AACR Special Conference in Cancer Research
BRAIN CANCER
March 23-25, 2026 | Philadelphia, PA

AACR American Association for Cancer Research

# PROFFERED ABSTRACTS

PR001 A036 **GPNMB CAR-T cells target both glioblastoma and its immunosuppressive tumor microenvironment,** Sheila K Singh, McMaster University, Hamilton, ON, Canada

PR002 B048 **Investigating the effect of dopamine signaling on glioblastoma development,** Yaxu-Sofia Wang, The Hospital for Sick Children, Toronto, ON, Canada

PR003 A028 **Microglia derived extracellular vesicles in the crosstalk between glioblastoma and the periphery,** Irene Bertolini, The Wistar Institute, Philadelphia, PA, United States

PR004 B037 **Interactome-seq: A novel technology for mapping neuron-cancer synapses at single-cell resolution,** Boxuan Zhao, University of Illinois Urbana Champaign, Urbana, IL, United States

PR005 A030 **Closed-Loop Sonothermogenetic Control of CAR T Cells for Precision Immunotherapy of Brain Tumors,** Costas Arvanitis, Georgia Institute of Technology, Atlanta, GA, United States

PR006 A062 **Mechanisms of Cognitive Impairment in Children Treated for Brain Tumors,** Noor Al Dahhan, The Hospital for Sick Children, Toronto, ON, Canada

PR007 B063 **Estrogen induces a pro-tumoral phenotype shift in microglia that contributes to E2-unresponsive breast cancer brain metastasis,** Karen L.F. Alvarez-Eraso, University of Colorado AMC, Aurora, CO, United States

PR008 B054 **Precancer-Associated Microglia Restrain Glioblastoma Evolution Through Phagocytic Clearance,** Keon Woo Kim, Korea Advanced Institute of Science and Technology, Daejeon, , Korea, Rep.

PR009 A067 **Telomere length heterogeneity shapes structural and amplification landscapes in IDH-mutant astrocytoma,** Maryam Jehangir, Translational Genomics Research Institute (TGen), Phoenix, AZ, United States

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## POSTER SESSION A
## Monday, March 23, 2026

A001 **A new role for IL-8 as a driver of blood-derived macrophage reprogramming and immune suppression in human glioblastoma tumors**, Stephanie Medina, Vanderbilt University, Nashvile, TN, United States

A002 **CCR5 inhibition with the human monoclonal antibody leronlimab enhances temozolomide- and radiation-induced killing of glioblastoma multiforme cells**, Ritika Harish, Baruch S. Blumberg Institute, Doylestown, PA, United States

A003 **Chronic cGAS–STING activation reprograms glioblastoma-associated macrophages toward immunosuppression in hypoxic tumor niches**, Sebastian Ouyang, Duke University, Durham, NC, United States

A004 **Defining the role of the gut microbiota on high-grade glioma initiation and progression**, Margaret Mary P Javier, University of Toronto, Toronto, ON, Canada

A005 **Differential Immune Suppression in PCNSL and GBM Reveals Checkpoint Dependencies Underlying CNS Therapy Response**, Nella Martyna Tuczko, University of Queensland, Brisbane, , Australia

A006 **Direct immunosuppressive effect of the matricellular protein fibulin-3 on tumor-associated macrophages in glioblastoma**, Soham Mitra, SUNY Upstate Medical University, Syracuse, NY, United States

A007 **Elucidating SEMA4D-YAP signaling in BBB transmigration of HER2+ Breast Cancer**, Anu D Sunkara, University of Maryland Baltimore, Baltimore, MD, United States

A008 **Engineered MHC-I Model as a Novel Platform to Decode the Glioma Immunopeptidome**, Antonio C Fuentes-Fayos, Board of Governors Regenerative Medicine Institute; Cedars-Sinai Medical Center, Los Angeles, CA, United States

A009 **Engineering a novel suite of somatic transgenic murine Egfr-mutant glioblastoma models that recapitulate molecular, immunologic, and functional features of human glioblastoma**, Joshua J Breunig, Cedars-Sinai Medical Center, Los Angeles, CA, United States

A010 **Epigenetic priming restores tumor-intrinsic cGAS–STING competence in glioblastoma and enables immunogenic DNA damage responses**, Sebastian Ouyang, Duke University, Durham, NC, United States

