

New Horizons in Cancer Research: Delivering Cures Through Cancer Science

November 2-5, 2016 • Shanghai Marriott Parkview Hotel • Shanghai, P.R. China

Poster Session A - Thursday, November 3, 2016, 1:00-3:30 p.m.

Molecular Biology

A01 **ALK L1198F and G1201E mutations identified in anaplastic thyroid cancer patients are not ligand-independent.** Jikui Guan, Georg Wolfstetter, Joachim Siaw, Damini Chand, Fredrik Hugosson, Ruth Palmer and Bengt Hallberg. Department of Medical Biochemistry and Cell Biology, Institute of Biomedicine, Sahlgrenska Academy, University of Gothenburg, Gothenburg, Sweden.

A02 **Enhanced ulcerative colitis in alkaline sphingomyelinase (NPP7) knockout mice: A potential link to the increased risk of colitis-associated colon cancer by NPP7 deficiency.** Ping Zhang¹, Ying Chen², Siqi Zhu¹, Jintong Li¹, Ju Guan¹, Åke Nilsson³, Rui Dong Duan³. ¹Medical Laboratory Technology College, Harbin Medical University, Daqing Campus, Daqing, China, ²Gastroenterology, Tongji Hospital, Tongji University, Shanghai, China, ³Gastroenterology and Nutrition Lab, Department of Clinical Sciences, University of Lund, Lund, Sweden.

A03 **Arginine and its 'downstream' molecules can separate breast cancer from benign breast disease.** Lu Hu¹, Yu Gao¹, Yunfeng Cao^{1,2,3}, Yin Xu Zhang¹, Minghao Xu¹, Yuanyuan Wang¹, Yu Jing¹, Shengnan Guo¹, Fangyu Jing¹, Xiaodan Hu¹, Zhitu Zhu¹. ¹First Affiliated Hospital of Jinzhou Medical University, Jinzhou, P.R. China, ²Joint Center for Translational Medicine, The First Affiliated Hospital of Jinzhou Medical University, Jinzhou, P.R. China, ³Dalian Institute of Chemical Physics, Chinese Academy of Sciences, Dalian, P.R. China.

A04 **Myosin VI is overexpressed in human colorectal cancer and mediates cell growth.** Gewen Tan, Weiqiang You, Nengquan Sheng, Yi Yang, Jianfeng Gong, Jun Yan, Zhigang Wang. Department of General Surgery, Shanghai Jiao Tong University Affiliated Sixth People's Hospital, Shanghai, China.

A05 **Activation of the convergent HOTAIR-HOXC11 locus in cancer cells.** Xiaohann Qu¹, Yan Wang¹, Janarthanan Jayawickramarajah², Emily N Schmidt², Bin Shan³. ¹Washington State University ²Tulane University, New Orleans, LA, ³Washington State University ESF College of Medicine, Pullman, WA.

A06 **Integrative genomic and transcriptomic analysis for pinpointing recurrent alterations of Tudor domain genes and their clinical significance in breast cancer.** Yuanyuan Jiang, Lanxin Liu, Wenqi Shan, Zengquan Yang. Barbara Ann Karmanos Cancer Institute, Wayne State University, Detroit, MI, USA.

A07 Evaluation of the anticancer effects of sodium channel amine ligands against prostate cancer in vitro and in vivo. Zongliang Lu, Kong Ya, Jiajia Wang, Song Wei, Wang He, Hongxia Xu. Department of Nutrition, Daping Hospital and Research Institute of Surgery, Third Military Medical University, Chongqing, China.

A08 The Sall2 transcription factor, a key regulator of cell cycle progression and cellular transformation in mouse embryonic fibroblasts. Elizabeth Riffo¹, Ginessa Salgado¹, Viviana Hermosilla¹, David Escobar¹, Violeta Morín¹, Mario Galindo², Ariel Castro¹, Roxana Pincheira¹. ¹Department of Biochemistry and Molecular Biology, Faculty of Biological Sciences, Universidad de Concepción, Concepción, Chile. ²Institute of Biomedical Sciences, Faculty of Medicine, Universidad de Chile, Santiago, Chile.

Tumor Biology

A09 LDHA α , a lactate dehydrogenase A (LDHA) isoform, promotes tumor progression through energy metabolism and transcriptional regulation. Bingqing Huang, Xiaobao Dong, Yujiao Jia, Kun Ru. Department of Pathology, Institute of Hematology and Blood Diseases Hospital, Chinese Academy of Medical Sciences.

A10 Fibronectin expression is up-regulated by Akt activation in tamoxifen-resistant breast cancer cells. Daeun You¹, Myeongjin Jeon¹, Taewan Kim², Soo Youn Bae², Seung Pil Jung³, Jeong Eon Lee¹, Sangmin Kim². ¹Department of Health Sciences and Technology, SAIHST, Sungkyunkwan University, Seoul, Korea, ²Department of Surgery, Samsung Medical Center, Seoul, Korea, ³Division of Breast and Endocrine Surgery, Department of Surgery, Korea University College of Medicine, Seoul, South Korea.

A11 MicroRNA-346 facilitates cell growth and metastasis, and suppresses cell apoptosis in human non-small cell lung cancer by regulation of XPC/ERK/Snai/E-cadherin pathway. Cheng-Cao Sun¹, Shu-Jun Li^{1,2}, and De-Jia Li¹. ¹Department of Occupational and Environmental Health, School of Public Health, Wuhan University, Wuhan, P. R. China, ²Wuhan Hospital for the Prevention and Treatment of Occupational Diseases, Wuhan, P. R. China.

A12 Combination of hemocoagulase with microbubbles enhanced ultrasound cavitation and augmented ablative effect in microvasculature in rabbit VX2 liver tumor. Qian Yang¹, Peng Tang², Jianguo He¹, Liwen Liu¹, Chunmei Wang³, Fen Gu¹, Xiaodong Zhou¹. ¹Department of Ultrasound, Xijing Hospital, Xi'an, China, ²Department of Orthopedics, Xijing Hospital, Xi'an, China, ³Department of Pathology, Xijing Hospital, Xi'an, China.

A13 Compound N suppresses FAK/paxillin signaling to inhibit cell adhesion and growth in osteosarcoma cells. Kyung-Ran Park, Hyung-Mun Yun. Kyung-Hee University, Seoul, South Korea.

A14 Epigenetic dysregulation of *MIR-34A* is a critical path in *TP53*-associated human cancer susceptibility. Nardin Samuel^{1,2}, Gavin Wilson³, Mathieu Lemire³, Badr Id Said², Ana Novokmet², Thomas J. Hudson⁴, David Malkin^{1,2,5}. ¹Department of Medical Biophysics, University of Toronto, Toronto ON, ²Department of Genetics and Genome Biology, The Hospital for Sick Children, Toronto ON, ³Ontario Institute for Cancer Research, Toronto ON, ⁴AbbVie Inc., Redwood City, CA, ⁵Department of Pediatrics, The Hospital for Sick Children, Toronto, ON, Canada.

