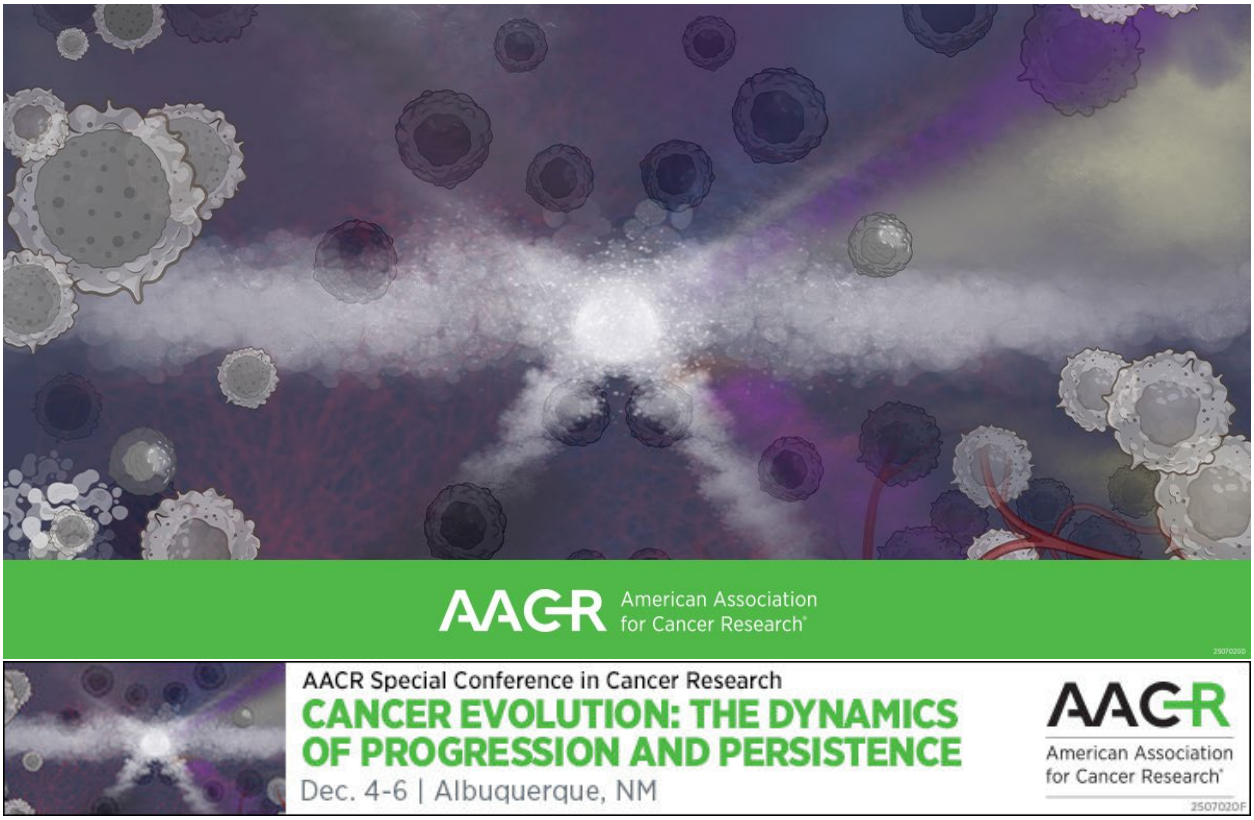

POSTER LISTING*

PROFFERED ABSTRACTS

POSTER SESSION A

POSTER SESSION B

**As of November 5, 2025*

Proffered Abstracts

PR002, A008 Longitudinal study of bone marrow adipocytes throughout tungsten-enhanced breast cancer metastasis. Charlotte M. McVeigh, University of New Mexico, Albuquerque, New Mexico.

PR003, A013 NADPH-producing enzymes restrict precancer progression in the pancreas. Megan Radyk, University of Michigan, Ann Arbor, Michigan.

PR004, B021 Multi-omic spatial analysis reveals reshaping of tumour-immune dynamics at the transition to invasive colorectal cancer. Ann-Marie Baker, Institute of Cancer Research, London, United Kingdom.

PR005, A026 Mathematical biomarkers enable personalized adaptive therapy based on outcome prediction in prostate cancer. Kit Gallagher, University of Oxford, Oxford, United Kingdom.