A011 **Genome-wide CRISPR screening identifies novel regulators of macrophage phagocytosis against glioblastoma**, Shan Grewal, McMaster University, Hamilton, ON, Canada

A012 **IDO1 PROTAC improves survival against human glioblastoma**, Taylor Koch, Loyola University Chicago, Chicago, IL, United States



A014 **Low -neurovirulence wild-type Zika virus strains induce durable tumor regression and survival benefit in patient-derived glioblastoma models**, Parvez Akhtar, Aurora Clinical Lab, Rosemont, IL, United States

A015 **Mechano-Epigenetic Reprogramming of Myeloid Cells Suppresses Glioblastoma Invasion and Restores Phagocytic Function**, Golnaz Asaadi Tehrani, University of Notre Dame, South Bend, IN, United States

A016 **Myeloid Hv1-STING axis tunes glioma immunity**, Jiaying Zheng, University of Texas Health Science Center at Houston, Houston, TX, United States

A017 **Non-canonical CD47 enhances cardiolipin biosynthesis and remodeling in Temozolomide-resistant establishment and reduces microglia-mediated cytotoxicity in glioblastoma progression**, Yu-Ting Tsai, Wake Forest University School of Medicine, Winston-Salem, NC, United States

A018 **Sitagliptin potentiates glioblastoma tumor cell killing by EGFRvIII-targeting CAR T cells**, Laura O'Sullivan, Department of Neurosurgery, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, United States

A019 **Targeting glioblastoma using an antibody-enzyme fusion protein with a multi-pronged mechanism of action**, Camille H Cushman, Viska Bio, Cambridge, MA, United States

A020 **TGFβRII/Switch Receptor Armoring Redirects TGFβ Signaling to Enhance EGFR CAR T Therapy in Glioblastoma**, Jungmin Park, University of Pennsylvania, Philadelphia, PA, United States

A021 **The impact of Tumor Treating Fields (TTFields) on the transcriptome and the secretome of cancer stem-like cells isolated from the sub-ventricular zone of glioblastoma patients**, Antonia E. Sajche Sapon, The Brain Tumor Translational Laboratory, Department of Cell Biology and Physiology, University of New Mexico Health Sciences Center, Albuquerque, NM, United States

A022 **Therapeutic exploitability of the m<sup>6</sup>a methylation-cholesterol axis to target central nervous system-residing leukemic blasts**, Freya De Muyer, Ghent University (UGhent) - Cancer Research Institute Ghent (CRIG) - Center for Medical Genetics Ghent (CMGG), Gent, , Belgium

A023 **Tumor-associated microglia mirror neurodevelopment**, Joseph S Toker, Cancer Research UK Cambridge Institute, Cambridge, , United Kingdom

A024 **CAR T cells locally delivered in porcine decellularized matrix hydrogels enhance survival in post-resection glioblastoma**, Meghan Logun, University of Pennsylvania, Philadelphia, PA, United States

A025 **Design and synthesis of a novel DNA alkylating agent as a potential treatment for glioblastoma**, Ramsha Iftikhar, University of New South Wales Sydney, Sydney, , Australia

A026 **Discovery and development of a transferrin receptor antibody panel for efficient blood-brain barrier delivery as part of a multispecific antibody**, Bradley M Lunde, Adimab LLC, Lebanon, NH, United States

A027 **Harnessing facial neuronal-lymphatic pathways for face-to-brain delivery of bimodal cGAS-STAT3 Spherical Nucleic Acids for anti-glioma therapy**, Akanksha S Mahajan, Washington University at Saint Louis, Saint Louis, MO, United States

A028 **Microglia derived extracellular vesicles in the crosstalk between glioblastoma and the periphery**, Irene Bertolini, The Wistar Institute, Philadelphia, PA, United States

A029 **Supramolecular Sequestration of Actinium-225 via Cyclodextrin Nanopolymers: A Novel Strategy for Targeted Alpha Therapy in Glioblastoma Multiforme**, Punna Suryadevara, Ayudarea, Frisco, TX, United States

A030 **Closed-Loop Sonothermogenetic Control of CAR T Cells for Precision Immunotherapy of Brain Tumors**, Costas Arvanitis, Georgia Institute of Technology, Atlanta, GA, United States

A031 **Early Immune Activation and Repair Cytokine Signatures Associate with Survival in Herpes-Based Oncolytic Virotherapy in Recurrent Glioma**, Mohammad Hamo, UAB Heersink School of Medicine, Birmingham, AL, United States

