

## Poster Session A

Monday, September 25, 2017

1:15 p.m.-3:30 p.m.

Promenade West I-III

**A01 Somatic engineering of the mammary gland for the development of novel mouse models of triple negative breast cancer.** Stefano Annunziato, NKI, Amsterdam, Netherlands.

**A02 Potent synergism between FBXW7 and PI3K signalling in a mouse model of endometrial carcinogenesis.** Ileana Cuevas, UT Southwestern Medical Center, Dallas, TX, United States.

**A03 Perturbation of proteostasis is lethal in SMARCB1 deficient tumors.** Giannicola Genovese, UT MD Anderson Cancer Center, Houston, TX, United States.

**A04 Cross-species oncogenomics approach identifies PTPN11 as an oncogene and potential therapeutic target in melanoma.** Minjung Kim, Moffitt Cancer Center, Tampa, FL, United States.

**A05 Investigating mechanisms of obesity-mediated pancreatic cancer progression.** Mandar Muzumdar, Koch Institute at MIT, Cambridge, MA, United States.

**A06 Automated, high throughput 3D desorption electrospray ionisation (DESI) mass spectrometry imaging of a xenograft model of glioblastoma.** Michael Batey, Waters Corporation, Manchester, United Kingdom.

**A07 Speedy-mouse models to study melanomagenesis.** Ilah Bok, Moffitt Cancer Center, Tampa, FL, United States.

**A08 Fast and efficient generation of conditional ROSA26-based mouse models that recapitulate oncogene activation in T-cell acute lymphoblastic leukemia.** Steven Goossens, Ghent University, Ghent, Belgium.

**A09 Multiplexed *in vivo* small molecule screening for immediate drug repositioning reveals novel therapeutic targets in metastatic pancreatic cancer.** Barbara Grüner, West German Cancer Center (WTZ) University Hospital Essen, German Cancer Consortium (DKTK/DKFZ), Essen, Germany.

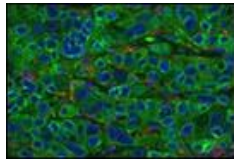
**A10 Rapid generation of carcinoma mouse models using *in vivo* electroporation.** Josef Leibold, Memorial Sloan Kettering Cancer Center, New York, NY, United States.

**A11 Preclinical assessment of CD3 bispecific antibody efficacy: A comparison of humanized mouse models bearing xenografts and syngeneic mouse models using surrogate antibodies.** Bethany Mattson, Janssen Research & Development, Spring House, PA, United States.

**A12 CRISPR-mediated modeling and functional validation of candidate tumor suppressor genes in small cell lung cancer.** Sheng Rong Ng, Koch Institute for Integrative Cancer Research, Massachusetts Institute of Technology, Cambridge, MA, United States.

**A13, PR02 Capturing the integration of Ras-mutant cells into normal epithelial tissue using live imaging.** Cristiana Pineda, Yale University, New Haven, CT, United States.

**A14 Engineering novel humanized mouse models of cancer.** Ali Roghanian, Massachusetts Institute of Technology (MIT), Cambridge, MA, United States.



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**A15 Generation of clonal replica tumors to interrogate complexity of human cancer in vivo.** Andrea Viale, Department of Genomic Medicine, University of Texas MD Anderson Cancer Center, Houston, TX, United States.

**A16 Humanized mouse models for evaluation of immunotherapeutic drugs.** Wolfgang Walther, ECRC Charité Universitätsmedizin Berlin, Berlin, Germany.

**A17 Novel patient-derived xenograft (PDX) models from peritoneal metastasis of colorectal carcinoma for drug testing and biomarker analysis.** Wolfgang Walther, ECRC Charité Universitätsmedizin Berlin, Berlin, Germany.

**A18 Generation of new conditional Kras-alleles by CRISPR-based genome editing.** Maria Paz Zafra, Weill Cornell Medicine, New York, NY, United States.

**A19 Phosphorylation results in nuclear translocation of dicer protein that increases metabolism, accelerates aging, and alters tumorigenesis.** Neeraj Aryal, MD Anderson Cancer Center, Houston, TX, United States.

**A20 Pin1 as a regulator of multiple targets of cell growth in lung cancer.** Silvia Boffo, Sbarro Institute for Cancer Research and Molecular Medicine, Temple University, Philadelphia, PA, United States.

**A21 Dissecting MYC immunoregulatory activity in BRCA1-associated breast cancer.** Chiara Svetlana Brambillasca, The Netherlands Cancer Institute, Amsterdam, Netherlands.