AACR Special Conference in Cancer Research
CANCER EVOLUTION: THE DYNAMICS OF PROGRESSION AND PERSISTENCE
Dec. 4-6 | Albuquerque, NM

AACR American Association for Cancer Research

Poster Session A

Thursday, December 4

7:00-8:30 p.m.

A001 Pre-existing non-genetic cellular states determine susceptibility to oncogenic transformation. Grant Kinsler, University of Pennsylvania, Philadelphia, Pennsylvania.

A002 In situ KRAS-mapping and spatial-omics characterization in lung premalignancy. Amanda Lindberg, Uppsala University, Uppsala, Sweden.

A003 APOBEC3A drives chromosomal instability and tumor evolution in pancreatic cancer. Zhihui Zhang, MD Anderson Cancer Center, Houston, Texas.

A005 Meta-analysis of evolutionary drivers of treatment resistance in solid tumors: Insights from phylogenetic and single-cell sequencing studies. Noureddine Samai, Oran University 1, Oran, Algeria.

A006 Transcription factors ASCL1 and OLIG2 drive glioblastoma initiation but inversely regulate tumor cell types and migration. Tou Yia Vue, University of New Mexico Health Sciences Center, Albuquerque, New Mexico.

A007 Characterization of the recurrent and parallel evolution of non-small cell lung cancer metastases to the brain. Nic Fisk, Univeristy of Rhode Island, North Kingston, Rhode Island.

A009 Defining and targeting L1CAM-driven metastasis progenitor cells in lung adenocarcinoma. Jin Suk Park, Memorial Sloan Kettering Cancer Center, New York, New York.

A010 A cell culture model of quiescent melanoma cell state that governs cancer evolution, therapy resistance, and recurrence/metastasis. Balraj Singh, MD Anderson Cancer Center, Houston, Texas.

A011 Ethnic variation in GSTM1-null polymorphism and its association with cancer risk in the Brazilian population. Ilce Ferreira da Silva, Department of Epidemiology and Quantitative Methods in Health, National School of Public Health, Oswaldo Cruz Foundation (FIOCRUZ), Rio de Janeiro, Brazil.

A012 Extracellular glucose level regulates cell mechanics and invasion of triple-negative breast cancer cells. Tae-Hyung Kim, University of New Mexico Health Sciences Center, Albuquerque, New Mexico.

A014 Repurposing aprocitentan, an anti-hypertensive drug, as a potential anticancer agent: Targeting endothelin receptors in pancreatic and breast cancer models. Rahaf Adnan Al-Zeer, Gulf Medical University, Ajman, United Arab Emirates.

A015 Tumor landscape analysis: An ecologically informed framework to understand tumor microenvironments. Ryan M. Carr, Mayo Clinic, Rochester, Minnesota.

A016 Microenvironmental drivers of DCIS recurrence and progression to breast cancer. Luis H. Cisneros, Mayo Clinic, Rochester, Minnesota.

A017 Influenza virus-induced expansion of dormant metastatic breast cancer in the lung alters tumor collagen program. Bailey S. Kane, Department of Biochemistry and Molecular Genetics, University of Colorado School of Medicine, Aurora, Colorado.

A018 Investigating the role of cancer-associated fibroblasts in colorectal cancer peritoneal metastasis. Qihao Ren, Genentech, South San Francisco, California.

A019 Rewiring the tumor microenvironment: Uncovering lineage drivers of immunosuppressive tumor-associated macrophages in prostate cancer bone metastasis. Azimullah Rifai, University of Maryland Greenebaum Comprehensive Cancer Center, Baltimore, Maryland.

A020 Decoding the solar elastosis microenvironment in melanoma with an interpretable multimodal fusion framework. Kushal Virupakshappa, UNM Comprehensive Cancer Center, Albuquerque, New Mexico.

A021 Leveraging histopathology and clinical information to map the tumor microenvironment for interpretable lung cancer diagnosis. Kushal Virupakshappa, UNM Comprehensive Cancer Center, Albuquerque, New Mexico.

A023 SomAtt: A foundation model for the tumor genome. David Arredondo, University of New Mexico, Albuquerque, New Mexico.

A024 DeepVul: A multi-task transformer model for joint prediction of gene essentiality and drug response. My Bach Nguyen, University of New Mexico, Albuquerque, New Mexico.

A025 Noncanonical antigen T cell responses as a tool to measure DMG immune-driven evolution. C. Russell Y. Cruz, Children's National Hospital, Washington, District of Columbia.