A032 **Efficacy of nuclear envelope protein targeting CAR T cell therapy for MYC driven group 3 medulloblastoma**, Yujin Suk, McMaster University, Hamilton, ON, Canada

A033 **Ex vivo Cbl-b silenced, autologous TIL therapy in glioblastoma demonstrates proof-of-concept efficacy and translational potential**, Prafulla C Gokhale, Dana-Farber Cancer Institute, Boston, MA, United States

A034 **Functional genomics screen reveals SFPQ as a regulator of cell state in IDH-mutant glioma**, Ebru Yilmaz, Koc University, Istanbul, , Türkiye

A035 **Functional genomics screen reveals SFPQ as a regulator of cell state in IDH-mutant glioma**, Ebru Yilmaz, Koc University, Istanbul, , Türkiye

A036 **GPNMB CAR-T cells target both glioblastoma and its immunosuppressive tumor microenvironment**, Sheila K Singh, McMaster University, Hamilton, ON, Canada

A037 **Histone deacetylase inhibitors as emerging therapeutic strategies for glioblastoma and other brain tumors**, Laila T A Metwaly, None, New York City, NY, United States

A038 **Modified RVG Functionalized Liposome Gold Nanoparticles for specific microRNA delivery Against Glioblastoma.**, Diego E Garcia Ortiz, University of Puerto Rico Medical Sciences Campus, San Juan, , Puerto Rico

A039 **Novel microRNA-mediated G2/M vulnerabilities in glioblastoma revealed by a CRISPR/Cas9 screen**, Iulia A. Grigore, University of Toronto, Toronto, ON, Canada



A040 **Reactive oligodendrocytes promote glioblastoma progression through CCL5/CCR5-mediated glioma stem cell maintenance**, Jason Moffat, Hospital for Sick Children & University of Toronto, Toronto, ON, Canada

A041 **The immunotherapeutic targeting of glioblastoma at the minimal residual disease state**, Mohamed Taleb, McMaster University, Hamilton, ON, Canada

A042 **Formulation of FLAG-003 Tablets to support Phase I/II Clinical Testing in Children with DIPG**, Frank L Sorgi, FLAG Therapeutics Inc, Raleigh, NC, United States

A043 **Genomically-tailored multi-agent precision medicine clinical trial for adults with recurrent glioblastoma**, David A Solomon, Stanford University, Stanford, CA, United States

A044 **Novel insights from and feasibility of functional precision medicine for brain cancer patients through the Cancer Avatar Program at the CPMC Research Institute**, Anne Marie Barrette, CPMC Research Institute, San Francisco, CA, United States

A045 **The 5G (Next Generation AGile Genomically Guided Glioma) Platform Trial – A First-in-world Adaptive Clinical Trial for Precision Treatment of Brain Tumours**, Juanita Lopez, Institute of Cancer Research, London, , United Kingdom

A046 **The UK Brain Board - Developing an integrated platform for Whole Genome Sequencing analysis that enables rapid molecular stratification into clinical trials.**, Richard Mair, University of Cambridge, Cambridge, , United Kingdom

A047 **A conserved enhancer locus in ecDNA and HSRs activates MYC transcription in Group 3 Medulloblastoma**, Jake D Friske, St. Jude Children's Research Hospital, Memphis, TN, United States

A048 **A modified method to improve the accuracy of detecting glioma-related gene abnormalities for pediatric gliomas by liquid biopsy**, Masayoshi Fukuoka, Saitama Medical University International Medical Center, Hidaka-shi, , Japan

A049 **Age-Associated Transcriptomic Alterations in Glioblastoma Following Temozolomide Treatment**, Qian Wang, iLab Research Institute, Mountain View, CA, United States

A050 **Diagnostic accuracy of artificial intelligence powered by machine learning in differentiating WHO grade I and II meningiomas**, Marwan A. Almalki, King Saud University, Riyadh, , Saudi Arabia

A051 **Early cerebrospinal fluid (CSF) circulating tumor DNA (ctDNA) dynamics following intracerebroventricular CAR T cell therapy predict response to treatment of recurrent glioblastoma (rGBM)**, Erica L Carpenter, University of Pennsylvania, Philadelphia, PA, United States

A052 **Efficient recovery of cell-free DNA from synthetic cerebrospinal fluid enables sensitive molecular profiling in brain cancer**, Nafiseh Jafari, nRichDX, Irvine, CA, United States