A15 RUNX 1 & RUNX 3 contribute to neurofibromagenesis. Hongzhu Liu¹, Eva Dombi², Wei Liu^{1,3}, Kwangmin Choi¹, P. Paul Liu⁴, Gang Huang¹, and Jiangqiang Wu¹. ¹Division of Experimental Hematology and Cancer Biology, Cancer and Blood Diseases Institute, Cincinnati Children's Hospital Research Foundation, Cincinnati Children's Hospital, Cincinnati, OH, USA, ²Pediatric Oncology Branch, National Cancer Institute, Bethesda, MD, USA, ³Department of Pediatric Surgery, Provincial Hospital affiliated to Shandong University, P. R. China, ⁴National Human Genome Research Institute, National Institutes of Health, Bethesda, MD, USA.

A18 Silencing of *LAPTM5* inhibited bladder cancer cell proliferation and metastasis. Liang Chen¹, Rui Cao¹, Gang Wang¹, Yu Xiao^{1,2}, Xinghuan Wang¹. ¹Zhongnan Hospital of Wuhan University, Department of Urology, Wuhan, China, ²Center for Medical Science Research, Zhongnan Hospital of Wuhan University, Wuhan, China.

A19 SORBS1 suppresses tumor metastasis and improves the sensitivity of cancer to chemotherapy drug. Lele Song, Lixing Zhan. Institute for Nutritional Sciences, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, Beijing, China.

A20 IDB enhances NK cell mediated lysis of cancer cells through activating PKC pathway. Chenyuan Gong, Xiaowen Zhu, Chao Yao, Zhongya Ni, Lixin Wang, Lulu Ni, Shiguo Zhu. Laboratory of Integrative Medicine, School of Basic Medical Science, Shanghai University of Traditional Chinese Medicine, Shanghai, China.

A21 PKC ϵ phosphorylates MIIP and promotes colorectal cancer metastasis through inhibition of p65 deacetylation. Tao Chen¹, Yu-Hui Jiang². ¹Zhongshan Hospital of Fudan University, ²First People's Hospital, School of Medicine, Shanghai Jiaotong University, Shanghai, China.

A22 Exosome transfer-induced dedifferentiation of colorectal cancer cells contributes to chemotherapy resistance. Yibing Hu, Chang Yan, Lei Mu, Kesheng Huang, Xiaolan Li, Deding Tao, Yaqun Wu, Jianping Gong, Jichao Qin. Molecular Medicine Center, Tongji Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China.

A23 **Decreased *HJURP* induced cell cycle arrest and apoptosis through ROS generation in bladder cancer cells via PPAR γ -SIRT1 pathway.** Rui Cao¹, Kaiyu Qian¹, Gang Wang¹, Xinyuan Guan², Yu Xiao^{1,3}, Xinghuan Wang¹. ¹Department of Urology, Zhongnan Hospital of Wuhan University, Wuhan, China, ²Department of Clinical Oncology, Li Ka Shing Faculty of Medicine, University of Hong Kong, Hong Kong SAR, ³Center for Medical Science Research, Zhongnan Hospital of Wuhan University, Wuhan, China.

A24 **Evaluation of combination treatment efficacy of PI3K inhibitors utilizing the labcyte echo liquid handler and echo combination screen software in PC-3 and MCF7 cell viability assays.** Charline Hsieh¹, Tim Allison¹, Linda Orren¹, John Lesnick¹, Carl Peters². ¹ Labcyte, ² BMG LABTECH, Cary, NC, USA.

A25 **The changing 50% inhibitory concentration (IC50) of cisplatin: A pilot study on the artifacts of the MTT assay and the precise measurement of density-dependent chemoresistance in ovarian cancer.** Yifeng He. Department of Obstetrics and Gynecology, Ren Ji Hospital, School of Medicine, Shanghai Jiao Tong University, Shanghai, China.

A26 **The CEA-/lo colorectal cancer cell population harbors cancer stem cells and metastatic cells.** Chang Yan^{1,2}, Yibing Hu^{1,2}, Bo Zhang^{1,2}, Lei Mu^{1,2}, Kaiyu Huang^{1,2}, Hui Zhao², Xiaolan Li², Deding Tao², Jianping Gong^{1,2}, and Jichao Qin^{1,2}. ¹Department of Surgery, Tongji Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China, ²Molecular Medicine Center, Tongji Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China.

A27 **The involvement of DNA methyltransferase 1-mediated transcription of insulin-like growth factor 2 in resistance to histone deacetylase inhibitors.** Ho-Young Lee^{1,2,3}, Rang-Woon Park⁴, Hye-Young Min^{1,2}, Su-Chan Lee¹, Kwan Hee Park^{1,3}, Seung Yeob Hyun¹, Jaebeom Cho¹, Xiao Ni⁵, Faye M. Johnson⁶, Madeleine Duvic⁵. ¹Creative Research Initiative Center for Concurrent Control of Emphysema and Lung Cancer, College of Pharmacy, Seoul National University, Seoul, Republic of Korea, ²Department of Molecular Medicine and Biopharmaceutical Science, Graduate School of Convergence Science and Technology, Seoul National University, Suwon, Gyeonggi, Republic of Korea, ³College of Pharmacy and Research Institute of Pharmaceutical Sciences, Seoul National University, Seoul, Republic of Korea, ⁴Department of Biochemistry and Cell Biology, School of Medicine, and Cell & Matrix Research Institute, Kyungpook National University, Daegu, Republic of Korea, Departments of ⁵Dermatology and ⁶Thoracic Head & Neck Medical Oncology, The University of Texas MD Anderson Cancer Center, Houston, TX, USA.

A28 **PVN inhibits JAK2/STAT3 and MAPKs signaling in osteosarcoma cells.** Kyung-Ran Park, Hyung-Mun Yun. Kyung Hee University, Seoul, South Korea.

A30 Identification of *TRA2B-DNAH5* fusion as a novel oncogenic driver in human lung squamous cell carcinoma. Jian Zhang, Fei Li, Jian Zhang, Zhaoyuan Fang, Chenchen Guo, Zhen Qin, Yuetong Wang, Yujuan Jin, Hongbin Ji. Institute of Biochemistry and Cell Biology, Shanghai Institutes for Biological Sciences, Chinese Academy of Science, Shanghai, China.

A31 Activation of YAP suppresses lung squamous cell carcinoma growth by disrupting ROS homeostasis via YAP-DNp63-GPX2 axis. Hsinyi Huang, Hongbin Ji, Wenjing Zhang. Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, Shanghai, China.

