Poster Session A
Friday, Sept. 28, 2018
12:30–3 p.m.

A01 Dichotomous roles for RNA binding protein IMP1 in colon cancer metastasis. Sarah Andres, University of Pennsylvania, Philadelphia, PA, USA.

A02 Patient-derived xenografts and matched cell lines identify pharmacogenomic vulnerabilities in colorectal cancer. Sabrina Arena, University of Turin, Candiolo Cancer Institute-FPO, Candiolo, Turin, Italy.

A03 Dietary folic acid modulates the colonic epigenome and promotes colitis-associated tumorigenesis. Wen-Chi Chang, Fox Chase Cancer Center, Philadelphia, PA, USA.

A04 Hypoxia-induced expression of intestinal stem cell markers in patient-derived human colorectal cancer organoids through alterations in 5-hydroxymethylcytosine. Colin Flinders, University of Southern California, Los Angeles, CA, USA.

A05 STAT2 contributes to the motility and metastasis of colorectal cancer when p53 is inactivated. Ana Gamero, Temple University, Philadelphia, PA, USA.

A06; PR06 Epithelial Notch1 drives metastasis by controlling neutrophil chemotaxis in novel late stage colorectal cancer genetically engineered mouse models. Rene Jackstadt, Cancer Research UK Beatson Institute, Glasgow, United Kingdom.

A07 Cross-stage changes in gene mutation profiles in colorectal cancer. Sanjay Jain, Morehouse School of Medicine, Atlanta, GA, USA.

A08 Dissecting the role of histone demethylases in the gastrointestinal tract at homeostasis and during regeneration. Hannah Kolev, University of Pennsylvania, Philadelphia, PA, USA.
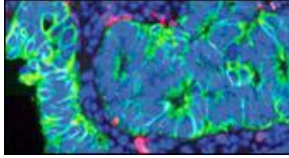
A09 A FOXA1-regulated putative long noncoding RNA encodes a highly conserved tumor suppressor micropeptide in colorectal cancer cells. Ashish Lal, Center for Cancer Research - National Cancer Institute, Bethesda, MD, USA.

A10; PR09 Intestinal cancer initiation using ENU mutagenesis. Filipe Lourenco, CRUK Cambridge Institute, University of Cambridge, Cambridge, United Kingdom.

A11 Differential regulation of <i>let-7</i> microRNAs by LIN28B isoforms in colorectal cancer. Rei Mizuno, University of Pennsylvania, Philadelphia, PA, USA.

A12 SMAD4 rewires WNT signaling and suppresses BRAF-driven serrated tumorigenesis. Kevin Tong, Rutgers, The State University of New Jersey, Piscataway, NJ, USA.

A13 The Role of the HBP1 Gene and Wnt Signaling in a New Pre-clinical Model of Ulcerative Colitis and Colitis-Associated Colorectal Cancer. Amy Yee, Tufts University School of Medicine, Boston, MA, USA.

Intestinal Stem Cells and Colon Cancer:
Biology to Therapy
September 27 - 30, 2018 | Washington, DC

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A14 HopX identifies a colonic stem cell population that contributes to colonic regeneration but not colorectal tumors. Samuel Asfaha, Western University, London, Ontario, Canada.

A15; PR01 Real time in vivo imaging of the intestinal epithelium reveals that stem cell and crypt dynamics affect mutation accumulation. Lotte Bruens, Netherlands Cancer Institute, Amsterdam, The Netherlands.

A16 Impact of the c-MYC internal ribosome entry site on intestinal regeneration and colorectal tumorigenesis. Sarah Denk, University of Wuerzburg, Wuerzburg, Germany.

A17; PR07 Defining sensitivity and resistance to WNT inhibitors using CRISPR editing in intestinal organoids and in vivo models.. Lukas Dow, Weill Cornell Medicine, New York, NY, USA.

A18 The bile acid receptor FXR controls intestinal stem cell proliferation. Ting Fu, Salk Institute, La Jolla, CA, USA.

A19; PR05 Cancer cell plasticity drives metastasis in colorectal cancer. Arianna Fumagalli, NKI-AvL, Oncode Institute, Amsterdam, The Netherlands.

A20; PR04 Injury-induced Paneth cell plasticity. Nan Gao, Rutgers University, Newark, NJ, USA.

A21 Protective role of the aryl hydrocarbon receptor in regulating colonic stem and progenitor cell homeostasis. Huajun Han, Texas A&M University, College Station, TX, USA.

