

The Evolving Landscape of Cancer Modeling

March 2-5, 2020 | San Diego, CA

AACR
American Association
for Cancer Research

Poster Session B

Wednesday, March 4

1:10 p.m-3:30 p.m.

Encore/Legends 5-6

B01 MODELING THE ULTRA-RARE CIC-DUX4 POSITIVE TUMORS TO IDENTIFY NOVEL THERAPIES. Katia Scotlandi. IRCCS Istituto Ortopedico Rizzoli, Bologna, Italy.

B02 Association of APC, BRAF, and TCF7L2 mutations with tumor mutation load and survival outcomes in patients with metastatic colorectal cancer. Liang Xu. The sixth affiliated hospital of sun yat-sen university, guangzhou, Guangdong, China.

B03 Acute Megakaryoblastic Leukemia is Associated with Poor Overall Survival and Enriched in JAK2 Variants. Marissa Li. Mayo Clinic, Rochester, MN, USA.

B04 Translating pre-clinical studies into the clinic: issues with the assays and endpoints selected to determine efficacy. Michael Horsman. Aarhus University Hospital, Aarhus, Denmark.

B05 Comprehensive functional modeling of pan-cancer risk SNP rs6983267 in human CRC cells via scarless CRISPR/Cas9 genome editing. Nicole Coggins. University of California, Davis, Davis, CA, USA.

B06 A novel patient-derived orthotopic xenograft model of esophageal adenocarcinoma provides a platform for translational discoveries. Omkara Veeranki. MD Anderson Cancer Center, Houston, TX, USA.

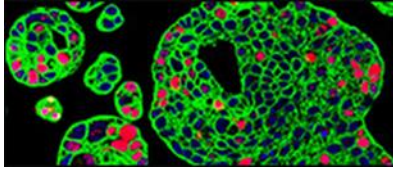
B08 High-resolution positron emission microscopy of patient-derived tumor organoids. Syamantak Khan. Department of Radiation Oncology, Division of Medical Physics, Stanford University School of Medicine, Palo Alto, CA, USA.

B09 Lineage tracing of tumour propagating cells in LUAD. Kieren Marini. UCSF, San Francisco, CA, USA.

B10 A fluorescent cancer stem cell sensor reveals dynamic induction of a stem phenotype in non-stem tumor cells on contact with macrophages in vitro and in vivo. Bingwu Tang. National Cancer Institute, Bethesda, MD, USA.

B11 Use of novel multigenic vectors to model complex genome-based colorectal cancer profiles in Drosophila. Maria Quintero. Florida State University, Tallahassee, FL, USA.

B12 Carcinogen exposure alters keratin 5 expression and K5-Cre recombination in transgenic mouse urothelium. Alan Kelleher. University of Michigan, Ann Arbor, MI, USA.



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B14 Engineering a long-term in vitro model of breast cancer tumor resistance for high-throughput predictive drug screening. Rachel Weathered. The Pritzker School of Molecular Engineering, University of Chicago, Chicago, IL, USA.

B15 Metabolic imaging of patient-derived tumor organoids provides a fast and dynamic readout of drug response. Shannon Mumenthaler. University of Southern California, Los Angeles, CA, USA.

B16 Mathematical modeling identifies optimum palbociclib dosing schedules for the treatment of estrogen receptor positive (ER+) breast cancer patients. Shayna Stein. Harvard TH Chan School of Public Health, Boston, MA, USA.

B17 Modeling genomic complexity of colorectal cancer using multi-genic Drosophila models. Sindhura Gopinath. Icahn School of Medicine at Mount Sinai, New York, NY, USA.

B18 Patient derived xenograft and organoids models of prostate cancer. Sofia Karkampouna. Department for BioMedical Research, Urology Research Laboratory, University of Bern, Bern, , Switzerland.

B19 Role of cell-cell communication in endocrine therapy-resistant breast cancer. Robert Clarke. Georgetown University, Washington, DC, USA.

B20 Patient derived organoids demonstrate synergistic effect of co-targeting Aurora kinase and pro-survival BCL2 family proteins. VIJAYA BHARTI. Vanderbilt University, Nashville, TN, USA.

B22 The zebrafish as a mechanical filter: Using zebrafish xenografts to model Ewing Sarcoma metastasis in vivo. Dagan Segal. UT Southwestern Medical Center, Dallas, TX, USA.

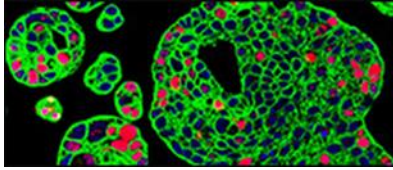
B23 Engineered Three-Dimensional Lung Tumor Mimics Maintain Tissue Heterogeneity Allowing for Investigation of Tumor-Stromal Interactions. Kayla Goliwas. University of Alabama at Birmingham, Birmingham, AL, USA.

B24 A multicellular, microfluidic model of the human bone marrow niche in metastatic cancers. Nan Sethakorn. University of Wisconsin-Madison, Madison, WI, USA.

B25 Lymph node colonization promotes distant tumor metastasis through the induction of tumor-specific immunosuppression. Nathan Reticker-Flynn. Stanford University, Stanford, CA, USA.