**A22 Ezh2 haploinsufficiency and full insufficiency in KRAS/p53-null lung tumors drive distinct cellular phenotypes.** Fan Chen, University of Kentucky, Lexington, KY, United States.

**A23 Mdm2 phosphorylation by Akt is critical for modulating cellular responses to oxidative stress.** Loretah Chibaya, University of Massachusetts Medical School, Worcester, MA, United States.

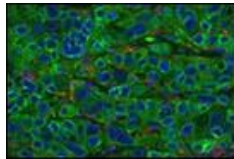
**A24 Bone marrow hematopoietic adaptation as a sensor of early, pre-invasive, epithelial malignancy.** Claudia Chiodoni, Fondazione IRCCS Istituto Nazionale Tumori, Milan, Italy.

**A25 Intestinal tumorigenesis in APCMin/+ mice was higher after acute relative to fractionated proton radiation: Implications for space radiation-induced colorectal carcinogenesis.** Kamal Datta, Georgetown University, Washington, DC, United States.

**A26, PR03 The tumor suppressor BAP1 regulates the Hippo pathway in pancreatic ductal adenocarcinoma.** Anwasha Dey, Genentech Inc., South San Francisco, CA, United States.

**A27 Exploring the role of glycosylation in pancreatic disease.** Dannielle Engle, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, United States.

**A28 Understanding the role of the tumor suppressor p53 in pancreatic cancer development.** Brittany Flowers, Stanford University School of Medicine, Stanford, CA, United States.



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Promenade West I-III

**A29 Generation of a novel transgenic mouse model with regulatable  $\beta$ -catenin expression to examine importance of activated  $\beta$ -catenin signaling to long-term maintenance of mammary tumor growth.** Jennifer Gorman, Lunenfeld-Tanenbaum Research Institute, Sinai Health System, Toronto, Ontario, Canada.

**A30, PR08 Altered nucleolar trafficking of the Blm helicase in the mouse reduces size, increases DNA damage and tumor susceptibility, and facilitates premature aging.** Joanna Groden, The Ohio State University College of Medicine, Columbus, OH, United States.

**A31 Biallelic *Dicer1* loss in endothelial cells drives angiosarcoma development.** Jason Hanna, St. Jude Children's Research Hospital, Memphis, TN, United States.

**A32 *Sall2* transcription factor; a novel regulator of G1-S cyclins.** Viviana Hermosilla, Universidad de Concepcion, Concepcion, Chile.

**A33 Loss of *Id4* initiates PIN-like lesions by maintaining stemness in mice prostate.** Dhanushka Hewa Bostanthirige, Clark Atlanta University, Atlanta, GA, United States.

**A34 EGF receptor activated Notch signaling contributes to pathogenesis of premalignant gastric lesions.** Won Jae Huh, Vanderbilt University Medical Center, Nashville, TN, United States.

**A35, PR07 Elucidating mechanisms of p53-deficient breast cancer development via lineage tracing and clonal analysis.** Zhe Li, Brigham & Women's Hospital and Harvard Medical School, Boston, MA, United States.

**A36 Characterizing the role of *Egfr* signaling in mediating the exacerbative effect of acute inflammation on tumor development in a mouse model for familial adenomatous polyposis.** Wei Li, Vanderbilt University Medical Center, Nashville, TN, United States.

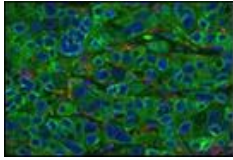
**A37 SB insertional mutagenesis identifies new metastasis-promoting tumor suppressor genes in pancreatic cancer.** Karen Mann, Moffitt Cancer Center, Tampa, FL, United States.

**A38 *Twist1*-driven fatty pancreas formation facilitates pancreatitis and pancreatic ductal adenocarcinoma progression.** Thien Ly Nguyen, University of Mississippi Medical Center, Jackson, MS, United States.

**A39 Modeling organelle-specific O-glycosylation in driving liver tumor growth, invasion and metastasis.** Anh Tuan Nguyen, Institute of Molecular and Cell Biology, Singapore, Singapore.

**A40 *Twist1* activation in muscle progenitor cells during development or adulthood causes severe muscle loss reminiscent of human cancer cachexia.** Parash Parajuli, University of Mississippi Medical Center, Jackson, MS, United States.

**A42, PR04 p120 catenin loss drives pancreatic cancer EMT and metastasis through activation of calcium signaling.** Jason Pitarresi, University of Pennsylvania, Philadelphia, PA, United States.