A053 **Estrogen-related receptor beta2 as a regulator of the glioblastoma cytoskeleton and macrophage polarization**, Angela Appiah-Kubi, Georgetown University, Washington, DC, United States

A054 **Functional precision oncology in recurrent ependymoma: Multiplexed functional profiling reveals unexpected cytotoxic and anti-proliferative drug activity**, Rajeshwar Nitiyanandan, SageMedic Corp, Redwood City, CA, United States

A055 **Glioblastoma liquid biopsy: Maximizing insights from DNA traces in cerebrospinal fluid and blood plasma**, Carla Boccaccio, Candiolo Cancer Institute, FPO-IRCCS, Candiolo, , Italy

A056 **Growth rates of patient-derived tumor organoids reflect heterogeneity in tumor plasticity among glioblastoma patients.**, Guillermo Gomez, Centre for Cancer Biology, Adelaide, SA, Australia

A057 **High-grade astrocytoma with piloid features: a clinical and genomic analysis of prognostic factors using a large cohort**, Shuodan Zhang, National Cancer Institute, Bethesda, MD, United States

A058 **Integrating DNA-RNA sequencing analysis to identify low-variant allele frequency fusions in glioblastoma**, Shray Parimoo, Weill Cornell Medical College, New York, NY, United States

A059 **Integrative MR elastography and multi-omics identify conserved biomechanical states in adult diffuse gliomas**, Maksym Zarodniuk, University of Notre Dame, Notre Dame, IN, United States

A060 **Lactotransferrin drives glioblastoma progression via apoptosis suppression in an iron-independent manner**, Swapnil Dey, Cleveland Clinic, Cleveland, OH, United States

A061 **Longitudinal multimodal profiling of IDH-wildtype glioblastoma reveals the molecular evolution and cellular phenotypes underlying prognostically different treatment responses**, David A Solomon, Stanford University, Stanford, CA, United States

A062 **Mechanisms of Cognitive Impairment in Children Treated for Brain Tumors**, Noor Al Dahhan, The Hospital for Sick Children, Toronto, ON, Canada

A063 **Molecular features unique to circulating tumor DNA enable the tumor-naïve liquid biopsy of glioblastoma**, Hunter R Underhill, University of Utah, Salt Lake City, UT, United States

A064 **Non-canonical Glioblastoma: Discovery of a prevalent TP53/PTEN co-altered subtype utilizing project GENIE**, Ayah S Alsmadi, Jordan University of Science & Technology, Irbid, , Jordan

A065 **Pooled Analysis of 7 Multicenter Prospective Studies (n=212) Using an Integrated Multi-Compartment Biomarker Ecosystem to Differentiate True Progression from Treatment Effect in High-Grade Glioma**, Mohamed Tharwat Kamouna, Merit university in Egypt, Sohag, , Egypt

A066 **Scalable visualization of perineuronal nets in the brain tumor microenvironment using generative deep learning**, Vishva Natarajan, Geisel School of Medicine at Dartmouth, Hanover, NH, United States

A067 **Telomere length heterogeneity shapes structural and amplification landscapes in IDH-mutant astrocytoma**, Maryam Jehangir, Translational Genomics Research Institute (TGen), Phoenix, AZ, United States

## POSTER SESSION B
## Tuesday, March 24, 2026

B001 **The BAIAP2 pathway regulates proliferation and migration in medulloblastoma**, Luz C Levanda-Sousa, Georgetown University, Washington, DC, United States

B002 **The dual nature of glioblastoma cell motility: Migratory efficiency as a prognostic determinant**, Chiara Maria Mazzanti, Fondazione Pisana per la Scienza, San Giuliano Terme, Pisa, , Italy

B003 **Beyond conventional pathology: Adding an extra layer of insight with NADH-FLIM to reveal hidden metabolic profiles in glioblastoma**, Mariangela Morelli, Fondazione Pisana per la Scienza, San Giuliano Terme, Pisa, , Italy

B004 **Whole genome nanopore DNA methylation sequencing for rapid molecular classification of CNS tumors**, Allison A Murray, The University of North Carolina at Chapel Hill, Chapel Hill, NC, United States

B005 **Accelerating epigenetic vulnerability mapping for drug-repurposing and combination design in glioblastoma**, James G Nicholson, Queen Mary University London, London, , United Kingdom