A027 Unfinished stories: Consequences of melanoma clinical trial discontinuation and non-publication. Hadeer Hafez, Faculty of Medicine, October 6th University, Giza, Egypt, October 6th, Egypt.

A028 The evolution of antibody-dye-conjugates: From Ehrlich to immuno-engineering. Sdanish Kadir, University of Texas Rio Grande Valley, Edinburg, Texas.

A029 Gen-Z AI health access: A decentralized, ethical artificial intelligence platform for global cancer care in remote communities. Sdanish Kadir, University of Texas Rio Grande Valley, Edinburg, Texas.

A030 Mutation2Text: A unified protein and text language model for explaining mutation effects. Oladimeji Macaulay, University of New Mexico, Albuquerque, New Mexico.

A031 Multi-omics profiling reveals cancer-relevant gut–liver axis alterations during MASL to MASH transition. Jaclyn A. Rivas, University of New Mexico, El Paso, Texas.

A032 Explainable AI with multi-agent collaborative system for colonoscopic polyp detection and Kudo pit classification. Sowmya Sankaran, Albuquerque Academy, Albuquerque, New Mexico.

A033 PRELUDE: A graph neural network for drug response prediction. Luis E. Tafoya, UNM Comprehensive Cancer Center, Albuquerque, New Mexico.

A034 Clinical characteristics and outcomes of primary cardiac leiomyosarcoma cases from 2015-2025: A literature review. Taylor C.S. Bailey, Charles R. Drew University College of Medicine, Los Angeles, California.

A036 Decellularized extracellular matrix hydrogel for esophageal cancer model. Yunqing Kang, Florida Atlantic University, Boca Raton, Florida.

A037 Evolutionary cancer epidemiology. Carlo Maley, Arizona State University, Tempe, Arizona.

Poster Session B

Friday, December 5

7:15-8:45 p.m.

B002 Transmissible cancer in bivalves: Mutation and selection in cancer lineages and host genomes through hundreds of years of evolution. Michael J. Metzger, Pacific Northwest Research Institute, Seattle, Washington.

B003 Widespread methylation convergence in clonally distinct foci of multifocal prostate cancer. Tamsin J. Robb, University of Cambridge, Cambridge, United Kingdom.

B004 Mapping loss of heterozygosity in Li-Fraumeni syndrome to uncover early molecular drivers of tumorigenesis. Hailey M. Stack, The Hospital for Sick Children, Toronto, Ontario, Canada.

B005 Goliath clades and in vivo tracking of clonal dynamics show three phases of UV-induced skin carcinogenesis. Kenneth Y. Tsai, H. Lee Moffitt Cancer Center & Research Institute, Tampa, Florida.

B007 Physiological concentrations of cortisol induce changes to intercellular heterogeneity in both cancerous and normal cells. Kimberly J. Bussey, Midwestern University, Glendale, Arizona.

B008 Mapping clonal architecture and evolution in pediatric brain cancers. Minh A. Nguyen, University of Pennsylvania, Philadelphia, Pennsylvania.

B010 Determining the cancer cell sensitivity to IPMK-ATP competitive inhibitors. Jasmyn K. Brown, Fisk University; Vanderbilt University, Nashville, Tennessee.

B011 Modeling HER2 heterogeneous breast cancer uncovers therapeutic vulnerabilities and subclonal evolution driving resistance to HER2-targeted therapies. Marie-Anne Goyette, Dana-Farber Cancer Institute, Boston, Massachusetts.

B012 A review of experimental evidence for cost of therapeutic resistance in cancer. Bailey Kane, Biodesign Center for Biocomputing, Security, and Society, Arizona State University, Tempe, Arizona.

B013 Chromosomal rearrangements at the YAP/TAZ pathway genes are associated with heterogeneity and stem cell-like castration-resistant prostate cancer. Alexander Martinez-Fundichely, Weill Cornell Medicine, New York, New York.

B014 Transcription factors governing the evolution of drug-tolerant persisters in KRAS-mutant non-small cell lung cancer. Chendi Li, Massachusetts General Hospital Cancer Center/Harvard Medical School, Charlestown, Massachusetts.

B016 Clonal evolution and structural variation drive chemotherapy resistance in ovarian carcinoma. Giulia Micoli, University of Helsinki, Helsinki, Finland.

B017 The evolution of doxorubicin resistance in SMARCB1-deficient cancers. Katie T. Skinner, Emory University, Atlanta, Georgia.

B018 Decoding the evolutionary landscape of soft tissue sarcomas: From multiregion origins to therapy-driven adaptation. Shaghayegh Soudi, Stanford Medicine, Stanford, California.

