B01  Cancer metabolic shift driven by MSC1-mediated mitochondria dysfunction in colon cancer. Minhee Kim. Department of Pharmacology, Metabolic Syndrome and Cell Signaling Laboratory, Institute for Cancer Research, College of Medicine, Chungnam National University, Daejeon, South Korea.


B03  Metformin prevents ovarian cancer progression via repressing ROS-dependent HIF1α stabilization in mesothelial cells. Peter Hart. University of Chicago, Chicago, IL.

B04  Normalizing metabolic heterogeneity to inhibit cancer cell invasion. Rachel Commander. Emory University, Atlanta, GA.

B05  NetrinG1/NGL-1 Axis promotes pancreatic tumorigenesis through cancer associated fibroblast derived nutritional supply and immunosuppression. Ralph Francescone. Fox Chase Cancer Center, Philadelphia, PA.

B06  The battle for L-arginine: Hepatocellular carcinoma cells vs. immune cells. Rindert Missiaen. Abramson Family Cancer Research Institute, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA.

B07  STAT3 activation in endothelial cells is important for tumor metastasis via increased cell adhesion molecule expression. Sang-Kyu Ye. College of Medicine, Seoul National University, Seoul, Republic of Korea.

B08  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 (UMBC), Baltimore, MD.

B09  The role of SREBP1 in cancer development and progression. Sudha Rani Janaki Raman. Department of Biochemistry and Molecular Biology, Theodor-Boveri-Institute, University of Würzburg, Wuerzburg, Germany.

B10  The genomic consequences of tumor hypoxia in human cancers. Vinayak Bhandari. OICR, University of Toronto, Toronto, ON, Canada.

B11  NFS1 undergoes positive selection in lung tumors and protects cells from ferroptosis. Vladislav Sviderskiy. New York University School of Medicine, New York, NY.

B13  mTORC1 and STAT3 cooperate to regulate mitochondrial dynamics and metabolism in tuberous sclerosis complex (TSC). Hilaire Lam. Brigham and Women’s Hospital, Harvard Medical School, Boston, MA.

B14  Functional capacity of CHCHD2 in glioblastoma cells expressing EGFRvIII. Jan Lumibao. University of Illinois Urbana-Champaign, Urbana, IL.


B17  IL-32 is a novel metabolic regulator and growth factor for multiple myeloma cells. Kristin Roseth Aass. Norwegian University of Science and Technology, Trondheim, Norway; Centre of Molecular Inflammation Research (CEMIR), Faculty of Medicine and Health Sciences, Norwegian University of Science and Technology, Trondheim, Norway.


B19  ACC1 is a novel regulator of breast cancer progression and metastasis. Matthew Naylor. University of Sydney, Sydney, NSW, Australia.


B22  Metabolomic analysis of circulating cancer cells. Thomas Mathews. University of Texas Southwestern, Dallas, TX.


B24  A role of NR1H4 on cell growth and proliferation in colon cancer cells. Yun Jeong Lee. National Cancer Center, Goyang, Gyeonggi, Korea.


B26  IGF2 mediates the cellular metabolic shift towards enhanced glucose and fatty acid oxidation in triple-negative breast cancer (TNBC) cells. Daisy De León. Loma Linda University, Loma Linda, CA.
B27  IGF2 is a key player in determining the metabolic phenotype of cancer by regulating mtDNA content and genes critical in the metabolic switch of breast cancer cells. Vinodh Radhakrishnan. Loma Linda University, Loma Linda, CA.

B28  Dexras1 negatively controls metabolism of brown fat via regulation of mitochondrial dynamics. Jo Woon Seok. Yonsei University, Seoul, South Korea.

B29  When cancer meets fat: Role of the p53 pathway in lipid metabolism. Laurent Le Cam. Montpellier Cancer Center, Montpellier University, INSERM, Montpellier, France.

B30  Metabolomic markers of hepatocellular carcinoma. Nicholas Skill. Indiana University, Indianapolis, IN.

B31  The multifunctional protein E4F1 links p53 to lipid metabolism. Matthieu Lacroix. INSERM U1194 - IRCM, Montpellier, France.