B26 A novel dietary Advanced Glycation End-product (AGE) model to assess impact on tumor progression. Reid Schuster. Medical University of South Carolina, Charleston, SC, USA.

B27 Modeling the impact of miR-200s on mammary tumor initiation and progression *in vitro* and *in vivo*. Roger Moorehead. University of Guelph, Guelph, ON, Canada.



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B28 Development and validation of a novel organotypic in vitro model of the tumor-lymph-immune interface for predicting immunotherapy resistance. Ruolan Zhou. The Pritzker School for Molecular Engineering, University of Chicago, Chicago, IL, USA.

B29 Modeling the oxygen-deprived breast cancer tumor microenvironment within a three-dimensional bioengineered platform that exhibits hypoxia-driven immune evasion. Somshuvra Bhattacharya. Sanford Research, Sioux Falls, SD, USA.

B30 Quantification of dynamical steps of recognition and killing of tumor cells by natural killer cells. Vladimir Kuznetsov. Upstate Medical University, Syracuse, NY, USA.

B31 A pre-processing filter to improve superparamagnetic relaxometry (SPMR)-based early tumor detection. Mehdi Baqri. Yale University, New Haven, CT, USA.

B32 The BRG1/SOX9 axis is critical for acinar cell-derived pancreatic tumorigenesis. Motoyuki Tsuda. Kyoto University, Kyoto, Japan.

B33 Impact of genetic diversity on the growth of human derived xenografts. Muneer Hasham. The Jackson Laboratory, Bar Harbor, ME, USA.

B34 Defining an Orthotopic, Syngeneic Metastatic Melanoma Model for Characterizing the Immunotherapeutic Activity of the Prostamide, 15dPMJ2. Rukiyah Van Dross. Brody School of Medicine at East Carolina University, Greenville, NC, USA.

B36 Tracking the path of breast tumorigenesis in BRCA1 mutant breast cancer. Shailja Pathania. Center for Personalized Cancer Therapy, University of Massachusetts, Boston, MA, USA.

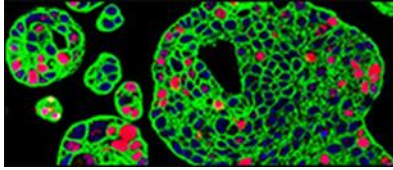
B37 Understanding DCIS initiation and progression using PDX and genetically engineered mouse and rat models. Stefan Hutten. Netherlands Cancer Institute, Amsterdam, The Netherlands.

B38 Impact of non-genetic intra-tumor heterogeneity on phenotypic characteristics and ongoing evolutionary dynamics in lung tumors. Subhajyoti De. Rutgers University, New Brunswick, NJ, USA.

B39 Establishment of the novel murine anaplastic thyroid cancer cell line for xenograft tumor model using C57BL/6 mouse. Sun Wook Cho. Seoul National University Hospital, Seoul, South Korea.

B40 Minimal mutational determinants of human squamous cell carcinoma. Vicente Planells-Palop. University of California, San Francisco (UCSF), San Francisco, CA, US.

B41 Modeling marginal zone lymphomagenesis. Victor Yazbeck. Virginia Commonwealth University, Richmond, VA, USA.



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B42 A new mouse model of serrated colorectal cancer with mesenchymal activation and immunosuppressive phenotypes. Yuki Nakanishi. Kyoto University Graduate School of Medicine, Kyoto, Japan.

B43 A hierarchical model of DNA repair inferred from omics-scale genetic interaction data reveals the dynamics of DNA damage induction. Anton Kratz. University of California San Diego, San Diego, CA, USA.

B44 Modeling plasticity of metastasis in vivo using patient-derived xenografts. Elena Piskounova. Weill Cornell Medicine, New York, NY, USA.

B45 A versatile ES cell-based melanoma mouse modeling platform. Florian Karreth. H. Lee Moffitt Cancer Center and Research Institute, Tampa, FL, USA.

B46 MADR: rapid generation of somatic mosaics with locus-specific, stably-integrated transgenic elements for generation of "personalized" mouse models and human organoid tumor models. Joshua Breunig. Cedars-Sinai and UCLA, Los Angeles, CA, USA.

B47 Mutation of K104 abrogates the oncogenic properties of K-Ras^{G12D}. Moon Hee Yang. Beth Israel Deaconess Medical Center, Boston, MA, USA.

B48 STAT3 pathway in fibroblasts aggravates invasiveness of lung cancer cells in the tumor microenvironment. Ju-Hee Kang. College of Pharmacy, Gachon University, Incheon, South Korea.

B49 Predictive modeling, applied to genetically engineered mouse models of breast or lung cancer, provides insights into major oncogenic pathways. Bodo Lange. Alacris Theranostics GmbH, Berlin, Germany.

B50 HnRNP A3 regulates the nuclear EGFR localization and cancer progression. Chi-Yuan Chen. Chang Gung University of Science and Technology, Taoyuan, Taiwan.

B51 Mechanism-based computational models to study interplay between EGFR inhibitors and KRAS mutants. Edward Stites. Salk Institute for Biological Studies, La Jolla, CA, USA.

B52 A multi-scale map of recurrently mutated systems in cancer. Fan Zheng. University of California, San Diego, La Jolla, CA, USA.