### Poster Session A

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Promenade West I-III

**A43 Loss of *Keap1* promotes KRAS-driven lung cancer and results in genotype specific vulnerabilities.** Rodrigo Romero, Koch Institute for Integrative Cancer Research, Cambridge, MA, United States.

**A44 Establishment of patient-derived Hispanic gastric cancer xenografts to test targeted therapeutics.** Jean Ruiz-Calderon, UPR Medical Science Campus, San Juan, PR, United States.

**A45 Targeted therapy-induced senescence enhances immune surveillance of KRAS mutant lung cancers.** Marcus Ruscetti, Memorial Sloan Kettering Cancer Center, New York, NY, United States.

**A46 3D cultured prostate organoids derived from PTEN-conditional KO mouse models of prostate cancer reveal Class IA PI3K $\alpha$  drives tumorigenesis and the levels of its lipid products are pH dependent.** Barzan Sadiq, University of Cambridge, Cambridge, UK, United Kingdom.

**A47 Reducing actin contraction in E-cadherin inactivated mammary epithelial cells leads to the development of invasive lobular carcinoma.** Koen Schipper, Netherlands Cancer institute, Amsterdam, Netherlands.

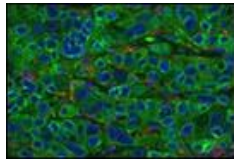
**A48 Ube2v1 promotes EMT and metastasis by suppression of autophagy.** Tong Shen, Suchoo University, Suzhou, China.

**A49 Using IL10<sup>-/-</sup> mouse model to assess heavy-ion radiation exposure associated colitis and colorectal cancer incidence.** Shubhankar Suman, Georgetown University, Washington, DC, United States.

**A50 Nrf2 regulates cellular behaviors and Notch signaling in oral squamous cell carcinoma cells in vivo and in vitro.** Zheng Sun, Beijing Stomatological Hospital & School of Stomatology, Capital Medical University, Beijing, China.

**A51 Nicotine induces cervical lymph node metastasis of mouse tongue cancer by regulating Prx1/EMT signalling.** Xiaofei Tang, Division of Oral Pathology, Beijing Institute of Dental Research, Capital Medical University, Beijing, China.

**A52 Arid1a exerts context-dependent oncogenic and tumor suppressor functions in liver cancer.** Shuyuan Zhang, Children's Research Institute at UT Southwestern, Dallas, TX, United States.



## Poster Session B

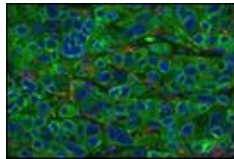
Tuesday, September 26, 2017

6:00 p.m.-8:30 p.m.

Promenade West I-III

- B01 A genetically-engineered mouse model of *de novo* bone metastasis.** Juan Arriaga, Columbia University Medical Center, New York, NY, United States.
- B02 Neutrophils and Snail orchestrate the establishment of a pro-tumor microenvironment in lung adenocarcinoma.** Etienne Meylan, Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland.
- B03 Acinar cell expansion: A new step in pancreatic tumorigenesis.** Patrick Neuhofer, Stanford University, Stanford, CA, United States.
- B04 Activating K-Ras<sup>A146T</sup> mutations induce Mapk-dependent hyperproliferation in the intestinal epithelium.** Emily Poulin, Beth Israel Deaconess Medical Center, Boston, MA, United States.
- B05 BRAF inhibition and cytokine therapy for melanoma: A novel rational combined approach.** Gabriele Romano, The University of Texas MD Anderson Cancer Center, Houston, TX, United States.
- B06 A SOX9+ bile duct progenitor as a cell of origin of hepatocellular carcinoma.** Patrick Viatour, Children's Hospital of Philadelphia, Philadelphia, PA, United States.
- B07 Role of lysyl hydroxylases in metastatic lung cancer.** Yanan Yang, Mayo Clinic, Rochester, MN, United States.
- B08 Pathological roles of Ddx3x in hepatocellular carcinoma development.** Li-Ru You, National Yang-Ming University, Taipei, Taiwan.
- B09 Loss of diphthamide biosynthesis enzyme *Dph1* causes ER stress and sensitizes the liver to chemically- and genetically-induced tumorigenesis.** Yi-Ru Yu, National Yang-Ming University, Taipei, Taiwan.
- B10 The polyploid state plays a tumor suppressive role in the liver.** Shuyuan Zhang, UT Southwestern Medical Center, Dallas, TX, United States.
- B11 Foxm1 mediates maintenance and progression of mouse lung tumor driven by oncogenic Kras.** I-Ching Wang, National Tsing Hua University, Hsinchu, Taiwan.
- B12 The importance of the RASA1/R-Ras/Ral-A signaling axis in melanoma tumorigenesis.** Minjung Kim, Moffitt Cancer Center, Tampa, FL, United States.
- B13 The prevention of lymphoproliferative lesions arising in patient-derived cancer xenografts by anti-graft-versus-host-disease agents.** Tsuyoshi Chijiwa, Department of Emergency and Critical Care Medicine, Saitama Medical Center, Jichi Medical University, Saitama, Japan.
- B14 Extracellular matrix composition shapes the fate of oncogenic events.** Mario Colombo, Fondazione IRCCS Istituto Nazionale dei Tumori, Milano, Italy.
- B15 The effects of obesity on tumor microenvironment and immunotherapy efficacy.** Stephanie Dudzinski, Vanderbilt University, Nashville, TN, United States.