A32 ChREBP promotes initiation and progression of colorectal cancer. Ming Feng, Jian Meng, Ying Lu, Na Tian, Yakui Li, Yemin Zhu, Lifang Wu, Jie Zhong, Ping Zhang, Minle Li, Hui Ran, Xuemei Tong. Dept. of Biochemistry and Molecular Cell Biology, Institute of Medical Science, Shanghai Jiao Tong University School of Medicine, Shanghai, P.R. China.

A33 Radioresistant non-small cell lung cancer-derived exosomes promote immune evasion. Li Xie, Xianrang Song. Shandong Cancer Hospital & Institute, Shandong, China.

Clinical Research and Clinical Trials

A35 Time to lowest postoperative carcinoembryonic antigen level is predictive on survival outcome in rectal cancer. Huichuan Yu^{1,2}, Yanxin Luo^{1,2}, Xiaolin Wang², Laiyuan Li², Liangliang Bai², Zenghong Huang², Weida Lin², Shaoyong Peng², Zihuan Yang², Lei Wang^{1,2}, Meijin Huang¹, Liang Kang¹, Yanhong Deng³, Jianping Wang^{1,2}. ¹Department of Colon and Rectum Surgery, The Sixth Affiliated Hospital (Guangdong Gastrointestinal and Anal Hospital), Sun Yat-sen University, Guangzhou, Guangdong, China, ²Guangdong Provincial Key Laboratory of Colorectal and Pelvic Floor Disease, The Sixth Affiliated Hospital (Guangdong Gastrointestinal and Anal Hospital), Sun Yat-sen University, Guangzhou, Guangdong, China, ³Department of Medical Oncology, The Sixth Affiliated Hospital (Guangdong Gastrointestinal and Anal Hospital), Sun Yat-sen University, Guangzhou, Guangdong, China.

A37 The effects of genomic polymorphisms in one-carbon metabolism pathways on survival of gastric cancer patients received fluorouracil-based adjuvant therapy. Tingting Zhao, Jinfei Chen. Department of Oncology, Nanjing First Hospital, Nanjing Medical University, Nanjing, China.

A38 Transarterial ethanol ablation combined with transarterial chemoembolization for hepatocellular carcinoma with portal vein tumor thrombus. Biao-yang, Zheng-yin Liao. Department of Abdominal Oncology, West China Hospital, West China Medical School, Sichuan University, Chengdu, China.

A39 Tumor regression in 1st primary and 3rd refractory early gastric cancer cases from stand-alone oral Pga-Zn supplementation. Jinhyuk Fred Chung¹, Norihisa Yoko². ¹Synergy Point Co. Ltd., Seongnam-city, Gyeonggi-do, South Korea, ²Cheongshim International Medical Center, Gyeonggi-do, South Korea.

A40 Immunohistochemical analysis of cancer testis antigens MAGE-A1 and MAGE-A4 in high grade endometrial cancer: A retrospective study. Antonio Juretic¹, Sanja Srdelić Mihalj², Ivana Kuzmić-Prusac³, Giulio C. Spagnoli⁴, Eduard Vrdoljak⁵, Branka Petrić-Miše⁵, Vesna Čapkun⁶. ¹Department of Oncology, Zagreb University Hospital Center, and School of Medicine, University of Zagreb, Zagreb, Croatia, ²Department of Gynecology, Split University Hospital Center, Split, Croatia, ³Department of Pathology, Split University Hospital Center, Split, Croatia, ⁴Department of Biomedicine, University of Basel, Basel, Switzerland, ⁵Department of Oncology, Split University Hospital Center, Split, Croatia; ⁶Department of Nuclear Medicine, Split University Hospital Center, Split, Croatia.

A41 Clinical implications of the extent of BRAFV600E alleles in patients with papillary thyroid carcinoma. Lihua Liu¹, Jae Won Chang², Seung-Nam Jung², Hee Sung Park², Taejeong Oh³, Young Chang Lim⁴, and Bon Seok Koo². ¹Department of Medical Science, College of Medicine, Chungnam National University, Daejeon, Republic of Korea, ²Department of Otolaryngology-Head and Neck Surgery, Research Institute for Medical Science, Chungnam National University College of Medicine, Daejeon, Republic of Korea, ³Research and Development Center, GenomicTree, Inc. Daejeon Bioventure Town, Daejeon, Republic of Korea, ⁴Department of Otolaryngology-Head and Neck Surgery, Research Institute for Medical Science, Konkuk University College of Medicine, Seoul, Republic of Korea.

A42 Predictive factors of lateral lymph node recurrence after total thyroidectomy and central neck dissection in patients with papillary thyroid cancer. Lihua Liu¹, Jae Won Chang², Bon Seok Koo². ¹Department of Medical Science, College of Medicine, Chungnam National University, Daejeon, Republic of Korea, ²Department of Otorhinolaryngology-Head and Neck Surgery, Research Institute for Medical Sciences, Chungnam National University College of Medicine, Daejeon, Republic of Korea.

A43 B cell precursor acute lymphoblastic leukemia (ALL) shows similar drug response in PDX mice and the corresponding patient. Wei Ye¹, Zuliang Zheng², Jingxuan Liu², Weilong Ye², Peng Li¹. ¹Guangzhou Institutes of Biomedicine and Health, Chinese Academy of Sciences, Guangzhou, China, ²Chongqing Hichuang Biomedical Corp., Chongqing, China.

A44 Heterogeneity of chemosensitivity of bladder cancer by ex vivo ATP-tumor chemosensitivity assay (ATP-TCA). Wenqing Ge², Jian Chi¹, Zheng Wang¹, Jian Shen¹, Jinxian Pu². ¹Chongqing Hichuang Biomedical Corp., Chongqing, China, ²The first Affiliated Hospital of Soochow University, Jiangsu, China.

A45 A pilot safety study of allogeneic nature killer cells to treat the recurrence of hepatocellular carcinoma after transplantation. Guoying Wang, Qi Zhang, Wenjie Chen, Huanxian Luo, Yang Yang, Guihua Chen. Liver Transplantation Center, the Third Affiliated Hospital of Sun Yat-sen University, Guangzhou, China.

