



American Association for Cancer Research (AACR) Virtual Annual Meeting II Monday, June 22-Wednesday, June 24, 2020

All session times are in US EDT

(Case CCC Members in Bold, presenters underlined)

Session Chairs

Jennifer S. Yu. The Cleveland Clinic, Cleveland, OH.

Chairperson: Session ED11 – Cancer Stem Cells and Therapeutic Resistance

June 22, 2020, 3:45 PM - 5:15 PM; Educational Session; Nervous System Cancer - Tumor Biology

Shlomo A. Koyfman. The Cleveland Clinic, Cleveland, OH

Chairperson: Session ED25 – HPV and Cancer: New Insights into Carcinogenesis and Therapy
June 23, 2020, 3:00 PM – 5:00 PM; Educational Session; Head and Neck Cancer, Gynecological Cancer Tumor Biology, Immunology, Molecular and Cellular Biology/Genetics, Clinical Trials, Survivorship

Ahmad M. Khalil. Case Western Reserve Univ. School of Med., Cleveland, OH Chairperson: Session ED07 — Noncoding RNA in Cancer Progression

June 23, 2020, 3:00 PM — 5:00 PM; Educational Session; Breast Cancer, Gastrointestinal Cancer, Skin Cancer - Molecular and Cellular Biology/Genetics, Tumor Biology

Presentations

Jennifer S. Yu. The Cleveland Clinic, Cleveland, OH.

Presenter: Cancer stem cells and their roles in disease progression Session ED11 – Cancer Stem Cells and Therapeutic Resistance

June 22, 2020, 3:46 PM – 4:11 PM; Educational Session; Nervous System Cancer – Tumor Biology

Justin D. Lathia. The Cleveland Clinic Lerner Research Inst., Cleveland, OH

Presenter: Cancer stem cell induction and maintenance of immune suppression

Session ED46 – Stress Adaptation and Resiliency in Cancer

June 23, 2020, 1:45 PM – 2:05 PM; Educational Session; Breast Cancer - Molecular and Cellular

Biology/Genetics, Bioinformatics and Systems Biology, Tumor Biology

Ahmad M. Khalil. Case Western Reserve Univ. School of Med., Cleveland, OH

Presenter: Epigenetic regulation of the human genome by lincRNAs

Session ED07 – Noncoding RNA in Cancer Progression

June 23, 2020, 3:01 PM – 3:21 PM; Educational Session; Breast Cancer, Gastrointestinal Cancer, Skin

Cancer - Molecular and Cellular Biology/Genetics, Tumor Biology

Shlomo A. Koyfman. The Cleveland Clinic, Cleveland, OH

Presenter: 7 An overview of clinical trials in HPV-related oropharyngeal cancer: Past, present, and future Session ED25 - HPV and Cancer: New Insights into Carcinogenesis and Therapy

June 23, 2020, 4:00 PM – 4:20 PM; Educational Session; Head and Neck Cancer, Gynecological Cancer - Tumor Biology, Immunology, Molecular and Cellular Biology/Genetics, Clinical Trials, Survivorship

Abhishek A. Chakraborty. The Cleveland Clinic Lerner Research Institute, Cleveland, OH

Presenter: Reversing hypoxia-driven tumor cell fate decisions: Novel strategies to overcome chemo- and radio-resistance

Session ED38 – How Many R's in Radiobiology?

June 24, 2020, 2:15 PM – 2:35 PM; Educational Session; Breast Cancer, Cancer of the Lung and Bronchus, Gastrointestinal Cancer, Nervous System Cancer - Molecular and Cellular Biology/Genetics, Tumor Biology, Clinical Research Excluding Trials

Jill S. Barnholtz-Sloan. Case Western Reserve University School of Med., Cleveland, OH

Presenter: 3 Keep calm and assess sex differences: Thinking about study design, analysis, and interpretation

Session ED20 – Sex Differences in Cancer

June 24, 2020, 4:00 PM – 4:20 PM; Educational Session; Clinical Research Excluding Trials, Epidemiology, Molecular and Cellular Biology/Genetics

Minisymposia

1081 DNA methylation at the intersect of chromatin structure and transcriptome diversity

Session MS.MCB05.01 – Cancer Epigenetics

June 23, 2020, 9:35 AM – 9:45 AM; Molecular and Cellular Biology/Genetics

Angela H. Ting, Vishal Nanavaty, Elizabeth Abrash, Byron Lee, Emily Fink, Tae Hyun Hwang, Changjin Hong. The Cleveland Clinic, Cleveland, OH, The Cleveland Clinic, Cleveland, OH

Late Breaking Research

LB-047 CHMP5 dependency is a therapeutic vulnerability of T cell acute lymphoblastic leukemia

 $Session\ LBPO.MCB01-Late-Breaking\ Research:\ Molecular\ and\ Cellular\ Biology/Genetics\ 1$

