Targeted disruption of SIN3 chromatin regulator complex function inhibits metastasis and improves survival in triple negative breast cancer. Samuel Waxman, Icahn School of Medicine at Mount Sinai, New York, NY.

Thymine DNA glycosylase as a novel target for melanoma. Alfonso Bellacosa, Fox Chase Cancer Center, Philadelphia, PA.

Epigenome modification of prostate adenocarcinoma by the dietary phytochemical ursolic acid in prostate specific PTEN-/- mice. Chao Wang, Department of Pharmaceutics, Ernest Mario School of Pharmacy, Rutgers, The State University of New Jersey, Piscataway, New Jersey.

Sulforaphane epigenetically demethylates the CpG sites of the miR-9-3 promoter and reactivates miR-9-3 expression in human lung cancer A549 cells. David Cheng, Rutgers University, Piscataway, NJ.

Aspirin treatment inhibits LINE-1 expression in human colon cancer cell line. Ekavali Ekavali, South Dakota State University, Brookings, South Dakota.

DNA methylation patterns separate senescence from transformation potential and indicate cancer risk. Hariharan Easwaran, The Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins, The Johns Hopkins University School of Medicine, Baltimore, MD.

DNA methylation changes at enhancers define master regulators in glioma progression. Houtan Noushmehr, Department of Neurosurgery, Hermelin Brain Tumor Center, Henry Ford Hospital, Detroit, Michigan.

Epigenetic mechanisms drive cellular reprogramming in pancreatic carcinogenesis. Ivonne Regel, Department of Medicine II, University Hospital, Ludwig-Maximilian University Munich, Munich, Germany.

Clinically significant subgroups of Wilms tumors are defined by genome-wide DNA methylation patterns. Jack Brzezinski, Hospital for Sick Children, Toronto, Ontario, Canada.

DNMT3B induction at distant site promotes breast cancer metastasis through epigenetic reprogramming. Jae Young So, NIH, Bethesda, MD.

Early loss of monoubiquitylation of Histone H2B alters key immune signaling pathways promoting the progression of high-grade serous ovarian cancer. Jagmohan Hooda, University of Pennsylvania, Philadelphia, PA.

The role of long noncoding RNA mediated disruption of SWI/SNF in prostate cancer. Jesse Raab, UNC Chapel Hill, Chapel Hill, NC, 27599.

Epigenetic targeting of adipocytes inhibits high-grade serous ovarian cancer cell migration and invasion. Jessica Tang, Indiana University, Bloomington, IN.
The histone methyltransferase DOT1L is a potential therapeutic target in multiple myeloma. Kazuya Ishiguro, Department of Gastroenterology and Hepatology, Sapporo Medical University School of Medicine, Sapporo, Hokkaido, Japan.

p16 epimutation: Function in intestinal tumorigenesis and as a target for therapy. Lanlan Shen, Baylor College of Medicine, Houston, TX.

Methylation status at the SMPD3 promoter in hepatocellular carcinoma correlates with SMPD3 gene expression and liver function markers. Maarit Tiirikainen, University of Hawaii Cancer Center, Honolulu, HI.

A Trichostatin A/Sp1 mediated mechanism for the regulation of SALL2 tumor suppressor in Jurkat T leukemia cells. Matias Hepp, Universidad de Concepcion, Concepcion, BioBio, Chile.

Deregulation of DNA demethylation in inflammation and cancer. Natalia Tretyakova, University of Minnesota, Minneapolis, MN.

CRISPR screening to assess genetic vulnerabilities in mutant IDH1-dependent models of different lineages. Lindsey Rodrigues, Novartis Institutes for Biomedical Research, Cambridge, Massachusetts.

Combining enhancer DNA methylation and RNA-seq to identify gene regulatory network changes in cancer. Nicole Yeager, Cedars-Sinai Medical Center, Los Angeles, CA.

The histone methyltransferase Suv420h2 prevents the epithelial-to-mesenchymal transition (EMT) by restraining the mesenchymal program in luminal breast cancer cells. Priya Kapoor, Emory University, Atlanta, GA.

Epigenetic and genetic modification of tumor necrosis factor alpha and associated biomarkers on human prostate cancer LNCaP, PC-3 and DU145 cells induced by ursolic acid and sulforaphane. Ran Yin, Rutgers, the State University of New Jersey, Piscataway Township, NJ.

Epigenome Modification and Cancer Prevention by Curcumin in Colitis-accelerated Colon Cancer in Mice. Renyi Wu, Rutgers University, Piscataway, New Jersey.

Discovery of selective, non-covalent small molecule inhibitors of DNMT1. Melissa Pappalardi, GlaxoSmithKline, Collegeville, PA.

Potential role of the splicing factor SF3B1 in epigenetic regulation. Sandra Deliard, Temple University School of Medicine, Philadelphia, PA.

Identification of epigenetically silenced breast cancer driver genes. Shoghag Panjarian, Fels Institute, Temple University, Philadelphia, PA.

Epigenetic changes mediated by Ring1b are an important prerequisite for acinar-to-ductal metaplasia and pancreatic carcinogenesis. Simone Benitz, Department of Internal Medicine II, University Hospital, Ludwig-Maximilian University Munich, Munich, Bavaria, Germany.

Genome-wide methylation profiling of matched glioblastoma, patient-derived neurospheres, and xenograft models. Tathiane Malta, Henry Ford Hospital, Detroit, Michigan.

Aggressive glioma G-CIMP subtype is defined by loss of 5-hydroxymethylcytosine associated with genomic enhancers. Thais Sabedot, Henry Ford Hospital, Detroit, MI.

Combination effect of sulforaphane and epigenetic alternations reagents for metastatic melanoma treatment. Tung-chin Chiang, University of Arkansas for Medical Sciences, Little Rock, AR.

Tumor-suppressive miR-145 co-repressed by TCF4-β-catenin and PRC2 complexes forms double-negative regulation loops with its negative regulators in colorectal cancer. Wei Wang, State Key Laboratory of Cancer Biology, Department of Immunology, Fourth Military Medical University, Xi'an, Shaanxi, China.
B33  MYSM1 inhibits human colorectal cancer tumorigenesis by facilitating the expression of the miR-200 family and blocking PI3K/AKT signaling. Wei Wang, State Key Laboratory of Cancer Biology, Department of Immunology, Fourth Military Medical University, Xi’an, Shaanxi, PR China.

B34  Epigenetic characteristics of ovarian cancer stem cells. Yinu Wang, Department of Obstetrics and Gynecology, Feinberg School of Medicine, Northwestern University, Chicago, IL.

B35, PR12  Inhibition of histone methyltransferases EHMT1 and EHMT2 reduces PARP inhibitor resistance in high grade serous ovarian cancer. Zachary Watson, University of Colorado, Aurora, CO.