A46 Scalable approach for whole-exome sequencing of cell-free DNA from patients with metastatic cancer. Viktor A. Adalsteinsson^{1,2,8,9}, Gavin Ha^{1,3,4,8}, Samuel S. Freeman^{1,4,8}, Atish D. Choudhury³, Daniel G. Stover^{3,4}, Heather A. Parsons^{3,4}, Gregory Gydush¹, Sarah C. Reed¹, Denis Loginov^{1,2}, Dimitri Livitz¹, Daniel Rosebrock^{1,4}, Ignaty Leshchiner¹, Jaegil Kim¹, Chip Stewart¹, Mara Rosenberg¹, Joshua M. Francis^{1,3}, Cheng-Zhong Zhang^{1,3,4}, Ofir Cohen^{1,3}, Coyin Oh¹, Huiming Ding², Paz Polak¹, Max Lloyd³, Sairah Mahmud³, Karla Helvie³, Margaret S. Merrill³, Rebecca A. Santiago³, Edward P. O'Connor³, Seong H Jeong³, Rachel Leeson², Rachel M. Barry², Joseph F Kramkowski³, Zhenwei Zhang³, Laura Polacek³, Jens G. Lohr^{1,3}, Nelly M. Oliver³, Lori Marini³, Adrienne G. Waks^{3,5}, Lauren C. Harshman³, Sara M. Tolaney³, Eliezer M. Van Allen^{1,3,4,5}, Eric P. Winer³, Nancy U. Lin³, Mari Nakabayashi^{3,4}, Mary-Ellen Taplin³, Cory M. Johannessen¹, Levi A. Garraway^{1,3,4,5,7}, Todd R. Golub^{1,3,4,7}, Jesse S. Boehm¹, Nikhil Wagle^{1,3,4}, Gad Getz^{1,6,9}, J. Christopher Love^{1,2,9}, Matthew Meyerson^{1,3,4,5,9}. ¹Eli and Edythe L. Broad Institute of MIT and Harvard, Cambridge, Massachusetts, USA, ²Koch Institute for Integrative Cancer Research, Massachusetts Institute of Technology, Cambridge, Massachusetts, USA, ³Dana-Farber Cancer Institute, Boston, Massachusetts, USA, ⁴Harvard Medical School, Boston, Massachusetts, USA, ⁵Brigham and Women's Hospital, Boston, Massachusetts, USA, ⁶Massachusetts General Hospital, Boston, Massachusetts, USA, ⁷Howard Hughes Medical Institute, Chevy Chase, Maryland, USA. ⁸These authors contributed equally to this work. ⁹These authors jointly directed this work.

Immunology

A47 A tumor-penetrating recombinant protein anti- EGFR-iRGD enhance efficacy of antigen-specific CTL in gastric cancer *in vivo*. Huizi Sha, Shu Su, Naiqing Ding, Baorui Liu. The Comprehensive Cancer Center of Drum- Tower Hospital, Medical School of Nanjing University & Clinical Cancer Institute of Nanjing University, Nanjing, China.

A49 A panel of well-characterized syngeneic models for *in vivo* screening: MuScreenTM. Ying Jin, Lan Zhang, Juan Zhang, Eric Murphy, Zhongliang Li, Meng Qiao, Qian Shi. Cancer Pharmacology, Crown Bioscience, Inc., Santa Clara, CA, USA.

A50 Immunophenotyping in immunotherapy development. Annie Xiaoyu An^{1,2}, Bin Chen¹, Jie Cai¹, Zhun Wang¹, Davy Ouyang¹, Henry Q.X. Li^{1,2}. ¹Crown Bioscience, Inc., Santa Clara, CA, USA, ²State Key Laboratory of Natural and Biomimetic Drugs, Peking University, Beijing, China.

A51 R-Ras regulates murine T cell functions and implicates a role in anti-tumor immunity. Xiaocai Yan¹, Mingfei Yan², Yihe Guo³, Gobind Singh⁴, Yuhong Chen³, Mei Yu³, Demin Wang³, Cheryl A. Hillery¹, Wai Nam Liu², and Andrew M. Chan². ¹Department of Pediatrics, The Medical College of Wisconsin, Milwaukee, Wisconsin, U.S.A., ²School of Biomedical Sciences, The Chinese University of Hong Kong, Shatin, Hong Kong SAR, ³Blood Research Institute, BloodCenter of Wisconsin, Milwaukee, Wisconsin, U.S.A., ⁴Department of Oncological Sciences, The Mount Sinai School of Medicine, New York, New York, U.S.A.

A52 Loss of MondoA in regulatory T cells promotes colorectal carcinogenesis. Ying Lu¹, Yangyang Li¹, Na Tian¹, Xuerui Luo¹, Bin Li¹, Xuemei Tong¹. ¹Shanghai Key Laboratory for Tumor Microenvironment and Inflammation, Shanghai Jiao Tong University School of Medicine, Department of biochemistry and Molecular Cell Biology, Shanghai, China.

A53 A humanized anti-CD24 antibody targeting hepatocellular carcinoma with high affinity and reduced immunogenicity. Fumou Sun¹, Tong Wang¹, Zhaoxiong Ma¹, Yang Wang¹, Jiahao Jiang¹, Yuexing Ma¹, Min Wang¹, Juan Zhang². ¹School of Life Science & Technology, China Pharmaceutical University, ²China Pharmaceutical University, Nanjing, China.

A54 In vivo efficacy models for development of immuno-oncology drugs. Yun Zhang, Yanan Guo, Jichun Wen, Min Wu, Youqiang Yu, Yunping Wen, Xiaoming Du, Shuwen Huang, Yuelei Shen, Yuanhao Li. Beijing Biocytogen Co Ltd., Beijing, China.

A55 Depletion of myeloid-derived suppressor cells potentiates robust anti-tumor immunity against metastasis of IL17A-enriched mammary carcinoma. Bassel Dawod^{1,2}, Simon Gebremeskel¹, Chi Yan^{1,2}, Brent Johnston^{2,3,4,6}, David Hoskin^{2,3,4,6}, Jun Wang^{1,2,3,5,6}. ¹Canadian Center for Vaccinology, ²Department of Microbiology & Immunology, ³Department of Pediatrics, ⁴Department of Pathology, Faculty of Medicine, Dalhousie University, ⁵IWK Health Centre, ⁶Beatrice Hunter Cancer Research Institute, Halifax, Nova Scotia, Canada.

A56 Notch-Wnt interaction regulates the proliferation of Kupffer cells in the progression of hepatocellular carcinoma(HCC) in mice. Yuchen Ye^{1,2}, Fei He^{1,2}, Lin Wang¹, Shiqian Liang², Junlong Zhao², Pengfei Ma^{1,2}, Kefeng Dou¹, Hua Han², Hongyan Qin². ¹Department of Hepatobiliary Surgery, Xijing Hospital, The Fourth Military Medical University, Xi'an, China, ²Department of Medical Genetics and Developmental Biology, The Fourth Military Medical University, Xi'an, China.

A57 Quantification of natural killer cell-mediated ADCC using celigo imaging cytometry. Ting Zhang¹, Ruwei Li¹, Mingwei Sun¹, Leo Chan¹, Jiaying Hao², and Tao Zhao². ¹Nexcelom Bioscience Instruments (Shanghai) Co. Ltd., Shanghai, China, ²GenScript (Nanjing) Co., Ltd., Nanjing, Jiangsu, China.

A58 Evaluation of immune functions and immune checkpoint expression profiles in tumor microenvironment. Tangping Li, Na Li, Jeff Kim, Yuling Luo, Xiao-Jun Ma, Emily Park. Advanced Cell Diagnostics Inc., Newark, CA, USA.