B006 **Adhesion plasticity and bidirectional paracrine signaling cooperatively drive glioblastoma invasion**, Abhinaba Banerjee, University of California San Diego, La Jolla, CA, United States

B007 **Allosteric ClpP agonist ONC206 alters mitochondrial metabolism and stress response to elicit apoptosis in meningioma**, Varun V Prabhu, Chimerix (a Jazz Pharmaceuticals company), Durham, NC, United States

B008 **An epigenetic dependency on BRD8 in TP53-wild-type glioblastoma**, Xueqin Sherine Sun, Sanford Burnham Prebys Medical Discovery Institute, San Diego, CA, United States

B009 **Transcriptomic prediction for evaluating Zika virus susceptibility in glioblastoma using feature selection and machine learning approaches**, Anna Lundeen, Loyola University, Chicago, IL, United States



B010 **Common translational challenges in brain tumour therapeutic development identified through a multidisciplinary accelerator programme**, Eloise Lines, Tessa Jowell Brain Cancer Mission, London, , United Kingdom

B011 **Compression induces nuclear morphological irregularities in human astrocytes**, Julian Najera, University of Notre Dame, Notre Dame, IN, United States

B012 **Defining the developmental origins and therapeutic vulnerabilities of pediatric high-grade glioma**, Anna Tymofyeyeva, The Hospital for Sick Children, Toronto, ON, Canada

B013 **Development of a human astrocyte NF-κB reporter for real-time inflammatory signaling in 3D microfluidic platforms**, Helena Borges, Promega Corporation, Madison, WI, United States

B014 **Divergent treatment responses in genetically distinct EGFR-mutant models of glioblastoma**, Katie B Grausam, Cedars Sinai Medical Center, Los Angeles, CA, United States

B015 **Enhancing the Therapeutic Efficacy in Triple Negative Breast Cancer by using Albumin coated Cadmium Oxide Nanoparticles**, Relebohile Patricia Lefojane, Central University of Technology, Bloemfontein, , South Africa

B016 **FGFR2 localization to primary cilia: Implications for glioblastoma**, Michaela Bosakova, Masaryk University, Faculty of Medicine, Brno, , Czechia

B017 **From healthy brain to cancer cells: Understanding the origins of glioblastoma through the lens of Darwinian evolution**, Jhan C Salazar Salazar, Mayo Clinic, Jacksonville, FL, United States

B018 **Integrated Stress Response (ISR) activation coupled to epigenetic reprogramming enables CNS tumor survival**, Santosh Kumar, National Institutes of Health, Bethesda, MD, United States

B019 **Mapping clonal architecture and evolution in pediatric brain cancers**, Minh Anh Nguyen, University of Pennsylvania, Philadelphia, PA, United States

B020 **Simple quantitative characterization of high-grade gliomas using 3D slicer**, Madeline Godziela, Midwestern University, Glendale, AZ, United States

B021 **Single-cell lineage tracing to reveal ecDNA dynamics in glioblastoma through treatment**, Abigail C Marshall, Geisel School of Medicine at Dartmouth, Lebanon, NH, United States

B022 **Spatial multi-omics of mitochondrial lipid remodeling and metabolism identified therapeutic vulnerabilities in glioblastoma**, Adele Ponzoni, Center for Discovery and Innovation, Hackensack Meridian Health, Nutley, NJ, United States

B023 **Targeting therapy induced senescence with small molecule Protein Phosphatase 2A (PP2A) activators to prevent glioblastoma relapse after first line treatment**, Michael Ohlmeyer, Atux Iskay LLC, Plainsboro, NJ, United States



B024 **Targeting tmCLIC1 to overcome resistance across heterogeneous glioblastoma subtypes by exploiting metabolic vulnerabilities with synergistic combinatorial therapy**, Francesca Cianci, University of Milan, Milano, , Italy

B025 **The DNA methyltransferase gene MGMT is regulated by Nuclear Receptor 4A1 (NR4A1) and NR4A2 in glioblastoma cells and is a druggable target**, Evan Farkas, Texas A&M University, College Station, TX, United States

B026 **tmCLIC1 as a Key to Metformin's Action: Connecting Molecular Insights to Glioblastoma Therapy**, Guido Rey, Università degli Studi di Milano, Milan, , Italy

B027 **TNKS–NOTCH signaling regulates the Developmental state in glioblastoma stem cells**, Maira Almeida, University of Toronto, Toronto, ON, Canada