A22 Targeting Oncogenic Intestinal Stem Cells as a Chemopreventive Strategy. Michael Hodder, CRUK Beatson Institute, Glasgow, United Kingdom.

A23 Colorectal cancer develops inherent radiosensitivity. Kuo-Shun Hsu, Memorial Sloan Kettering Cancer Center, New York City, NY, USA.

A24 Modeling radiation injury and countermeasure drug responses in a primary human Intestine Chip. Sasan Jalili-Firoozinezhad, Wyss Institute for Biologically Inspired Engineering, Harvard University, Boston, MA, USA.

A25 Azoxymethane administration in mice Increases Lgr5+ stem cell signature in organoids. Stefan Klingler, Memorial Sloan Kettering Cancer Center, New York, NY, USA.

A26; PR12 Ex vivo pharmacogenomic heterogeneity of colorectal liver metastases. Kushtrim Kryeziu, Institute for Cancer Research and K.G.Jebsen Colorectal Cancer Research Centre, Oslo University Hospital, Oslo, Norway.
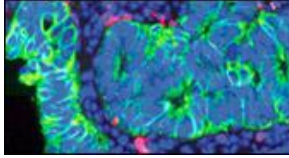
Poster Session A

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12:30–3 p.m.

A27; PR10 PLAGL2 is a Let-7 target that drives intestinal stem cell fate and transformation. Blair Madison, Washington University in St. Louis, Saint Louis, MO, USA.

A28 TNKS2 promotes WNT/Beta-catenins signaling through PARylation of NKD2 in colon cancer cells. Nicholas Markham, Vanderbilt University, Nashville, TN, USA.

A29 NDRG4, an enteric neuronal-specific protein, contributes to colorectal cancer progression via regulation of vesicle trafficking. Veerle Melotte, MUMC, Maastricht, The Netherlands.

A30 Novel deubiquitinases regulating ß-Catenin stability in colorectal cancer. Michaela Reißland, University Würzburg, Department of Biochemistry and Molecular Biology, Wuerzburg, Germany.

A31; PR03 HMGA1 is Up-Regulated by Procarcinogenic Bacteria within the Microbiome to Expand the Colon Stem Cell Pool and Drive Tumorigenesis. Linda Resar, Johns Hopkins University School of Medine, Baltimore, MD, USA.

A32 Oxidative damage-induced epigenetic changes in intestinal stem cells and tumorigenesis.. Sudha Savant, Indiana University, Bloomington, IN, USA.

A33 Metabolic control of stemness and tumorigenesis in the intestine. Carlos Sebastian, Candiolo Cancer Institute-FPO, IRCCS, Candiolo, Torino, Italy.

A34 Role of inflammation in Dclk1+ cell-derived colon cancer. Alice Shin, Western University, London, Ontario, Canada.

A35 Highly efficient derivation and expansion of small intestinal organoids from human pluripotent stem cells in vitro. Salvatore Simmini, STEMCELL Technologies UK Ltd., Cambridge, Cambridgeshire, United Kingdom.

A36 An endoluminal rectal cancer model establishes a platform to study individual tumor biology and responses to chemotherapy and irradiation. J. Joshua Smith, Memorial Sloan Kettering Cancer Center, New York, NY, USA.

A37 SATB2/β-catenin/TCF-LEF pathway induces cellular transformation by generating cancer stem cells in colorectal cancer.. Rakesh Srivastava, Louisiana State University Health Sciences Center, New Orleans, LA, USA.

A38 Role of autophagy in intestinal stem cell homeostasis. Coralie Trentesaux, Institut Cochin, Institut National de la Sante et de la Recherche Médicale (INSERM) U1016, Université Paris Descartes, Centre National de la Recherche Scientifique (CNRS) UMR8104, Paris, France.
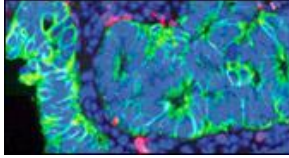
Poster Session B
Saturday, Sept. 29, 2018
1–3:30 p.m.

B01 Exploring RasGRP1 as a Biomarker for Colorectal Cancer. Oghenekevwe Gbenedio, University of California, San Francisco, San Francisco, CA, USA.

B02 Emerging role for membrane therapy in shaping aberrant Wnt signaling. Alfredo Erazo-Oliveras, Texas A&M University, College Station, TX, USA.

