THURSDAY, SEPTEMBER 27

6:00 p.m.–7:00 p.m.  OPENING KEYNOTE SESSION
Presidential Ballroom

Welcome Remarks and Session Chair:
Anil Rustgi, University of Pennsylvania, Philadelphia, PA

Lgr5 stem cell-based organoids in cancer research
Hans Clevers, Hubrecht Institute, Utrecht, The Netherlands

7:00 p.m.–9:00 p.m.  WELCOME RECEPTION
Congressional and Senate Ballrooms

FRIDAY, SEPTEMBER 28

7:00 a.m.–8:00 a.m.  CONTINENTAL BREAKFAST WITH MENTORING ROUNDTABLES
Senate Ballroom

8:00 a.m.–10:00 a.m.  PLENARY SESSION 1: INTESTINAL STEM CELLS — BIOLOGY TO MODEL SYSTEMS TO OPPORTUNITIES FOR THERAPEUTICS I
Presidential Ballroom

Session Chair: Owen Sansom, Beatson Institute for Cancer Research, Glasgow, United Kingdom

Targeting transformed intestinal stem cells in vivo
Owen Sansom

Intestinal lineage tracing from mouse stem cells to human mutation burden
Douglas Winton, Cancer Research UK Cambridge Institute, Cambridge, United Kingdom

Msi proteins and the stem cell origins of colon cancer
Christopher Lengner, University of Pennsylvania School of Veterinary Medicine, Philadelphia, PA

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

LGR4 is mechanistically different from LGR5 in potentiating Wnt/β-catenin signaling*
Soo hyun Park, University of Texas Health Science Center at Houston, Houston, TX

*Short talk from proffered abstract
CONFERENCE PROGRAM

10:00 a.m.–10:30 a.m.       BREAK
                                Capital Terrace

10:30 a.m.–12:30 p.m.       PLENARY SESSION 2: INTESTINAL STEM CELLS — BIOLOGY TO MODEL SYSTEMS TO OPPORTUNITIES FOR THERAPEUTICS II
                                Presidential Ballroom

                                Session Chair: Anil Rustgi, University of Pennsylvania, Philadelphia, PA

                                Epigenetic control of intestinal stem and progenitor cell states
                                Ramesh A. Shivdasani, Dana-Farber Cancer Institute, Boston, MA

                                Targeting macrophages facilitates reduction of cancer stem cells and tumor regrowth
                                Linheng Li, Stowers Institute for Medical Research, Kansas City, MO

                                Dynamic regulation of cellular identity in normal and cancerous tissues
                                Kim B. Jensen, University of Copenhagen, Copenhagen, Denmark

                                HMGA1 is upregulated by procarcinogenic bacteria within the microbiome to expand the colon stem cell pool and drive tumorigenesis*
                                Linda Resar, The Johns Hopkins University School of Medicine, Baltimore, MD

                                Injury-induced Paneth cell plasticity*
                                Nan Gao, Rutgers University, Newark, NJ

12:30 p.m.–3:00 p.m.       POSTER SESSION A / LUNCH
                                Congressional and Senate Ballrooms

3:00 p.m.–5:00 p.m.       PLENARY SESSION 3: SIGNALING PATHWAYS AND THE STEM CELL NICHE
                                Presidential Ballroom

                                Session Chair: Christina Curtis, Stanford University, Stanford, CA

                                A novel, non-germline role for the PIWI component, Aubergine, in intestinal stem cell proliferation during tissue regeneration
                                Julia Cordero, University of Glasgow, Glasgow, United Kingdom

                                Gremlins in the crypt: BMP signaling in colorectal tumorigenesis
                                Simon Leedham, University of Oxford, Oxford, United Kingdom

                                Immune evasion and metastasis in colorectal cancer
                                Eduard Batlle, Institute for Research in Biomedicine, Barcelona, Spain

                                Cancer cell plasticity drives metastasis in colorectal cancer*
                                Arianna Fumagalli, NKI-AVL, Oncode Institute, Amsterdam, The Netherlands

                                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

*Short talk from proffered abstract
SATURDAY, SEPTEMBER 29

7:00 a.m.–8:00 a.m.  CONTINENTAL BREAKFAST WITH MENTORING ROUNDTABLES
Senate Ballroom

8:00 a.m.–9:00 a.m.  KEYNOTE LECTURE
Presidential Ballroom

Session Chair: Hans Clevers, Hubrecht Institute, Utrecht, The Netherlands

The mutational landscape of normal colorectal epithelium
Michael Stratton, Wellcome Trust Sanger Institute, Cambridge, United Kingdom