B028 **Trends in brain and central nervous system mortality in the United States from 1999-2021**, Matthew M Calumpit, University of Pennsylvania, Philadelphia, PA, United States

B029 **3D magnetic gliomasphere modeling reveals CDK inhibitor mediated suppression of migration in newly diagnosed and recurrent glioblastoma under hypoxic conditions.**, Niamh M Scully, The Royal College of Surgeons, Dublin, , Ireland

B030 **A single-cell atlas of RNA alternative splicing in the glioma-immune ecosystem**, Xiao Song, Northwestern University, Chicago, IL, United States

B031 **Decoding Tumor Complexity: An Integrative Framework Linking Chromatin Topology to Therapeutic Resistance**, Peter Oloche David, Eloi Holding, Inc., Abuja, , Nigeria

B032 **Drug and single-cell gene expression integration identifies heterogeneity-aware synergistic combinations for glioblastoma**, Robert K Suter, Georgetown University, Washington, DC, United States

B033 **Epigenetic determinants of transcriptional cellular states in glioblastoma**, L. Nicolas Gonzalez Castro, Dana-Farber Cancer Institute, Mass General Brigham, Harvard Medical School, Boston, MA, United States

B034 **Identifying intratumoural heterogeneity in glioma at the cohort level via the Minderoo Precision Brain Tumour Programme**, Richard Mair, University of Cambridge, Cambridge, , United Kingdom

B035 **Integrating RNA sequencing and spatial transcriptomic analyses reveals drivers of glioblastoma malignancy near the brains' lateral ventricles**, Maria F. Gonzalez-Aponte, Mayo Clinic, Jacksonville, FL, United States

B036 **Integrative Genomic Profiling Reveals Epigenomic, Structural, and Spatial Complexity in Meningioma.**, Anthony Magliocco, Protean BioDiagnostics, Orlando, FL, United States

B037 **Interactome-seq: A novel technology for mapping neuron-cancer synapses at single-cell resolution**, Boxuan Zhao, University of Illinois Urbana Champaign, Urbana, IL, United States

B038 **Investigating the impact of the aged brain environment on glioblastoma progression**, Megan Callender, University of Connecticut Health Center, Farmington, CT, United States

B039 **Multi-regional surgical sampling reveals tumor origins and early developmental pathways in glioblastoma, IDH-mutant glioma, and meningioma**, Seok-Gu Kang, Department of Neurosurgery, Brain Tumor Center, Severance Hospital, Yonsei University College of Medicine, Seoul, , Korea, Rep.

B040 **53BP1-T336 Phosphorylation by GSK3β regulates DNA damage response and radioresistance in GBM**, Heba Allam, University of Arkansas for Medical Sciences (UAMS), LITTLE ROCK, AR, United States

B041 **A High-Resolution Integrative Framework for Annotating Cell States Underlying Interpatient Heterogeneity and Tumor Plasticity in Pediatric and Adult Gliomas**, Annan Timon, University of Pennsylvania, Philadelphia, PA, United States

B042 **Beyond genomics: Ex-vivo cytotoxicity and antiproliferation functional profiling revealed abemaciclib and entrectinib as potential actionable therapy options in recurrent brain cancers.**, Christian Apfel, SageMedic Corp, Redwood City, CA, United States

B043 **Defective lipid homeostasis drives nuclear envelope disruption and genomic instability during gliomagenesis**, Yinglu Guan, The University of Texas, MD. Anderson Cancer Center, Houston, TX, United States

B044 **Dual inhibition of CRK and CRKL as a strategy to block glioblastoma invasion**, Taeju Peter Park, Children's Mercy Kansas City, Kansas City, MO, United States

B045 **Effect of confined migration on nuclear mechanics and envelope integrity of neural precursor cells under physiologic brain oxygen tension**, Hassan Saadi, University of Maryland Baltimore, Baltimore, MD, United States

B046 **ETS transcription factors as key modulators of heterogeneity in pediatric high-grade gliomas**, Antonio C Fuentes-Fayos, Board of Governors Regenerative Medicine Institute; Cedars-Sinai Medical Center, Los Angeles, CA, United States

B047 **IDH-mutant gliomas arise from glial progenitor cells harboring the initial driver mutation**, Jung Won Park, KAIST, Daejeon, , Korea, Rep.