B019 SOX2 induction and ΔNp63-high subpopulations mark adaptive responses to EGFR inhibition in lung adenocarcinoma. Sharan Srinivasan, Fred Hutch Cancer Center, Seattle, Washington.

B020 Identification of VASP as a glucose-sensitive YAP-TEAD target gene in a human triple-negative breast cancer cell line. Wonkyung Lee, Yeungnam University, College of Medicine; Department of Pathology, School of Medicine, University of New Mexico Health Sciences Center, Albuquerque, New Mexico.

B022 Genetic evolution of immune escape across cancers. Wenjie Chen, MD Anderson Cancer Center, Houston, Texas.

B023 Temporally resolved proteomics identifies nidogen-2 as a co-target in pancreatic cancer that modulates fibrosis and therapy response. Brooke Pereira, Garvan Institute of Medical Research, Sydney, New South Wales, Australia.

B024 Contributions of tumor associated macrophage-mediated efferocytosis to breast cancer progression. Kathryn Schwertfeger, University of Minnesota, Minneapolis, Minnesota.

B025 Metabolic rewiring and cellular crosstalk may drive grade transformation in pancreatic neuroendocrine tumors. Himanshu N. Singh, Memorial Sloan Kettering Cancer Center, New York, New York.

B026 Modeling karyotype-driven adaptations to metabolic restrictions predicts therapeutic response and immunogenicity in cancer. Vural Tagal, Moffitt Cancer Center, Tampa, Florida.

B027 Ecological landscape analysis of the tumor microenvironment predicts recurrence risk in pancreatic ductal adenocarcinoma. Merih D. Toruner, Brown University, Warren Alpert Medical School, Providence, Rhode Island.

B028 Unravelling the molecular structural and functional roles of the homologous mouse double minute RINGs interface for targeted anticancer design. Adeniyi Thompson Adewumi, University of South Africa, Johannesburg, South Africa.

B029 Quantifying the translational relevance of naturally occurring dog cancers as models of adult and pediatric tumors. Geesa Daluwatumulle, University of Florida, Gainesville, Florida.

B030 Decoding cancer evolution: Computational models for tumor dynamics and precision oncology. Peter Oloche David, Eloi Holding, Inc., Abuja, Nigeria.

B031 Advanced therapeutic analysis of undruggable oncoprotein KRAS; 3D structural and functional significance by I-TASSER. Sdanish Kadir, University of Texas Rio Grande Valley, Edinburg, Texas.

B032 Integrated genomic analysis defines early and late drivers of glioma evolution and survival outcome in GBM. Harpreet Kaur, National Cancer Institute, National Institutes of Health, Bethesda, Maryland.

B033 Single-nuclei profiling of LFS development reveals tumour susceptibility. Ashby Kissoondoyal, The Hospital for Sick Children, Toronto, Ontario, Canada.

B034 PHYFUM: Reconstructing the evolutionary dynamics of human tissues using fluctuating methylation clocks. Diego Mallo, Arizona State University, Tempe, Arizona.

B035 Cell state transitions drive the evolution of disease progression in B-lymphoblastic leukemia. Sadegh Marzban, Moffitt Cancer Center, Tampa, Florida.

B036 Molecular drivers of biochemical recurrence post radical prostatectomy among men with prostate cancer. Zumar Meher, University of Maryland School of Medicine, Baltimore, Maryland.

B037 Capturing dose-response adaptation to identify evolutionarily-informed treatment strategies. Franco Pradelli, Moffitt Cancer Center, Tampa, Florida.

B038 Spatial-Tx: Multi-modal computational framework for predicting spatial drug response from tumor tissues. Kayode Raheem, University of Nebraska Medical Center, Omaha, Nebraska.

B039 Variation in selection intensity and mutation rates during tumor evolution across cancer types. Moein Rajaei, Yale University, New Haven, Connecticut.

B040 The Paipu framework enables large-scale comparative cancer genomics studies. Bria S. Smith, University of Florida, Gainesville, Florida.

B041 Inferring subclonal fitness landscapes from single-cell tumor phylogenies. Ruping Sun, Department of Laboratory Medicine and Pathology, University of Minnesota, Minneapolis, Minnesota.

B042 What single-tumor sequencing reveals about immune recognition and killing via neoantigen depletion curves. Heng Wu, Applied Mathematics Graduate Interdisciplinary Degree Program, University of Arizona, Tucson, Arizona.