9:00 a.m.–10:30 a.m.  PLENARY SESSION 4: GENETIC AND GENOMIC ALTERATIONS IN COLON CANCER I
Presidential Ballroom

Session Chair: Christina Curtis, Stanford University, Stanford, CA

Quantifying the evolutionary dynamics of colorectal cancer progression
Christina Curtis

RNA-binding proteins and colon cancer pathogenesis
Anil Rustgi, University of Pennsylvania, Philadelphia, PA

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

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

10:30 a.m.–11:00 a.m.  BREAK
Capital Terrace

*Short talk from proffered abstract
CONFERENCE PROGRAM

11:00 a.m.–1:00 p.m.  PLENARY SESSION 5: GENETIC AND GENOMIC ALTERATIONS IN COLON CANCER II
Presidential Ballroom

Session Chair: Anil Rustgi, University of Pennsylvania, Philadelphia, PA

Microbiome in PTEN hamartoma tumor syndrome
Charis Eng, The Cleveland Clinic, Cleveland, OH

Organoid modeling of tumor cells and their microenvironment
Calvin J. Kuo, Stanford University, Stanford, CA

Clonal competition and collaboration in colorectal cancer
Eric R. Fearon, University of Michigan Comprehensive Cancer Center, Ann Arbor, MI

Intestinal cancer initiation using ENU mutagenesis*
Filipe Lourenco, CRUK Cambridge Institute, University of Cambridge, Cambridge, United Kingdom

PLAGL2 is a let-7 target that drives intestinal stem cell fate and transformation*
Blair Madison, Washington University in St. Louis, St. Louis, MO

1:00 p.m.–3:30 p.m.  POSTER SESSION B / LUNCH
Congressional and Senate Ballrooms

3:30 p.m.–5:30 p.m.  PLENARY SESSION 6: RISK STRATIFICATION AS A BASIS FOR TARGETED THERAPY IN COLON CANCER
Presidential Ballroom

Session Chair: Owen Sansom, Beatson Institute for Cancer Research, Glasgow, United Kingdom

New predictive biomarkers for colorectal cancer
Timothy Maughan, CRUK/MRC Oxford Institute for Radiation Oncology, Oxford, United Kingdom

Risk stratification as a basis for targeted therapy in colon cancer
Rodrigo Dienstmann, Vall d’Hebron University Hospital, Barcelona, Spain

The molecular underpinnings of sidedness in determining cancer therapy: What is “right”?  
Nilofer S. Azad, Johns Hopkins Sidney Kimmel Comprehensive Cancer Center, Baltimore, MD

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, TX

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

*Short talk from proffered abstract
SUNDAY, SEPTEMBER 30

7:00 a.m.–8:00 a.m.  CONTINENTAL BREAKFAST WITH MENTORING ROUNDTABLES
Senate Ballroom

8:00 a.m.–10:00 a.m.  PLENARY SESSION 7: TARGETED AND COMBINATION THERAPIES
Presidential Ballroom

Session Chair: Johanna C. Bendell, Sarah Cannon Research Institute, Nashville, TN

The who, what, when, and why of adjuvant therapy for colon cancer
Johanna C. Bendell

Therapeutic resistance and tumor heterogeneity in colorectal cancer
Ryan Corcoran, Massachusetts General Hospital Cancer Center, Boston, MA

Targeting intestinal stem cells in cancer
Frederic J. de Sauvage, Genentech, South San Francisco, CA

New therapeutic strategies to target colon cancer stem cells
Heinz-Josef Lenz, University of Southern California Norris Comprehensive Cancer Center, Los Angeles, CA

10:00 a.m.–10:15 a.m.  BREAK
Capital Terrace

10:15 a.m.–12:15 p.m.  PLENARY SESSION 8: TECHNOLOGY, THERAPY, AND TRIALS
Presidential Ballroom

Session Chair: Hans Clevers, Hubrecht Institute, Utrecht, The Netherlands

Patient-derived organoids en route to the clinic
Nicola Valeri, Royal Marsden Hospital Institute of Cancer Research, Sutton, United Kingdom

Inactivation of DNA repair triggers immune surveillance in colorectal cancers
Alberto Bardelli, University of Torino, Torino, Italy

The colorectal cancer microbiome
Matthew Meyerson, Dana-Farber Cancer Institute, Boston, MA

Circulating tumor DNA in colorectal cancer management: Assessing minimal residual disease and treatment response
Scott Kopetz, The University of Texas MD Anderson Cancer Center, Houston, Texas

12:15 p.m.  CLOSING REMARKS
Presidential Ballroom