

The Evolving Landscape of Cancer Modeling

March 2-5, 2020 | San Diego, CA

AACR
American Association
for Cancer Research

Poster Session A

Tuesday, March 3

4:40 p.m.-7:00 p.m.

Encore/Legends 5-6

A01 Modeling the tissue-specific oncogenesis of mutant RAS. Amanda Moore. Genentech Inc., South San Francisco, CA, USA.

A02 Patient-derived xenograft models of neuroblastoma as improvement for the prediction of targeted therapies for childhood cancer. Dennis Gürgen. Experimental Pharmacology and Oncology Berlin-Buch GmbH (EPO), Berlin, Berlin, Germany.

A03 Predictors of HPV-related head and neck cancer progression identified through patient-derived models. Devraj Basu. University of Pennsylvania, Philadelphia, PA, USA.

A05 Nomograms based on the SEER database for predicting the prognosis of pulmonary large cell neuroendocrine carcinoma: A population-based STROBE cohort study. Hong-fen Wu. Jilin cancer hospital, Changchun, China.

A06 A systematic approach to create patient-derived models of rare tumors. Jesse Boehm. Broad Institute, Cambridge, MA, USA.

A07 Transcriptional Profiling Confirms Appendiceal Adenocarcinoma Is Distinct From Colorectal Cancer, In Vivo Models Needed. John Paul Shen. MD Anderson, Houston, TX, USA.

A08 Modeling melanomagenesis. Andrew White. Cornell University, Ithaca, NY, USA.

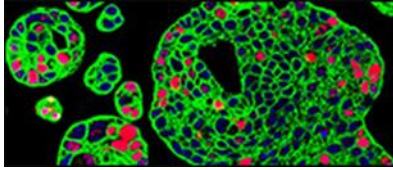
A09 Pregnancy reprograms the epigenome of mammary epithelial cells and blocks the development of premalignant mammary lesions in response to cMYC-overexpression. Camila dos Santos. Cold Spring Harbor Laboratory, Cold Spring Harbor, NY 11724, NY, USA.

A10 Androgen receptor blockade induces reprogramming to mesenchymal and stem-like prostate cancer and dependency on HER2/3 Signaling. Hyunho Han. UT MD Anderson Cancer Center, Houston, TX, USA.

A11 Urine sample-derived cerebral organoids suitable for modeling brain development and pathogenesis. Jiangnan Hu. University of North Texas Health Science Center, Fort Worth, TX, USA.

A12 L1CAM defines the regenerative origin of metastasis initiating cells in colorectal cancer. Karuna Ganesh. Memorial Sloan Kettering Cancer Center, New York, NY, USA.

A13 *ASCL1* confers tolerance to tyrosine kinase inhibitors in *EGFR* mutant lung cancer. Bomiao Hu. Department of Pathology, Yale School of Medicine, New Haven, CT, USA.



The Evolving Landscape of Cancer Modeling

March 2-5, 2020 | San Diego, CA

AACR
American Association
for Cancer Research

A14 Modeling drug combination sensitivity with Hopfield networks and transcriptomics data. Carlo Piermarocchi. Michigan State University, East Lansing, MI, USA.

A16 Patient-derived organoid-based models for endometrial cancer. Hege Berg. University of Bergen, Bergen, Norway.

A17 Polyploid giant cancer cells lead to evolution of drug resistance in high grade ovarian cancer. Jinsong Liu. The University of Texas MD Anderson Cancer Center, Houston, TX, USA.

A18 Coordinate translational control of KRAS signaling pathway in pancreatic adenocarcinoma. Kamini Singh. Memorial Sloan Kettering Cancer Center, New York, NY, USA.

A19 Modeling intra-patient pharmacotranscriptomic heterogeneity with organoids derived from colorectal cancer liver metastases. Kushtrim Kryeziu. Institute for Cancer Research, Department of Molecular Oncology, Oslo University Hospital, Oslo, Norway.

A21 Utilizing Endoscopic-Derived Gastric Cancer Organoids for Personalized Neoadjuvant Chemotherapy. Mei Gao. University of Kentucky, Lexington, KY, USA.

A22 Feasibility and efficacy of a human-derived plasma 3D culture (huP3D) model to predict clinically effective drug treatment concentrations. Pilar de la Puente. Sanford Research, Sioux Falls, SD, USA.

A23 A novel tumor microenvironment model that combines bioprinting and tissue culture to investigate cancer cell and microvascular interactions. Ariana Suarez-Martinez. University of Florida, Gainesville, FL, USA.

A24 Development of a survivable thoracic neuroblastoma mouse model for the study of the extra-adrenal tumor microenvironment. Christa Grant. Penn State College of Medicine, Hershey, PA, USA.

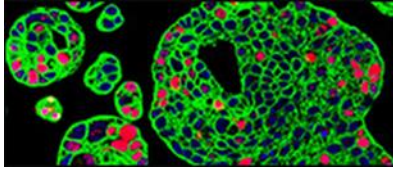
A25 Use of CRISPR knock-out screen to identify genes that regulate tumor cell sensitivity to NK cell-based immunotherapy. Davide Bernareggi. Department of Medicine, Division of Regenerative Medicine, UCSD, La Jolla, CA, USA.