Cellular Biology

B01 Activation transcription factor-4 induced by ionizing radiation regulates vascular endothelial growth factor-A transcription in human vascular endothelial cells. Eun Ju Kim¹, Jong Kyung Sonn², and Young-Bin Lim¹. ¹Division of Basic Radiation Bioscience, Korea Institute of Radiological and Medical Sciences, Seoul, Republic of Korea. ²Department of Biology, College of Natural Sciences, Kyungpook National University, Daegu, Republic of Korea.

B02 Semaphorin 3C drives invasiveness in prostate cells through epithelial-to-mesenchymal transition and stemness. Kevin J. Tam^{1,2}, Daniel H. F. Hui¹, Wilson W. Lee¹, Mingshu Dong¹, Ivy Z. F. Jiao¹, Shahram Kosravi¹, Ario Takeuchi¹, Jim W. Peacock¹, Tabitha Tombe¹, Larissa Ivanova¹, Michael E. Cox^{1,3}, Martin E. Gleave^{1,3}, and Christopher J. Ong^{1,2}. ¹Vancouver Prostate Centre, Vancouver General Hospital, Vancouver, BC, Canada, ²Department of Surgery, University of British Columbia, Vancouver, BC, Canada, ³Department of Urologic Sciences, University of British Columbia, Vancouver, BC, Canada.

Tumor Biology

B03 Intratumor stromal proportion confers aggressive phenotype of gastric signet ring cell carcinomas. Dakeun Lee¹, In-Hye Ham², Hoon Hur³. ¹Department of Pathology, Ajou University School of Medicine ²Department of Surgery, Ajou University School of Medicine³. ³Ajou University School of Medicine, Gyeonggi-do, South Korea.

B04 Targeted sequencing of plasma ctDNAs and primary tumors identified heterogeneity and homogeneity in advanced gastric cancer. Jing Gao, Haixing Wang, Yanyan Li, Jun Zhou, Xicheng Wang, Lin Shen. Department of Gastrointestinal Oncology, Key laboratory of Carcinogenesis and Translational Research (Ministry of Education/Beijing), Peking University Cancer Hospital and Institute, Beijing, China.

B05 Targeted next-generation sequencing identified genomic alterations of endoscopic biopsies in advanced gastric cancer. Sai Ge, Jiajia Yuan, Jiayuan Wang, Yanyan Li, Jing Gao, Lin Shen. Beijing, Peking University Cancer Hospital and Institute, Beijing, China.

B07 CASZ1 is a novel promoter of metastasis in ovarian cancer. Yi-Ying Wu¹, Yuan-Jhe Chuang¹, Yuh-Ling Chen², Tse-Ming Hong³, Keng-Fu Hsu⁴. ¹Graduate Institute of Clinical Medicine, ²Institute of Oral Medicine, College of Medicine, National Cheng Kung University, ³Graduate Institute of Clinical Medicine, College of Medicine, National Cheng Kung University, ⁴Dept. OBS GYN, National Cheng Kung Univ. Hospital, Tainan City, Taiwan.

B08 Functional diagnostics for cancer precision medicine using patient-derived cell models. Xuefeng Liu. Department of Pathology, Center for Cell Reprogramming, Georgetown University Medical Center, Washington DC, USA.

B09 Activation of aryl hydrocarbon receptor leads to resistance to targeted therapy through contextual phosphorylation of Src by Jak2 kinase. Mingxiang Ye^{1,2}, Yong Zhang¹, Jiān Zhang², Jian Zhang¹, ¹ Department of Pulmonary Medicine, Xijing Hospital, ² State Key Laboratory of Cancer Biology, Department of Biochemistry and Molecular Biology, Fourth Military Medical University, Xi'an, China.

B10 Extracellular matrix remodeling triggered by lysyl oxidase inhibition promotes the lung adenocarcinoma to squamous cell carcinoma transition independent of LKB1 status. Shun Yao^{1,2}, Xiangkun Han¹, Hongbin Ji^{1,3}. ¹Institute of Biochemistry and Cell Biology, Shanghai Institutes for Biological Sciences, Chinese Academy of Science, Shanghai, China. ²University of Chinese Academy of Sciences, Beijing, China. ³School of Life Science and Technology, Shanghai Tech University, Shanghai, China.

B11 The roles of circular RNA 0000096 in gastric cancer occurrence. Junming Guo, Peifei Li, Shengcan Chen, Xiaoyan Mo, Tianwen Li, Bingxiu Xiao, Rui Yu. Department of Biochemistry and Molecular Biology, and Zhejiang Key Laboratory of Pathophysiology, Ningbo University School of Medicine, Ningbo, China.
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B12 lncRNA panel to identify lung adenocarcinoma at an early stage in bronchial brushing specimens. Yanan Bai^{1,2}, Zule Cheng¹, Zhenhua Wu¹, Qunying Hong³, Dawei Yang³, Chunxue Bai³, Qinghui Jin¹, Jianlong Zhao¹, Hongju Mao¹. ¹State Key Laboratory of Transducer Technology, Shanghai Institute of Microsystem and Information Technology, Chinese Academy of Sciences, Shanghai 200050, China. ² University of Chinese Academy of Sciences, Beijing, China. ³ Department of Pulmonary Medicine, Zhongshan Hospital, Fudan University, Shanghai, China.

B14 Intracellular delivery of SOCS3 suppresses hepatocellular carcinoma progression: Improved cell-permeable SOCS3. Kuysook Lee, Dahyun Lee, Youngsil Choi and Daewoong Jo. Oncology Lab, Biological Activity Evaluation Lab, Cellivery R&D Institute, Cellivery Therapeutics, Inc., Mapo Gu, Seoul, Korea.

