A01 *Fusobacterium nucleatum* and clinicopathologic features of colorectal carcinoma: results from the ColoCare Study. Cornelia M. Ulrich. Huntsman Cancer Institute, Salt Lake City, UT.

A02 A mutational signature in human colorectal cancer induced by genotoxic *pk*f* E. coli*. Jens Puschhof. Hubrecht Institute, Utrecht, Provincie Utrecht, Netherlands.

A03 Association of *Fusobacterium nucleatum* (F. nucleatum) with progression free survival (PFS) and overall survival (OS) with 2nd-line FOLFIRI +/- regorafenib in metastatic colorectal cancer (mCRC). Michael Lee. University of North Carolina at Chapel Hill, Chapel Hill, NC.

A04 Effects of aspirin intervention on health and disease-associated oral bacterial taxa. Guillaume Onyeaghala. University of Minnesota, Division of Epidemiology and Community Health, Minneapolis, MN.

A05 Growth rate alterations of human colorectal cancer cells by 157 gut bacteria. Annemarie Boleij. Radboudumc, Nijmegen, Gelderland, the Netherlands.


A07 The involvement of a type VII secretion system in the interactions between *Streptococcus gallolyticus* subspecies *gallolyticus* and colorectal cancer. John Taylor. Texas A&M Health Science Center Institute of Biosciences and Technology, Houston, TX.

A08 Tumor Microbiome in Subtypes of Mismatch Repair Deficient Colorectal Cancer. Daniel Buchanan. University of Melbourne, Parkville, Victoria, Australia.

A09 Understanding the role of colorectal cancer-associated microbes in colorectal cancer. Dominik Ternes. University of Luxembourg, Belval, Luxembourg.

A10 *Fusobacteria* upregulates PD-L1 in head and neck cancer cell lines: potential mechanism for immune evasion. Amani Harrandah. Umm Al-Qura University, Mecca, Saudi Arabia.

A11 Betel nut chewing, oral *Cyanobacteria*, and exposure to cyanotoxins. Brenda Hernandez. University of Hawaii Cancer Center, Honolulu, HI.

A12 Expression of GPR41, GPR43, and GPR109A in breast tissue in relation to breast cancer development. Annie Kump. Pepperdine University, Malibu, CA.
A13 **Functional characterization of the enteric animal virome as mediator of host health.** Simone Dallari. New York University School of Medicine, New York, NY.

A14 **Meta-analysis improves identification of microbiome associations with anti-tumor response in melanoma, lung, and kidney cancer patients treated with checkpoint inhibitors.** Fyza Shaikh. Johns Hopkins School of Medicine, Baltimore, MD.

A15 **Potential of metformin to modify the gut microbiota and prevent inflammation in non-diabetic people with HIV.** Jean-Pierre Routy. McGill University Health Centre, Montréal, QC, Canada.

A17 **Human papillomavirus type 16 and 18 viral loads as predictors associated with abnormal cervical cytology among women in Saudi arabia.** Dalia Obeid. King Faisal Specialist Hospital and Research Center, Riyadh, Riyadh, Saudi Arabia.

A19 **Male Hormones Transactivates Viral non-coding RNA PAN to Promote KSHV Lytic Replication.** Xing Wang. Key Laboratory of Gastrointestinal Cancer (Ministry of Education), School of Basic Medical Sciences, Fujian Medical University, Fuzhou, Fujian, P.R.China.

A20 **Persistent high-risk HPV infection in the development of uterine cervical cancer.** Pablo Moreno Acosta. National Cancer Institute, Bogota, Colombia.

A21 **Promotion of colorectal cancer by Streptococcus gallolyticus – a novel mechanism.** Yi Xu. Texas A&M HSC - IBT, Houston, TX.

A22 **A mechanism of γδ T cell-mediated antitumor immunity against the brain cancer.** Heung Kyu Lee. Korea Advanced Institute of Science and Technology, Daejeon, Republic of Korea.


A24 **Bacteroides fragilis: A potential pathogen orchestrating EMT and stemness in breast epithelial cells via concomitant activation of Notch and βcatenin axes.** Dipali Sharma. Johns Hopkins University, Baltimore, MD.

A25 **Combinatorial therapy using oncolytic viruses and immunoregulatory probiotics for the treatment of colorectal cancer.** Yoanna Poutou Paumier. Centre for Innovative Cancer Research. Ottawa Hospital Research Institute, Ottawa, ON, Canada.

A26 **Comparison of DNA extraction kits for metagenomic studies in feces.** Isabella Kuniko Takenaka. A.C.Camargo Cancer Center, São Paulo, SP, Brazil.

A28 **Concomitant use of antibiotics and immune checkpoint inhibitors in patients with solid neoplasms: A retrospective data from real world settings.** Akhil Kapoor. Tata Memorial Hospital, Mumbai, India.
A29 **Differential regulation of apoptosis and senescence by the miR-449 family microRNAs and its implications in tumor micro-environments of NSCLC.** Chun-Yu Cho. National Institute of Cancer Research, National Health Research Institutes, Miaoli, Taiwan.

A31 **Genome-wide association study (GWAS) of host DNA sequence variation and the gut microbiome in the Multiethnic Cohort.** Meredith Hullar. Fred Hutchinson Cancer Research Center, Seattle, WA.

A32 **Identifying of actionable pathway malfunction scores with ML algorithm for omics data.** Dmitrii Chebanov. Biolg Corp., Walnut, CA.

A33 **Intratissutal and urinary microbiome in therapy naive bladder cancer patients: Definition of a gender-specific common microbiome.** Filippo Pederzoli. Division of Experimental Oncology/Unit of Urology; Urological Research Institute; IRCCS Ospedale San Raffaele; Vita-Salute San Raffaele University, Milan, Italy.

A34 **Lung and salivary microbiome in electronic cigarette users, never-smokers, and smokers: A pilot cross-sectional study.** Kevin Ying. Ohio State University, Columbus, OH.

A35 **Methanobrevibacter is associated with cervical dysplasia in Hispanics with HPV infections.** Filipa Godoy-Vitorino. Department of Microbiology and Medical Zoology, Microbial Ecology and Genomics Laboratory, University of Puerto Rico, School of Medicine, San Juan, PR.

A36 **Oral Microbiota associated to periodontal disease as a risk factor for oropharyngeal cancer, in patients from sexually transmitted infection clinics in Puerto Rico.** Brayan Vilanova. University of Puerto Rico School of Medicine, San Juan, PR.

A37 **Restoration of oral microbiota dysbiosis in head and neck squamous cell carcinoma after surgery.** Jason Chan. CUHK, Shatin, NA, Hong Kong SAR.

A38 **RNA-seq analysis identified candidate pathogens for prostate cancer.** Shingo Ashida. Department of Urology, Kochi Medical School, Nankoku, Kochi, Japan.