## Poster Session B

Tuesday, September 26, 2017

6:00 p.m.-8:30 p.m.

Promenade West I-III

**B16, PR06 Contribution of mutant microenvironment to hereditary cancer: Single-cell gene expression profiling of a genetically engineered mouse model of human hereditary BRCA1-related breast cancer.** Carman Li, Harvard Medical School, Boston, MA, United States.

**B17 A dual *in vivo* and *in silico* system to model ectopic lymph node structure formation and anti-tumor immune response in the murine tumor microenvironment.** Adam Mailloux, H. Lee Moffitt Cancer Center, Tampa, FL, United States.

**B18 The carcinogen-induced NTCU model: A pre-clinical mouse model for lung cancer Interception.** Sarah Mazzilli, Boston University School of Medicine, Boston, MA, United States.

**B19, PR05 Lineage specifiers SOX2 and NKX2-1 inversely regulate lung tumor immune microenvironment.** Trudy Oliver, University of Utah, Salt Lake City, UT, United States.

**B20 Alteration of colonic mesenchyme amplifies the loss of heterogeneity and the oncogenic effects of tumor suppressor APC.** Raphaëlle Servant, Université de Sherbrooke, Sherbrooke, Québec, Canada.

**B21 Novel *in vitro* and *in vivo* models for studying brain metastasis and tumor-microenvironment interactions.** Chaya Brodie, Henry Ford Health System, Detroit, MI, United States.

**B22 Novel pancreatic cancer stem cell surface biomarkers (CD19+31+45+133+) as target for pancreatic cancer therapy.** Jayanta Das, Florida International University, Miami, FL, United States.

**B23 Identifying regulatory networks and screening for genetic drivers of the stem cell state in Msi2+ pancreatic cancer cells.** Lesley Ferguson, University of California San Diego, La Jolla, CA, United States.

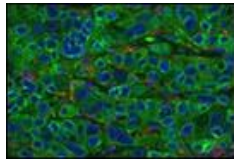
**B24 Stem cell lineage infidelity drives wound repair and cancer.** Yejing Ge, The Rockefeller University, New York, NY, United States.

**B25 Pten haplo-deficiency drives liver tumor initiation and progression in the microRNA-122a null mice via expansion of periportal hepatocyte-like cells.** Wei-Ling Tu, National Yang-Ming University, Taipei, Taiwan.

**B26 Whole genome sequencing and transcriptomic analysis of MMTV-Neu and MMTV-PyMT mammary tumors.** Eran Andrechek, Michigan State University, East Lansing, MI, United States.

**B27 The use of mouse models for understanding the *in vivo* impact of cancer-relevant genetic defects on genomic instability induced by human LINE-1 retrotransposon.** Victoria Belancio, Tulane University, New Orleans, LA, United States.

**B28 Development of estrogen-dependent and estrogen receptor-negative cervical cancer in HPV transgenic mice.** Sang-Hyuk Chung, University of Houston, Houston, TX, United States.



## Poster Session B

Tuesday, September 26, 2017

6:00 p.m.-8:30 p.m.

Promenade West I-III

**B29 A carcinogen-induced mouse model recapitulates the molecular alterations of human muscle invasive bladder cancer.** Damiano Fantini, Northwestern University, Chicago, IL, United States.

**B30 An *in silico* spatio-structural mathematical model for plastic drug resistance in heterogeneous melanoma subpopulations.** Arran Hodgkinson, Universite de Montpellier, Montpellier, France.