B32  Comparing metabolic labeling of human tumors at different anatomic sites. Divya Bezwada. UT Southwestern Medical Center, Dallas, TX.

B33  From time-lapse imaging to computational modeling: How glucose dynamics influence tumor cell growth. Jianchen Yang. The University of Texas at Austin, Austin, TX.

B34  Proliferating cell nuclear antigen (PCNA) has a central role in regulation of the glycolysis in hematologic cancer cells. Lisa M. Røst. Department of Biotechnology and Food Science, Faculty of Natural Sciences, NTNU Norwegian University of Science and Technology, Trondheim, Norway.

B35  Evaluation of the relationship between argonaute proteins expression and epithelial to mesenchymal transition-related proteins in mammary cell lines. Georgina Rivas-Saucedo. Universidad Autonoma de Zacatecas, Unidad Academica de Ciencias Quimicas, Zacatecas, Zacatecas, Mexico.


B38  The role of CD36 in tumor redox homeostasis. Alexander Terry. University of Illinois, Chicago, IL.


B41  Understanding natural tolerance to cancer-causing mutations: Imaging homeostatic equilibrium of oncogenic mutant clones in phenotypically normal tissue of live mice. Anupama Hemalatha. Genetics Department, Yale School of Medicine, New Haven, CT.

B42  Acetylation activates an alternative function of SOD2 promoting breast cancer stemness. Chenxia He. Medical College of Wisconsin, Milwaukee, WI, US.
B43  Lysine oxidase exposes a targetable liability in triple-negative breast cancer cells by inducing the antioxidant enzyme thioredoxin reductase 1. Dmitry Malin. University of Wisconsin, Madison, WI.

B44  Deubiquitinases maintain protein homeostasis and survival of cancer cells upon glutathione depletion. Isaac Harris. Ludwig Cancer Center, Harvard Medical School, Boston, MA.


B46  Monounsaturated fatty acids suppress non-apoptotic cancer cell death. Leslie Magtanong. Stanford University, Stanford, CA.


B48  Investigating the contribution of NNT to Fe-S cluster biosynthesis in NSCLC. Nathan Ward. Moffitt Cancer Center, Tampa, FL.

B49  Increased levels of Nrf2 expression lead to enhanced initiation and progression of lung carcinogenesis in Kras mutant mouse model. Ritu Sharma. University of Dundee, Dundee, United Kingdom.

B50  A large-scale chemical modulator screen identifies mTOR signaling as a positive regulator of ferroptosis. Scott Dixon. Stanford University, Stanford, CA.

B51  Multistage differentiation defines melanoma subtypes with differential vulnerability to drug-induced iron-dependent oxidative stress. Thomas Graeber. UCLA, Los Angeles, CA.

B52  p53-mediated adaptation to serine starvation is retained by tumor-derived mutants. Timothy Humpton. CRUK Beatson Institute, Glasgow, United Kingdom.


B54  Targeting the adaptive response in Adiponectin Receptor signaling following androgen-targeted therapy in prostate cancer: Efficacy in castrate LNCaP tumor xenografts in vivo. Lisa Philp. Australian Prostate Cancer Research Centre-Queensland, Institute of Health and Biomedical Innovation, School of Biomedical Sciences, Faculty of Health, Queensland University of Technology (QUT), Princess Alexandra Hospital, Translational Research Institute, Brisbane, QLD, Australia.

B55  Targeting Leptin Receptor signaling slows the progression of advanced prostate cancer. Lisa Philp. Australian Prostate Cancer Research Centre-Queensland, Institute of Health and Biomedical Innovation, School of Biomedical Sciences, Faculty of Health, Queensland University of Technology (QUT), Princess Alexandra Hospital, Translational Research Institute, Brisbane, QLD, Australia.

B56  Metabolic functions of the MDM2 oncoprotein define potential novel treatments for liposarcoma. Madi Cissé. Institut de Recherche en Cancérologie de Montpellier, Montpellier, France.
B57  Metabolic profiling and targeting of pancreatic ductal adenocarcinoma. Marija Trajkovic-Arsic. Division of Solid Tumor Translational Oncology, West German Cancer Center, University Hospital Essen and German Cancer Consortium (DKTK, partner site Essen) and German Cancer Research Center (DKFZ), Essen, NRW, Germany.