B048 **Investigating the effect of dopamine signaling on glioblastoma development**, Yaxu-Sofia Wang, The Hospital for Sick Children, Toronto, ON, Canada

B049 **Metabolic reprogramming in glioma: Targeting fatty acid oxidation via malonyl-CoA decarboxylase (MLYCD) inhibition**, Nowreen Islam Chowdhury, School of Veterinary Medicine, Texas Tech University, Amarillo, TX, United States

B050 **Mitochondrial NF-kB–inducing kinase orchestrates metabolic fitness, stress responses and immune signaling in glioma**, Victoria Bunting, Texas A&M University, Bryan, TX, United States



B051 **Modeling IDH-mutant low-grade astrocytoma using human embryonic stem cells**, Greta Ghita, Memorial Sloan Kettering Cancer Center, New York, NY, United States

B052 **NF-κB-Inducing Kinase (NIK) in microglia promotes male-specific glioblastoma tumor pathogenesis**, Hasara N Abeygunaratne, Texas A&M University College of Medicine, Bryan, TX, United States

B053 **Physical exercise and cognitive prehabilitation in high-grade glioma: A narrative review of mechanistic rationale, therapeutic benefits, and clinical constraints**, Minh Anh Tran, Dana-Farber Cancer Institute/ Mass General Brigham, Boston, MA, United States

B054 **Precancer-Associated Microglia Restrain Glioblastoma Evolution Through Phagocytic Clearance**, Keon Woo Kim, Korea Advanced Institute of Science and Technology, Daejeon, , Korea, Rep.

B055 **Single-cell meta-analysis reveals a neural-progenitor to mesenchymal transition driving immune evasion and resistance in glioblastoma**, Randa Elzein, SUNY Upstate University Hospital, SYRACUSE, NY, United States

B056 **Synergistic metabolic inhibition with 2-DG and metformin loaded electrospun scaffolds disrupts glioblastoma redox balance and glycolytic output:**, Bryce W Jewett, Northern Arizona University, Flagstaff, AZ, United States

B057 **Targeting Glioblastoma Cell State Plasticity for Enhanced Therapeutic Efficacy**, Stefano M Cirigliano *, *equal contribution, Weill Cornell Medicine, New York, NY, United States

B058 **A Genetically Unbiased In Vivo Platform to Define Therapy-Driven Determinants of Triple-Negative Breast Cancer Brain Metastasis**, Eric Rahrmann, The Hormel Institute - UMN, Austin, MN, United States

B059 **A small molecule activator of the tumor suppressor phosphatase PP2A overcomes leptomeningeal dissemination in group 3 medulloblastoma**, Michael Ohlmeyer, Atux Iskay LLC, Plainsboro, NJ, United States

B060 **Chemotherapy-Induced Astrocyte Senescence Drives Neutrophil Extracellular Trap–Mediated Awakening of Dormant DTCs and Brain Metastatic Relapse in Breast Cancer**, Shangheng Shi, Tianjin Medical University affiliated Cancer Institute& hospital, Tianjin, , China

B061 **Defining Early Glial Responses in Breast Cancer Brain Metastasis**, Naoki Hama, Department of Microbiology, School of Medicine, University of Alabama at Birmingham, Birmingham, AL, United States

B062 **Developing diverse patient-derived xenograft models of common and rare brain metastases to elucidate molecular landscapes and reveal therapeutic opportunities**, Aki Morikawa, University of Michigan, Ann Arbor, MI, United States



B063 **Estrogen induces a pro-tumoral phenotype shift in microglia that contributes to E2-unresponsive breast cancer brain metastasis**, Karen L.F. Alvarez-Eraso, University of Colorado AMC, Aurora, CO, United States

B064 **KDM2-mediated epigenetic mechanism regulates brain metastasis of breast cancer**, Jun Nishida, Dana-Farber Cancer Institute, Boston, MA, United States

B065 **Stage-aware CRISPR design for brain metastasis interception: Multi-modal validation of BBB extravasation and CNS colonization targets**, Fahad Kiani, CrisPRO.ai, Brooklyn, NY, United States

B066 **Targeting ACSS2 promotes ferroptosis and immune cell infiltration in breast cancer brain metastases**, Riley G Young, Drexel University, PHILADELPHIA, PA, United States

B067 **The Melanoma CTC Brain-Liver Metastasis Axis**, DARIO MARCHETTI, University of New Mexico Health Sciences Center, ALBUQUERQUE, NM, United States