



# The Microbiome, Viruses, and Cancer

February 21-24, 2020 | Orlando, Florida

**AACR**  
American Association  
for Cancer Research\*

## Poster Session B Sunday, February 23, 2020 5:45-7:45 p.m.

**B01 *Candida albicans* infection mediates gastrointestinal track malignancy independently of IL17a in an APECED mouse model.** Feng Zhu. Laboratory of Cancer Immunometabolism, Center for Cancer Research, National Cancer Institute, NIH, Frederick, MD.

**B02 E-cigarette vape and cigarette smoke potentially increase *S. aureus* oral colonization and inflammatory epithelial signaling.** Alma Catala-Valentin. University of Central Florida, Orlando, FL.

**B03 E-cigarette vapor exposure skews competition between colonizing oral Streptococci to allow biofilm formation of *S. mutans* and activation of stress and survival pathways in the oral cavity.** Matthew Caldwell. Burnett School of Biomedical Sciences, College of Medicine, University of Central Florida, Orlando, FL.

**B04 Gender-based Impact of Chemo-Radiotherapy in the Gut Microbial Diversity and Short-Chain Fatty Acid Levels of Adults with Rectal Cancers.** Carlos Sola-Morla. University of Puerto Rico - Comprehensive Cancer Center, San Juan, PR.

**B05 Intestinal microbiota mediates pancreatic carcinogenesis through modulation of tumor infiltrating natural killer cells.** Qin Yu. University of Florida, Gainesville, FL.

**B06 Investigating the microbial etiology of Tanzanian esophageal squamous cell carcinoma.** Jason Nomburg. Dana-Farber Cancer Institute, Boston, MA.

**B07 Oral, intestinal, and pancreatic microbiomes are correlated and exhibit co-abundance in patients with pancreatic cancer and other gastrointestinal diseases.** Naisi Zhao. Department of Public Health and Community Medicine, School of Medicine, Tufts University, Boston, MA.

**B09 Unravelling the gastric microbiome in health and disease: Gastric cancer beyond *Helicobacter pylori* in a Brazilian cohort.** Thais Bartelli. AC Camargo Cancer Center, Sao Paulo, Sao Paulo, Brazil.

**B10 Anti bacterial defence and metastatic progression - lessons from head and neck cancer.** Maria Kondratyev. University Health Network, Toronto, ON, Canada.

**B11 Comparisons of microbial composition identified via 16s rRNA sequencing and whole genome sequence based analysis using gut samples for patients with cervical cancer.** Greyson Biegert. MD Anderson Cancer Center, Houston, TX.

**B12 Cross-sectional analysis of grain, gluten, and fiber intakes and gut microbiota in the Food and Microbiome Longitudinal Investigation (FAMiLI) Study.** Caroline Um. American Cancer Society, Atlanta, GA.



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**B13 Development of a low cost method for collecting fecal samples in clinical trials.** Kimberly Pelozo. Johns Hopkins University School of Medicine, Baltimore, MD.

**B14 Flow cytometry for targeted culturomics of gut commensal species and rapid overview of microbiota composition.** Vincent Thomas. BIOASTER, Paris, France.

**B15 Gut microbiome populations modulate neoadjuvant chemotherapy responsiveness in preclinical triple negative breast cancer murine model.** Alaa Bawaneh. Integrative Physiology and Pharmacology Program, Department of Surgery, Wake Forest University School of Medicine, Winston-Salem, NC.

**B16 High-resolution metagenomic profiling revealed gut microbiome features for the response to cancer immunotherapy reproducible among multiple cohorts of patients.** Chan Yeong Kim. Yonsei University, Seoul, Republic of Korea.

**B17 IKK $\alpha$ /STAT3 Antagonistic Signaling Regulates Fungi-Bacteria Endosymbiosis-Associated Carcinogenesis.** Xin Li. National Institutes of Health, Frederick, MD.

**B18 Microbiome regulates the capacity for immune surveillance of soft tissue sarcoma and response to oncolytic virus immunotherapy.** Saif Sikdar. University of Calgary, Calgary, AB, Canada.

**B19 Novel microbiome-derived peptides modulate immune cell activity and the tumor microenvironment.** Dhvani Haria. Second Genome, South San Francisco, CA.

**B20 Novel phages targeting the intratumor associated bacteria *Fusobacterium nucleatum*.** Lior Zelcbuch. BiomX, Ness Ziona, Israel.

**B21 The gastrointestinal microbiota controls cancer cell intrinsic mechanisms to promote the progression of acute lymphoblastic leukemia.** Wadie Mahauad-Fernandez. Stanford University, Stanford, CA.

**B22 The human skin bacteria *Staphylococcus epidermidis* ameliorates UVB-induced free radicals through reduction of labile iron.** Arun Balasubramaniam. National Central University, Zhongli, Taoyuan, Taiwan.

**B23 The mammary tissue microbiome in breast cancer development.** Jaelyn Gabel. Pepperdine University, Malibu, CA.

**B24 The microbiome in lung cancer under immunotherapy: Significant compositional differences associated with treatment response and AEs.** Justin Chau. University of Iowa Holden Comprehensive Cancer Center, Iowa City, IA.

**B25 Colorectal cancer-associated anaerobic bacteria proliferate in tumor spheroids and alter the microenvironment.** Stephen Kasper. Exploratory Science Center, Merck & Co., Inc., Cambridge, MA.



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**B26 Comparative Analysis of Breast Tumor Microbiome in Black non-Hispanic (BNH) and White-non-Hispanic (WNH) women.** Srikantha Thyagarajan. University of North Texas Health Science Center, Fort Worth, TX.

**B27 Elucidating role of bacteria during pancreatic ductal adenocarcinoma (PDAC).** Vidhi Chandra. UT MD Anderson Cancer Center, Houston, TX.

**B28 Entero-mammary microbiota signaling axis regulates dietary influences on breast cancer risk.** Katherine Cook. Wake Forest University School of Medicine, Winston-Salem, NC.

**B29 Impact of obesity on the uterine microbiome in pre- and post-menopausal mice with endometrial cancer.** Gabrielle Hawkins. University of North Carolina at Chapel Hill, Chapel Hill, NC.

**B30 Intra-tumoral microbes correlate with tumor-infiltrating lymphocytes in lung cancer RNAseq.** Daniel Spakowicz. The Ohio State University Comprehensive Cancer Center, Columbus, OH.

**B31 Microbiota composition in bilateral healthy breast tissue and breast tumors.** Emily Klann. University of Florida, Gainesville, FL.

**B33 Racial differences in tumor associated microbes in early colorectal carcinogenesis.** Kristin Wallace. MUSC, Charleston, SC.

**B34 The ALPK1/TIFA/NF- $\kappa$ B axis links a bacterial carcinogen to replication stress and DNA damage.** Michael Bauer. Institute of Molecular Cancer Research, University of Zurich, Zurich, Switzerland.

**B35 The effect of patient demographics and polyp histological characteristics on immune gene expression in microenvironment is mediated by infiltrating microbiome.** Alexander Alekseyenko. Medical University of South Carolina, Charleston, SC.

**B37 Analysis of the differential expression of Human Endogenous retrovirus in Glioblastoma Multiforme.** Zihao Yuan. University of Texas Health Science Center at Houston, Houston, TX.

**B38 Virome assembly and annotation in brain tissue based on next-generation sequencing.** Zihao Yuan. University of Texas Health Science Center at Houston, Houston, TX.