B58  Tumor cell intrinsic roles for ornithine decarboxylase in the development and maintenance of Myc-driven lymphoma. Mario Fernandez. H. Lee Moffitt Cancer Center and Research Institute, Tampa, FL.


B60  Inhibition of Aurora kinase A inhibits the Warburg effect and elicits unique metabolic vulnerabilities in preclinical model systems of glioblastoma. Markus Siegelin. Columbia University, New York, NY.


B62  Multiomic analysis reveals a metabolic “oncogenic memory” in dormant, residual cancer cells following successful tumor treatment. Martin Jechlinger. EMBL (European Molecular Biology Laboratory), Heidelberg, Germany.

B63  Cystine-glutamate antiporter xCT deficiency suppresses tumor growth without impairing antitumor immunity. Michael Arensman. Pfizer, Pearl River, NY.

B64  Growth inhibition by glutaminase inhibitors and the relationship to glutamine-dependent growth of bladder and colon cancer cells. Michael Lea. Rutgers New Jersey Medical School, Newark, NJ.

B65  Perturbations of cancer cell metabolism by the antidiabetic drug canagliflozin. David Papadopoli. McGill University, Montreal, QC, Canada.

B66  Targeting MET modulates global metabolic pathways and induces dNTPs depletion-associated DNA damage in MET-addicted models. Michaela Poliakova. Inselspital, University of Bern, Radiation Oncology, Bern, Switzerland.

B67  Identifying mechanisms of metabolic regulation and adaptation in lung squamous cell carcinoma. Milica Momcilovic. UCLA, Los Angeles, CA.

B68  MYC-driven small cell lung cancer is metabolically distinct and vulnerable to arginine depletion. Milind Chalishazar. Department of Oncological Sciences, University of Utah, Huntsman Cancer Institute, Salt Lake City, UT.

B69  New mechanistic studies of a clinically successful, first-in-class cancer metabolism drug. Moises Guardado Rivas. Stony Brook University, Stony Brook, NY.
Withaferin A inhibits lysosomal activity to block autophagic flux and induces apoptosis via energetic impairment in breast cancer cells. Nethaji Muniraj. Johns Hopkins University School of Medicine and Sidney Kimmel Comprehensive Cancer Center, Baltimore, MD.

Papaverine and its novel derivatives radiosensitize solid tumors by inhibiting mitochondrial function. Nic Denko. Ohio State University, Columbus, OH.

Enzyme-directed Toll-like receptor agonists that confer immunogenicity to metabolism and drug efflux in multidrug-resistant cancers. Rock Mancini. Washington State University, Pullman, WA.

Phenotypic screening identified a class of thiosemicarbazones that inhibit mitochondrial respiration while decreasing lactate production. Scott Ackler. AbbVie Inc, North Chicago, IL.

Pan-cancer identification of metabolic dysregulation: Targeting the adaptive response. Spencer Rosario. Roswell Park Comprehensive Cancer Center, Buffalo, NY.

Targeting cancer metabolism in BRCA deficient breast cancer. Tamica N. Collins. University of Chicago, Chicago, IL, USA.

Specific targeting of MTAP-deleted tumors with a combination of 2-fluoroadenine and 5'-methylthioadenosine. Warren Kruger. Fox Chase Cancer Center, Philadelphia, PA.

Activation of Nrf2 in lung adenocarcinoma leads to a dependency on exogenous nonessential amino acids. Warren Wu. NYU School of Medicine, New York, NY.

Blockage of protein neddylation alters mitochondrial morphology and reprograms energy metabolism for targeted cancer therapy. Yi Sun. Institute of Translational Medicine, Zhejiang University School of Medicine, Hongzhou, Zhejiang, P.R. China.

Identification of novel MCT4 inhibitors for treating cancers with high expression of MCT4. Yong Wu. Charles Drew University of Medicine and Science, David Geffen UCLA School of Medicine, Los Angeles, CA.