**B31, PR10 RNA sequencing based analysis of transposon-induced tumors reveals novel insights into disease pathogenesis.** David Largaespada, University of Minnesota, Minneapolis, MN, United States.

**B32 Targeting WNT signaling *in vivo* via Tankyrase inhibition.** Emma Schatoff, Weill Cornell Medicine, New York, NY, United States.

**B33 CRISPR/Cas9 generation of *Ret* and *Ntrk1* fusion oncogenes and novel *in vitro* sgRNA screening method.** Laura Schubert, University of Colorado, Aurora, CO, United States.

**B34 Evolutionary history of small cell lung cancer transformed from EGFR-mutant lung adenocarcinoma.** Jeonghwan Youk, Korea Advanced Institute of Science and Technology (KAIST), Daejeon, Korea, Republic Of.

**B35 An innovative *in-vivo* model of metastasizing prostate cancer using orthotopic xenografts.** Johannes Linxweiler, Department of Urology, Saarland University, Homburg Saar, Germany.

**B36 Novel immunodeficient rat models capable of supporting the growth of human tumor xenografts.** Fallon Noto, Hera BioLabs, Lexington, KY, United States.

**B37 RNAi and CRISPR/Cas9 based *in vivo* models for drug discovery.** Prem Premsrirut, Mirimus Inc., Brooklyn, NY, United States.

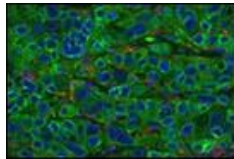
**B38 *In vivo* genome editing and organoid transplantation models of colorectal cancer and metastasis.** Jatin Roper, Koch Institute for Integrative Cancer Research at MIT, Boston, MA, United States.

**B39 Pharmacotyping patients using pancreatic cancer organoids.** Hervé Tiriach, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, United States.

**B40 Model liver cancer metastasis using 3D spheroids derived from primary tumors in liver cancer genetic mouse models.** Liqin Zhu, St. Jude Children's Research Hospital, Memphis, TN, United States.

**B41 Tumor endothelial cells as a targetable gateway that modulates access of drugs to cancer cells.** Michael Greene, Roswell Park Cancer Institute, Buffalo, NY, United States.

**B42 Targeting cancer cell CCR2 enhances synergistic immune surveillance in breast cancer.** Xue-Yan He, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, United States.



**Poster Session B**

Tuesday, September 26, 2017

6:00 p.m.-8:30 p.m.

Promenade West I-III

**B43 Molecular profiling of regulatory T cells in a genetic mouse model of lung adenocarcinoma.**

Amy Li, Koch Institute for Integrative Cancer Research at MIT, Cambridge, MA, United States.

**B44 Lysyl oxidases suppress pancreatic cancer progression and inhibit FAK and ERK signaling.**

Mario Shields, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, United States.

**B45, PR09 Clonal dynamics during breast cancer dormancy and recurrence.**

James Alvarez, Duke University, Durham, NC, United States.

**B46 Varying the inoculation site of mouse syngeneic tumors can result in aberrant inclusion of lymph node tissue at tumor harvest.**

Renee Clift, Halozyne Therapeutics, San Diego, CA, United States.

**B47 Modeling epithelial plasticity-induced erlotinib resistance in non-small cell lung cancer.**

Hailun Wang, Johns Hopkins University, School of Medicine, Baltimore, MD, United States.

**B48 Animal models in use by the NCI PREVENT Cancer Preclinical Drug Development Program.**

Altat Mohammed, National Cancer Institute, Bethesda, MD, United States.

**B49 Novel epidermal growth factor receptor inhibitors cross the blood-brain barrier and inhibit the growth of metastatic non-small cell lung cancer.**

Nicholas Cacalano, University of California at Los Angeles, Los Angeles, CA, United States.

**B50 Mouse Tumor Biology (MTB) database – An integrated data resource for GEM, inbred strains, and PDX models of human cancer.**

Debra Krupke, The Jackson Laboratory, Bar Harbor, ME, United States.

**B51 FOXO1 determines Non-Hodgkin lymphomas response to anti-CD20-based therapy.**

Abdessamad Zerrouqi, Medical University of Warsaw, Warsaw, Masowieckie, Poland.

**B52 Brusatol inhibits oral squamous cell carcinoma cells by targeting glycolytic metabolism.**

Xinyan Zhang, Beijing Stomatological Hospital & School of Stomatology, Capital Medical University, Beijing, China.