- B15 Intracellular delivery of SOCS3 suppresses pancreatic cancer progression: Improved cell-permeable SOCS3.** Youngsil Choi, Younseo Hwang, Kuysook Lee and Daewoong Jo. Oncology Lab & Biological Activity Evaluation Lab, Cellivery R&D Institute, Cellivery Therapeutics, Inc., Mapo Gu, Seoul, Korea.
- B16 Intracellular delivery with TFF1 suppresses gastric cancer progression: Cell-permeable TFF1.** Eunkyung Lee, Iseul Kwon, Youngsil Choi and Daewoong Jo. Oncology Lab & Biological Activity Evaluation Lab, Cellivery R&D Institute, Cellivery Therapeutics, Inc., Mapo Gu, Seoul, Korea.
- B17 Different effects of miR-512-3p and miR-512-5p in colorectal cancer invasion and metastasis.** Jie Hong, Tingting Yan, Linlin Ren, Haoyan Chen, Jing-yuan Fang. GI Division, Shanghai Jiao-Tong University School of Medicine Renji Hospital, Shanghai Institution of Digestive Disease; Key Laboratory of Gastroenterology & Hepatology, Ministry of Health (Shanghai Jiao-Tong University); State Key Laboratory of Oncogene and Related Genes., Shanghai, China.
- B19 Intracellular delivery with SOCS3 suppresses lung cancer progression: Improved cell-permeable SOCS3.** Jihye Kim, Chohyun Kim, Youngsill Choi, Daewoong Jo. Oncology Lab & Biological Activity Evaluation Lab, Cellivery R&D Institute, Cellivery Therapeutics, Inc., Mapo Gu, Seoul, Korea.
- B20 Intracellular delivery with GPX7 suppresses oesophageal and gastric cancer progression: Cell-Permeable GPX7.** Soyeong Lee, Kyoungsoo Kim, Youngsil Choi and Daewoong Jo. Oncology Lab & Biological Activity Evaluation Lab, Cellivery R&D Institute, Cellivery Therapeutics, Inc., Mapo Gu, Seoul, Korea.
- B21 PUR α overexpression promotes esophageal cancer cells migration and invasion through the epithelial-mesenchymal transition.** Jiajia Gao, Wei Li, Zhimin Guo, Yulin Sun and Xiaohang Zhao. State Key Laboratory of Molecular Oncology, National Cancer Center/Cancer Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China.
- B22 Intracellular delivery with SOCS3 suppresses solid tumor progression: Improved cell-permeable SOCS3.** Seulmee Shin, Keunhyung Cho, Changwoo Joo, Youngsil Choi and Daewoong Jo. Oncology Lab & Biological Activity Evaluation Lab, Cellivery R&D Institute, Cellivery Therapeutics, Inc., Mapo Gu, Seoul, Korea.
- B23 DOT1L is a melanocyte lineage specific caretaker tumor suppressor.** Rutao Cui. Boston University, Boston, MA.
- B24 Intracellular delivery with SOCS3 suppresses angiogenesis in solid tumors: Improved cell-permeable SOCS3.** Jungwoo Han, Wonheum Nah, Youngsil Choi and Daewoong Jo. Oncology Lab & Biological Activity Evaluation Lab, Cellivery R&D Institute, Cellivery therapeutics, Inc., Mapo Gu, Seoul, Korea.

B25 Establishing a reference point: the development of a cfDNA simulate for common cancer hot spots. Chia-hui Lin¹, Li Weng¹, Li Zhang¹, Yi Huang¹, Hongyan Wang¹, Jinzhong Chen², Johnny Sun¹, Grace Q. Zhao¹, Shengrong Lin¹, Kang Ying¹. ¹AccuraGen, ²Fudan University, Shanghai, China.

B26 A high-throughput image cytometry-based screening method for the cytotoxic effect of drug compounds on 3D tumor spheroid. Ting Zhang, Ruwei Li, Mingwei Sun, Yulong Cheng, Sarah Kessel, Olivier Déry, Scott Cribbes, Dmitry Kuksin, and Leo L. Chan. Nexcelom Bioscience Instruments (Shanghai) Co. Ltd., Shanghai, China.

B27 Novel kinase regulators of cancer metastasis: Epithelial-mesenchymal Transition and essential kinases. Linna Li¹, Meixiang Sang¹, Mohit Hulsurkar¹, Haiping Song¹, Nanping Ai¹, Dayong Zheng¹, Randolph Watnick², Michael Ittmann³, Jianming Xu⁴, Ed Harlow⁵, Wenliang Li¹. ¹Brown Foundation Institute of Molecular Medicine, University of Texas Health Science Center at Houston, USA, ²Vascular Biology Program, Department of Surgery, Children's Hospital Boston, Boston, USA, ³Department of Pathology and Immunology, Baylor College of Medicine, and Michael E. DeBakey VAMC, Houston, TX, USA, ⁴Department of Molecular and Cell Biology, Baylor College of Medicine, Houston, TX, USA, ⁵Department of Biological Chemistry and Molecular Pharmacology, Harvard Medical School, Boston, USA.

B28 Cancer stem cells: A promising field of study in cancer therapy and the key to tumor relapse. Tina S Homayouni¹, Reza Bayat Mokhtari^{1,3,5}, Zhenya Morgatskaya¹, Narges Baluch⁴, Sushil Kumar¹, Herman Yeger^{1,2,3}. ¹Developmental and Stem Cell Biology, The Hospital for Sick Children; Toronto, Ontario, Canada; ²Department of Paediatric Laboratory Medicine, The Hospital for Sick Children, Toronto, Ontario, Canada; ³Institute of Medical Science, University of Toronto, Toronto, Ontario, Canada; ⁴Department of Pathology and Molecular Medicine, Queen's University, Kingston, Ontario, Canada; ⁵Department of Immunology and Infectious Diseases, The Forsyth Institute, Cambridge, MA, USA.

B29 Combination therapy approaches open new horizons in cancer treatment. Zhenya Morgatskaya¹, Reza Bayat Mokhtari^{1,3,5}, Tina S Homayouni², Narges Baluch⁴, Sushil Kumar¹, Herman Yeger^{1,2,3}. ¹Developmental and Stem Cell Biology, The Hospital for Sick Children; Toronto, Ontario, Canada, ²Department of Paediatric Laboratory Medicine, The Hospital for Sick Children, Toronto, Ontario, Canada, ³Institute of Medical Science, University of Toronto, Toronto, Ontario, Canada, ⁴Department of Pathology and Molecular Medicine, Queen's University, Kingston, Ontario, Canada, ⁵Department of Immunology and Infectious Diseases, The Forsyth Institute, Cambridge, MA, USA.

B30 Validation of a high-throughput wound healing assay using 3D cell patterning and automated, kinetic imaging Jingzhe Yang. BioTek Instrument, Shanghai, China.

B31 Detection and visual localization of individual cellular proteins using a proximity ligation assay. Jingzhe Yang. BioTek Instrument, Shanghai, China.

B32 The phenomenon of tumor specifically expressed, evolutionarily novel (TSEEN) genes in tumors. A.P.Kozlov. Biomedical Center and Peter the Great St. Petersburg Polytechnic University, St. Petersburg, Russia.

Bioinformatics and Computational Biology

B34 Development of molecular pathology for HCC diagnosis and subtyping. Sheng Guo¹, Wubin Qian¹, Jia Xue¹, Jie Cai¹, Henry Q.X. Li^{1,2} ¹Crown Bioscience, Inc., Santa Clara, CA, ²State Key Laboratory of Natural and Biomimetic Drugs, Peking University.

B36 A personalized cancer reference genome for precision medicine. Wanping Lee¹, Goran Rakocevic², James Spencer³, Michele Mattioni³, Amit Jain³, Deniz Kural¹. ¹R&D, Seven Bridges Genomics, ²R&D, Seven Bridges Genomics, Belgrade, ³R&D, Seven Bridges Genomics, London.

