient-dependent activation of mTORC1 by RRAGC mutations enhance germinal center activation and drive follicular lymphoma*
Ana Ortega-Molina, Spanish National Cancer Research Center, Madrid, Spain

4:15 p.m.-4:30 p.m. PD-L1 is upregulated in the adipose tissue of tumor-bearing mice*
Max Heckler, Dana Farber Cancer Institute, Boston, MA

4:30 p.m.-7:00 p.m. POSTER SESSION B AND RECEPTION
Salons F, G, H, I

MONDAY, OCTOBER 1

7:00 a.m.-8:00 a.m. BREAKFAST
Salons F, G, H, I

8:00 a.m.-9:00 a.m. CLOSING KEYNOTE LECTURE
Salons D & E
The role of metabolites in regulating cellular differentiation
Craig B. Thompson, Memorial Sloan Kettering Cancer Center, New York, NY

9:00 a.m.-10:45 a.m. PLENARY SESSION 8: NEW METABOLIC PATHWAYS
Salons D & E
Session Chair: Ayelet Erez, Weizmann Institute of Science, Rehovot, Israel

9:00 a.m.-9:30 a.m. Metabolic limitations of tumor growth
Matthew G. Vander Heiden, Koch Institute for Integrative Cancer Research at MIT, Cambridge, MA

9:30 a.m.-10:00 a.m. Dual functions of metabolic enzymes
M. Celeste Simon, University of Pennsylvania, Philadelphia, PA

10:00 a.m.-10:30 a.m. The role of amino acid metabolism in carcinogenesis
Ayelet Erez

*Short talk from proffered abstract

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10:30 a.m.-10:45 a.m.  PKM2-mediated upregulation of serine synthesis pathway enables leukemic cells to proliferate in fructose-rich culture conditions*
Sangmoo Jeong, Memorial Sloan Kettering Cancer Center, New York, NY

10:45 a.m.-11:00 a.m.  BREAK
D & E Foyer

11:00 a.m.-12:45 p.m.  PLENARY SESSION 9: METABOLISM AND EPIGENETICS
Salons D & E

Session Chair: Lydia Finley, Memorial Sloan Kettering Cancer Center, New York, NY

11:00 a.m.-11:30 a.m.  Metabolic coordination of tumor suppression
Lydia Finley

11:30 a.m.-12:00 p.m.  Non-oncogene addiction of SIRT3 plays a critical role in lymphomagenesis
Ari M. Melnick, Weill Cornell Medical College, New York, NY

12:00 p.m.-12:30 p.m.  Acetyl-CoA metabolism and gene regulation: Understanding mechanisms of specificity
Kathryn E. Wellen, University of Pennsylvania, Philadelphia, PA

12:30 p.m.-12:45 p.m.  Alpha-ketoglutarate contributes to p53-mediated cell fate changes during tumor suppression*
Jossie J. Yashinskie, Memorial Sloan Kettering Cancer Center, New York, NY

12:45 p.m.  CONCLUSION

*Short talk from proffered abstract