A26 Modeling the ovarian cancer immune response and tumor microenvironment Duygu Ozmadenci. UCSD Moores Cancer Center, La Jolla, CA, USA.

A27 Heterotypic 3D bioprinted tissues to interrogate tumor-microenvironment crosstalk in cancer. Ellen Langer. Oregon Health and Science University, Portland, OR, USA.

A28 Systematic identification of astrocyte-tumor crosstalk regulating brain metastatic tumors. HONG ZHAO. Houston Methodist Cancer Center, Houston, TX, USA.

A29 Dissecting the mechanisms of senescence immune surveillance in liver cancer. Hsuan-An Chen. Memorial Sloan Kettering Cancer Center, New York, NY, USA.



The Evolving Landscape of Cancer Modeling

March 2-5, 2020 | San Diego, CA

AACR
American Association
for Cancer Research

A30 Development of an immunogenic and radioresistant orthotopic mouse model to recapitulate the stromal barriers of pancreatic cancer. Jayanth Surya Narayanan Shankara Narayanan. UCSD, La Jolla, CA, USA.

A31 Tumor stroma in the development of acquired cancer therapy resistance. Jesus Gomez-Escudero. Barts Cancer Institute, Queen Mary University of London, London, United Kingdom.

A32 Targeting RON-mediated metabolic vulnerabilities in recurrent/progressive breast cancer. Brian Hunt. University of Cincinnati, Cincinnati, OH, USA.

A33 Characterizing telomere and chromatin dynamics in colorectal cell transformation. Brooke Druliner. Mayo Clinic, Rochester, MN, USA.

A34 Polymerase-mediated ultramutagenesis: A new approach for modeling the high mutational load of human cancer. Hao-Dong Li. UT Southwestern, Dallas, TX, USA.

A35 From map to model: Genetic evolution of diffuse intrinsic pontine glioma provides the framework for accurate tumor modelling. Evan Lubanszky. The Hospital for Sick Children, Toronto, Ontario, Canada.

A36 Organoid models for deciphering roles of the evolving landscape of epigenetic heterogeneity during ageing in cancer development. Hariharan Easwaran. The Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins, The Johns Hopkins University School of Medicine, Baltimore, MD, USA.

A37 Somatic tissue engineering in mouse models reveals an actionable role for WNT pathway alterations in prostate cancer metastasis. Josef Leibold. MSKCC, New York, NY, USA.

A38 A critical role of Wnt5a-Axin2 axis in small cell lung cancer development. Kee-Beom Kim. University of Virginia, Charlottesville, VA, USA.

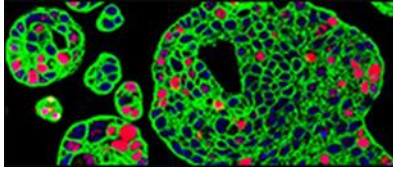
A39 A new somatic engineering-based model of small cell lung cancer development. Kwon-Sik Park. University of Virginia, Charlottesville, VA, USA.

A40 Leveraging single-cell epigenomics to uncover regulatory programs in lung adenocarcinoma. Lindsay LaFave. Massachusetts Institute of Technology, Cambridge, MA, USA.

A41 An in vivo KRAS allelic series reveals distinct phenotypes of common oncogenic variants. Maria Zafra. Weill Cornell Medicine, New York, NY, USA.

A44 Functional models of chromosome arm-level aneuploidies in cancer. Alison Taylor. Columbia University Medical Center, New York, NY, USA.

A45 Strategies to improve engineering cancer associated SNVs with base editing. Alyna Katti. Weill Cornell Medicine, New York, NY, USA.



The Evolving Landscape of Cancer Modeling

March 2-5, 2020 | San Diego, CA

AACR
American Association
for Cancer Research

A46 A novel patient-derived approach for preclinical evaluation of predictive imaging biomarkers in early lung cancer. Eva Koziolok. David Geffen School of Medicine, University of California, Los Angeles, Los Angeles, CA, USA.

A47 In silico organoids: a model for deconvolution of microenvironmental and drug effects on tumor growth. Katarzyna Rejniak. Moffitt Cancer Center, Tampa, FL, USA.

A48 Quantifying stroma-tumor cell interactions in three-dimensional cell culture systems. Marta Maria Cavo. Institute of Nanotechnology of National Research Council (CNR-NANOTEC), Lecce, Italy.

A49 Discovery and characterization of LOXHD1 as a highly specific EWS-FLI1 driven oncogene in Ewing Sarcoma. Qu Deng. University of Pennsylvania, Philadelphia, PA, USA.

A50 Matched metastatic pancreatic ductal adenocarcinoma biopsies and organoid models reveal tumor cell transcriptional plasticity and subtype-specific microenvironmental crosstalk. Peter Winter. MIT, Cambridge, MA, USA.

A51 A metabolomics discovery profiling approach identifies an E2F1-associated purine synthesis pathway as a major component of the MET-DNA damage response network. Yitzhak Zimmer. Department of Radiation Oncology, Inselspital, Bern University Hospital, Bern, Switzerland.

A52 Deciphering MET-dependent modulation of global cellular responses to DNA damage by quantitative phosphoproteomics reveals Ser1016 as a novel MET phosphosite that regulates cellular response to irradiation. Michaela Medová. Department of Radiation Oncology, Inselspital, Bern University Hospital, and University of Bern, Bern, Switzerland.