Chemistry

B38 Novel pyrrolomycins as potential anticancer agents in a MYCN amplified neuroblastoma. Rongshi Li, Dachang Bai, Don Coulter, Yan Liu, Zhen Qiao, Jerry Li, Zunhua Yang, Nagsen Gautam, Yazen Alnouti, John G. Sharp, Timothy R. McGuire. UNMC Center for Drug Discovery, Department of Pharmaceutical Sciences, and Pediatric Cancer Research Program, Fred and Pamela Buffet Cancer Center, College of Pharmacy and Medicine, University of Nebraska Medical Center, Omaha, Nebraska, USA.

Epidemiology

B39 Colon cancer susceptibility variant identified from a genome-wide association study in African Americans. Hansong Wang¹, Stephanie L. Schmit^{2,3}, Christopher A. Haiman³, Temitope O. Keku⁴, Ikuko Kato⁵, Julie R. Palmer⁶, David van den Berg³, Lynne R. Wilkens¹, Terrilea Burnett¹, David V. Conti³, Fredrick R. Schumacher⁷, Lisa B. Signorello^{8,9}, William J. Blot^{8,9}, Krista Zanetti¹⁰, Curtis Harris¹⁰, Mala Pande¹¹, Sonja I. Berndt¹², Polly A. Newcomb¹³, Dee W. West¹⁴, Robert Haile¹⁵, Daniel O. Stram³, Jane C. Figueiredo³, Loïc Le Marchand¹. ¹ Epidemiology Program, University of Hawaii Cancer Center, Honolulu, HI, ² Departments of Cancer Epidemiology and Gastrointestinal Oncology, Moffitt Cancer Center, Tampa, FL, ³ Department of Preventive Medicine and Norris Comprehensive Cancer Center, Keck School of Medicine, University of Southern California, Los Angeles, CA, ⁴ Center for Gastrointestinal Biology and Disease, University of North Carolina, Chapel Hill, NC, ⁵ Wayne State University Karmanos Cancer Institute, Detroit, MI, ⁶ Slone Epidemiology Center, Boston University School of Public Health, Boston, MA, ⁷ Case Western Reserve University, Cleveland, OH, ⁸ International Epidemiology Institute, Rockville, MD, ⁹ Division of Epidemiology, Department of Medicine, Vanderbilt Epidemiology Center and Vanderbilt-Ingram Cancer Center, Vanderbilt University, Nashville, TN, ¹⁰ Laboratory of Human Carcinogenesis, National Cancer Institute, National Institutes of Health, Bethesda MD, ¹¹ Department of Epidemiology, the University of Texas M. D. Anderson Cancer Center, Houston, TX, ¹² Division of Cancer

Epidemiology and Genetics, National Cancer Institute, National Institutes of Health, Bethesda, MD, ¹³ Fred Hutchinson Cancer Research Center, Seattle, WA. ¹⁴ Cancer Prevention Institute of California, Fremont, CA. ¹⁵ Stanford Cancer Institute, Stanford, CA.

Experimental Molecular Therapy

B42 Assessment of dianhydrogalactitol in the treatment of relapsed or refractory non-small cell lung cancer. Anne Steino¹, Guangan He², Beibei Zhai³, Jeffrey A. Bacha¹, Shun Lu⁴, Dennis M. Brown¹, Mads Daugaard³ and Zahid H. Siddik². ¹DelMar Pharmaceuticals, Inc., Vancouver, Canada and Menlo Park, CA, USA; ²The University of Texas MD Anderson Cancer Center, Houston, TX; ³Vancouver Prostate Centre, Vancouver, Canada; ⁴Shanghai Lung Cancer Center, Shanghai, China.

B43 Valproic acid potentiates efficacy of paclitaxel against triple-negative breast cancer. Weimin Zuo¹, Tingting Lin¹, Rong Lin¹, Ling Zhu¹, Lianghu Huang¹, Lin Deng², Bing Wang², Lie Wang², Jianming Tan¹, and Shuiliang Wang¹. ¹Fujian Key Laboratory of Transplant Biology, ²Department of General Surgery, Fuzhou General Hospital, Xiamen University, Fuzhou, Fujian, China.

B44 Design, synthesis, and biological evaluation of novel pyrazolo [1,5-a] pyrimidine derivatives as potent TRPC6 inhibitors. Yanting Yang¹, Chunrong Qu², Guangyao Lv¹, Xiaoxia Xie¹, Jingwei Tian¹, Fenghua Fu¹, Xuechuan Hong², Hongbo Wang¹. ¹School of Pharmacy, Key Laboratory of Molecular Pharmacology and Drug Evaluation (Yantai University), Ministry of Education, Yantai, China; ²State Key Laboratory of Virology, Key Laboratory of Combinatorial Biosynthesis and Drug Discovery Wuhan University School of Pharmaceutical Sciences, Wuhan, China.

B45 Compound A ameliorates irinotecan-induced diarrhea without compromising its anti-tumor activity *in vivo*. Daokun Guang, Jingwen Zhang, Lei Lei, Fenghua Fu, Hongbo Wang. Key Laboratory of Molecular Pharmacology and Drug Evaluation (Ministry of Education), Collaborative Innovation Center of Advanced Drug Delivery System and Biotech Drugs in Universities of Shandong, School of Pharmacy, Yantai University, Yantai, China.

B46 Applying a rational antibody development platform to the generation of validated therapeutic antibodies for gastric, breast and colorectal cancer. Jerome D Boyd-Kirkup, Maximilian Klement, Dipti Thakkar, Gloria Fuentes, Piers J Ingram. Hummingbird Bioscience, Singapore, Singapore.

B47 Synergistically improved antitumor treatment effects of PD-1 adjuvant immunotherapy after surgery in 4T1 breast tumor mouse model. Yang Du, Jie Tian. Key Laboratory of Molecular Imaging of Chinese Academy of Sciences, Institute of Automation, Chinese Academy of Sciences, Beijing, China.