B03 Wnt regulation of mRNA splicing in colon crypts and colon cancer. Amber Habowski, University of California Irvine, Irvine, CA, USA.

B04 Lef1 is a downstream target of Prox1 that regulates Lgr5+ cancer stem cells and intestinal tumorigenesis. Sarika Heino, Translational Cancer Biology Program, Translational Cancer Biology Program, Faculty of Medicine, University of Helsinki, Helsinki, Finland.

B05 Elimination of one Apc allele in the stem/progenitor compartment of Lrig1 null mice results in rapid and dramatic upregulation of EGFR and Wnt signaling. Won Jae Huh, Vanderbilt University, Nashville, TN, USA.

B06 The transcription factor HNF4A is a key regulator of the intestinal stem cell niche by regulating the expression of WNT3. Christine Jones, Université de Sherbrooke, Sherbrooke, Qc, Canada.
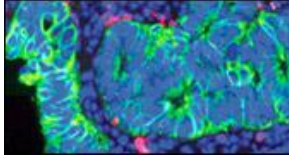
B07 A tumor suppressive PKC☐-ERK signaling axis in the intestine/colon. Navneet Kaur, University of Nebraska Medical Center, Omaha, NE, USA.

B08 Regulation of cancer stem cell population by SOX2 through interaction with miR29a and HDAC4 in colorectal cancer. Tae Il Kim, Department of Internal Medicine, Institute of Gastroenterology, Yonsei University College of Medicine, Seoul, Korea.

B09 Elucidating the role of Foxl1+ telocytes in providing non-canonical Wnt signaling to the intestinal epithelium. Ayano Kondo, University of Pennsylvania, Philadelphia, PA, USA.

B10 PKCα engages non-canonical TGF-β signaling to suppress inhibitor of DNA binding 1 (Id1) expression in intestinal epithelial cells. Xinyue Li, Eppley Institute, University of Nebraska Medical Center, Guangzhou, China.

**B11 GSK3β-mediated phosphorylation of TRAF6 inhibits
autophagy-dependent non-classical β-catenin degradation and promotes colorectal cancer metastasis
.** Jian-Ming Li, Sun Yat-sen Memorial Hospital, Omaha, NE, USA.

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B12 Ral Small GTPase signaling controls stem cell dynamics by promoting internalization of WNT signalosomes. Máté Nászai, University of Glasgow, Glasgow, United Kingdom.

B13; PR02 LGR4 is mechanistically different from LGR5 in potentiating Wnt/β-catenin signaling. Soohyun Park, University of Texas Health Science Center at Houston, Seoul, South Korea.

B14 SHP-2 promotes intestinal epithelial regeneration, tumorigenesis and protects against mucosal erosion. Nathalie Rivard, Université de Sherbrooke, Sherbrooke, Quebec, Canada.

B15 A pathway of fibroblast-stem cell interaction required for the initiation of intestinal tumorigenesis. Manolis Roulis, Yale School of Medicine, New Haven, CT, USA.

B16 Myc potentiates Wnt signaling through repression of the novel Wnt antagonist DKK3. Priyanka Sehgal, The Children's Hospital of Philadelphia, Philadelphia, PA, USA.

B17 Utilizing the *Sun1-Gfp* nuclear isolation tool for transcriptomic and genomic profiling of Foxl1+ telocytes. Avital Swisa, University of Pennsylvania, Philadelphia, PA, USA.

B18 Defining the Wnt-secreting niche that promotes the renewal of intestinal epithelial stem cells. Tomas Valenta, 1) Institute of Molecular Genetics of the ASCR / 2) Institute of Molecular Life Sciences, University of Zurich, 1) Prague / 2) Zurich, , 1) Czech Republic / 2) Switzerland.

B19 Enteric glial cells promote colon cancer stem cell chemoresistance via an ATM-dependent pathway. Laurianne Van Landeghem, Department of Molecular Biomedical Sciences, College of Veterinary Medicine, North Carolina State University, Raleigh, NC, USA.

B20 CD44 functions in Wnt signaling by regulating LRP6 stability, localization and activation. Romina Walter, Karlsruhe Institute of Technology, Institute of Toxicology and Genetics, Karlsruhe, Germany.

B21 *KRAS* mutation increases colon cancer stem cell properties through DCLK1's beta-promoter-driven alternative splice variant. Nathaniel Weygant, University of Oklahoma HSC, Oklahoma City, OK, USA.