- B48 Efficient growth suppression of pancreatic cancer PDX by fully human anti-mesothelin CAR-T cells.** Jiang Hua¹, Bo Song², Peng Wang², Qixiang Li³, Zonghai Li^{1,2}. ¹State Key Laboratory of Oncogenes and Related Genes, Shanghai Cancer Institute, Renji Hospital, Shanghai Jiaotong University School of Medicine, Shanghai, ²CARsgen Therapeutics, Xuhui District, Shanghai, China, ³Crown Biosciences, Inc., Santa Clara, CA.
- B49 Research of the biological mechanisms and therapeutic effects of recombinant adenoviral p53 on human malignant melanoma.** Shan-Wei Shi^{1,2}, Mao-Quan Li^{1,2}, Li-Guang Lu^{1,2}, Long-Jiang Li^{1,2}, Yi Li^{1,2}. ¹State Key Laboratory of Oral Disease, Sichuan University, Chengdu, China, ²Department of Head and Neck oncology, West China Hospital of Stomatology, Sichuan University, Chengdu, PR China.
- B50 Target DNA-PK to eradicate cancer stem cells.** Yanling Wang, Param-Puneet Butter, Yi Fan. Department of Radiation Oncology, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, USA.
- B51 EGFR tyrosine kinase inhibitors sensitized TRAIL-mediated cell death by regulating surface DR5 and c-FLIP expression in human hepatocellular carcinoma cells.** Wei-Hsuan Wu, Yi-Ching Shen, Chia-Yun Lin, Jun-Jie Chen. Tumor Research Laboratory, Department of Medical Research, E-Da cancer hospital, Kaohsiung City, Taiwan.
- B52 Development of therapeutics for renal cell carcinoma with rhabdoid features.** Chow Nan-Haw^{1, 2, 3}, Song Hong-Fang,¹ Yuh-Shyan Tsai,⁴ Hong-Yi Chang⁴. ¹Institute of Molecular Medicine, School of Medicine, National Cheng Kung University, Tainan, Taiwan,²Institute of Basic Medical science, National Cheng Kung University, Tainan, Taiwan,³Department of Pathology, College of Medicine, National Cheng Kung University, Tainan, Taiwan,⁴Department of Urology, College of Medicine, National Cheng Kung University, Tainan, Taiwan.
- B53 Akt signaling blockade sensitizes cells to proteasome inhibition induced death in histiocytic sarcoma – a dog model for the human disease.** Qizhi Qin¹, Irving C. Allen¹, Rafael V. Davalos², Nikolaos G Dervisis¹. ¹Virginia Maryland Regional College of Veterinary Medicine, ²School of Biomedical Engineering and Sciences Virginia Tech – Wake Forest University, Winston-Salem, NC.
- B54 The activity of asymmetrical marinopyrroles and novel pyrrolomycin derivatives in a MYCN amplified neuroblastoma cell line: Potential mechanism of cell death.** Timothy McGuire, Dachang Bai, Don Coulter, Zhen Qiao, Jerry Li, Zunhua Yang, Yan Liu, John Sharp, Rongshi Li. UNMC Center for Drug Discovery, Department of Pharmaceutical Sciences, and Pediatric Cancer Research Program, Fred and Pamela Buffet Cancer Center, College of Pharmacy and Medicine, University of Nebraska Medical Center, Nebraska Medical Center, Omaha, Nebraska, USA.

B55 Tumors with class 3 BRAF mutants are RAS dependent and sensitive to its inhibition. Zhan Yao¹, Rona Yaeger², Antony Tao⁹, Neilawattie M.Torres¹, Matthew T. Chang^{4, 6, 10}, Matthias Drosten⁸, Huiyong Zhao¹, Linde Miles^{1, 11}, Naomi M. Campbell⁷, Elisa de Stanchina¹, David B. Solit^{2, 4, 5}, Mariano Barbacid⁸, Barry S. Taylor^{4, 5, 6} and Neal Rosen^{1, 2, 3}. ¹Program in Molecular Pharmacology, ²Department of Medicine, ³Center for Mechanism Based Therapeutics, ⁴Human Oncology and Pathogenesis Program, ⁵Center for Molecular Oncology, ⁶Department of Epidemiology and Biostatistics, ⁷Department of Radiology, Memorial Sloan-Kettering Cancer Center, New York, NY, USA, ⁸Molecular Oncology Programme, Centro Nacional de Investigaciones Oncológicas (CNIO), Melchor Fernández Almagro 3, Madrid, Spain, ⁹Center for Neural Science, College of Arts and Sciences, New York University, New York, NY, , USA, ¹⁰Department of Bioengineering and Therapeutic Sciences, University of California, San Francisco, CA, USA, ¹¹Anti-Cancer Drug Development Graduate Training Program, Department of Pharmacology and Molecular Sciences, Johns Hopkins University, Baltimore, MD, USA.

B56 Identification of potential chemotherapy resistant markers for glioblastoma. Fengfei Wang¹, Shuang Zhou¹, Jonathan Teston^{1, 2, 3}, Yanfeng Gao⁴, Xin Shen¹, Touradj Solouki⁵, Batool Kirmani^{5, 6}, Jason H. Huang^{1, 7}, Erxi Wu^{1, 7, 8}, Ekokobe Fonkem^{1, 6, 7}. ¹Neuroscience Institute, Baylor Scott & White Health, Temple, Texas; ²Temple College, Temple, Texas; ³Texas Bioscience Institute, Temple, Texas; ⁴Department of Anesthesiology, First Affiliated Hospital, Xi'an Jiaotong University, Xi'an, China; ⁵Department of Chemistry and Biochemistry, Baylor University, Waco, Texas; ⁶Department of Neurology, Baylor Scott & White Health, Temple, Texas; ⁷Department of Surgery, Texas A & M University Health Science Center College of Medicine, Temple, Texas; ⁸Department of Pharmaceutic Sciences, Texas A & M University Health Science Center, College of Pharmacy, College Station, Texas.

B57 Identification of new mutations in familial glioblastoma. Fengfei Wang^{1, 2}, Edana Stroberg³, Sanjib Mukherjee⁴, Shi-hua Xiang⁵, Linden Morales³, Arundhati Rao³, M Karen Newell-Rogers⁴, Jason H. Huang^{1, 4}, Erxi Wu^{1, 4, 6}, Ekokobe Fonkem^{2, 4}. ¹Department of Neurosurgery, Baylor Scott & White Health, Temple, TX, ²Department of Neurology, Baylor Scott & White Health, Temple, TX, ³Department of Pathology, Baylor Scott & White Health, Temple, TX, ⁴Department of Surgery, Texas A & M Health Science Center College of Medicine, Temple, TX, ⁵Nebraska Center for Virology, School of Veterinary Medicine and Biomedical Sciences, University of Nebraska-Lincoln, Lincoln, NE, ⁶Department of Pharmaceutic Sciences, Texas A & M Health Science Center, College of Pharmacy, College Station, TX.

Prevention Research

B58 Sulforaphane Inhibits c-Myc-Mediated Prostate Cancer Stem-Like Traits. Shivendra V. Singh. Pharmacology & Chemical Biology, University of Pittsburgh Cancer Institute, University of Pittsburgh School of Medicine, Pittsburgh, PA, USA.

B59 Self-nano emulsifying Drug Delivery Systems (SNEDDS) of curcumin increases its cytotoxicity on various breast cancer cell lines. Retno Murwanti¹, Ronny Martien ², Leni Ritmaleni ². ¹Universitas Gadjah Mada, ²Faculty of Pharmacy, Universitas Gadjah Mada, Yogyakarta, Indonesia.