B22 Elucidating the role of mRNA-binding protein IMP1 in regulating adherens junction complex proteins in the intestinal epithelium. Priya Chatterji, University of Pennsylvania, Philadelphia, PA, USA.
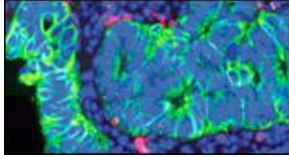
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B23 Integrative Single Cell Atlas of Host and Microenvironment in Colorectal Neoplastic Transformation. Robert Coffey, Vanderbilt University, Nashville, TN, USA.

B24 The functional role of the miR-17-92 cluster in colorectal adenoma-to-carcinoma progression. Sanne Martens-de Kemp, The Netherlands Cancer Institute, Amsterdam, The Netherlands.

B25 Clinicopathologic characteristics and oncologic outcomes of sporadic early-onset colorectal cancer. Ji Won Park, Seoul National University College of Medicine, Houston, TX, USA.

B26 Personalized medicine has the potential to improve efficacy of CRC containing the Pro47Ser single nucleotide polymorphism of p53. Thibaut Barnoud, The Wistar Institute, Philadelphia, PA, USA.

B27 Drug treated cancer-associated fibroblasts promote resistance to EGFR inhibition in colorectal cancer through increased EGF secretion. Colleen Garvey, Lawrence J. Ellison Institute of Transformative Medicine, University of Southern California, Los Angeles, CA, USA.

B28 Improved efficacy of the novel polymeric fluoropyrimidine F10 to orthotopic xenograft models of colorectal cancer. William Gmeiner, Wake Forest School of Medicine, Winston-Salem, NC, USA.

B29 Co-inhibition of BET proteins and NF-κB as a potential therapy for colorectal cancer through synergistic inhibiting MYC and FOXM1 expressions. Chen-Ying Liu, Xinhua Hospital, Shanghai Jiao Tong University School of Medicine, Shanghai, China.

B30 Non-estrogenic derivatives of xanthohumol, dihydroxanthohumol and tetrahydroxanthohumol, inhibit growth and increase apoptosis of colon carcinoma and hepatoma cell lines. Isabelle Logan, Oregon State University, Corvallis, OR, USA.

B31 Transient enhancement of p53 activity mitigates radiation-induced gastrointestinal toxicity. Vinod Pant, The University of Texas MD Anderson Cancer Center, Houston, TX, USA.

B32 To explore the effect of novel β-boswellic acid analogue(s) in mono and combination therapy (with 5-FU) targeting KRAS in colorectal cancer.. Arem Qayum, CSIR-IIIM, Jammu, Jammu/Kashmir, India.
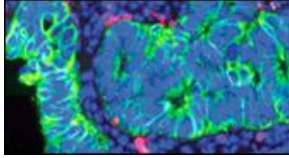
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B33; PR11 KRAS-IRF2 axis drives immune suppression and immune therapy resistance in colorectal cancer. Y. Alan Wang, The University of Texas MD Anderson Cancer Center, Houston, Texas, USA.

B34 eIF2B5 limits global protein synthesis to prevent MYC-dependent apoptosis in APC-deficient colorectal cancer. Armin Wiegering, Theodor Boveri Institute, Biocenter, University of Würzburg, Am Hubland, 97074 Würzburg, Germany, Würzburg, Germany.

B35 Amyloid precursor protein promotes tumor stemness and is a potential target in colorectal cancer. Hanwen Xu, The University of Texas MD Anderson Cancer Center, Houston, TX, USA.

B36; PR08 Trajectory space analysis: Leveraging computational models and single cell RNAseq to understand genetic programs defining intestinal lineages and infer colon stem cells in mouse. Denis Dermadi Bebek, Stanford University, Palo Alto, CA, USA.

B37 A Chemosensitivity Study of Colorectal Cancer Using Xenografts of Patient-Derived Tumor Initiating Cells. M. Mark Taketo, Kyoto University Graduate School of Medicine, Kyoto, Kyoto, Japan.

B38 Personalised medicine using patient-derived organoids for worst prognosis colorectal cancer. Susan Woods, University of Adelaide/SAHMRI, Adelaide, SA, Australia.

B39 A novel patient derived orthotopic xenograft model of gastro-esophageal junction cancer: key platform for translational discoveries. Omkara Lakshmi Veeranki, The University of Texas MD Anderson Cancer Center, Houston, TX, USA.