June 22, 2020, 9:00 AM - 6:00 PM; Molecular and Cellular Biology/Genetics

Virtual Meeting II: E-Posters

Katharine Umphred-Wilson, Stanley Adoro. Case Western Reserve University, Cleveland, OH

LB-138 Adjuvant pembrolizumab or placebo in patients with high-risk, locally advanced cutaneous squamous cell carcinoma: Phase 3 KEYNOTE-630

Session LBPO.CL01 – Late-Breaking Research: Clinical Research 1/Endocrinology

June 22, 2020, 9:00 AM – 6:00 PM; Clinical Research – Clinical Research Excluding Trials

Virtual Meeting II: E-Posters

Anne Lynne S. Chang, Gregory A. Daniels, Ezra E. W. Cohen, Joy Yang Ge, Burak Gumuscu, Ramona F. Swaby, Jessica L. Geiger. Stanford University Medical Center, Stanford, CA, University of California, San Diego, La Jolla, CA, Merck & Co., Inc., Kenilworth, NJ, Cleveland Clinic, Cleveland, OH

LB-288 Transcriptomic analysis of MUC1 vaccine responders and non-responders in MUC1 immunoprevention trials in subjects with advanced adenoma of the colon

Session LBPO.PR01 – Late-Breaking Research: Prevention, Early Detection, and Interception June 22, 2020, 9:00 AM – 6:00 PM; Prevention Research

Virtual Meeting II: E-Posters

Brian Richardson, Cheryl M. Cameron, Michael J. Cartwright, Jackelyn Golden, John McKolanis, Ryan P. McMurray, Nathan R. Foster, Robert E. Schoen, Paul J. Limburg, Vineet Raghu, Panayiotis V.

Benos, Olivera J. Finn, **Mark J. Cameron**. Case Western Reserve University, Cleveland, OH, Case Western Reserve University Department of Nutrition, Cleveland, OH, Case Western Reserve University Department of Population and Quantitative Health Sciences, Cleveland, OH, University of Plttsburgh Department of Immunology, Pittsburgh, PA, Mayo Clinic Cancer Ctr., Rochester, MN, University of Plttsburgh Division of Gastroenterology, Hepatology and Nutrition, Pittsburgh, PA, University of Plttsburgh Department of Computer Science, Pittsburgh, PA, University of Plttsburgh Department of Computational and Systems Biology, Pittsburgh, PA

Abstracts/E-Posters

112 Telomere proteins coordinate intracellular signaling to control telomere maintenance mechanism selection and metastatic recurrence

Session PO.MCB01.01 - Cell Signaling

June 22, 2020, 9:00 AM – 6:00 PM; Molecular and Cellular Biology/Genetics

Virtual Meeting II: E-Posters

Nathaniel J. Robinson, **Derek J. Taylor**, **William P. Schiemann**. Case Western Reserve University School of Medicine, Cleveland, OH, Case Western Reserve University School of Medicine, Cleveland, OH, Case Western Reserve University, Cleveland, OH

129 Apoptosis & anti-proliferative nature of Aescin on 7, 12 dimethylbenz[a]anthracene (DMBA) induced hamster buccal pouch carcinogenesis via downregulating Notch signaling

Session PO.MCB01.01 – Cell Signaling

June 22, 2020, 9:00 AM – 6:00 PM; Molecular and Cellular Biology/Genetics

Virtual Meeting II: E-Posters

<u>Hemavardhini Ramadoss Jr.</u>, Suresh Kathiresan Sr., Sanjay Gupta Sr.. Annamalai University, Chidambaram, India, Case Western Reserve University, Cleveland, OH

436 An orthotopic murine model of neuroendocrine bladder cancer offers insights into the phenotypic plasticity of small cell bladder cancer (SCBC)

Session PO.TB01.07 – Mouse Models of Human Cancer 1

June 22, 2020, 9:00 AM – 6:00 PM; Tumor Biology

Virtual Meeting II: E-Posters

<u>Aysegul Balyimez</u>, Shinjini Ganguly, Sitalaximi Thirunavukkarasu, Petros Grivas, Moshe Ornstein, **Shilpa Gupta**, **Byron Lee**, Chris McFarland, Monte Winslow, Jesse McKenney, **Omar Y. Mian**. Cleveland Clinic, Cleveland, OH, University of Washington, Seattle, WA, Stanford University School of Medicine, Stanford, CA

501 Aldh2 mutation promotes oral and esophageal cancer stem cells via autophagy-mediated redox homeostasis

Session PO.TB02.04 – Stem Cells, Cancer Stem Cell Therapeutic Targeting, and Regenerative Medicine June 22, 2020, 9:00 AM – 6:00 PM; Tumor Biology

Virtual Meeting II: E-Posters

Masataka Shimonosono, Takashi Kijima, Hisatsugu Maekawa, Satoshi Takada, Koji Tanaka, Varun Sahu, Manti Guha, Andres J. Klein-Szanto, **J. Alan Diehl**, Adam J. Bass, Anil K. Rustgi, Elizabeth Philipone, Angela J. Yoon, Hiroshi Nakagawa. Columbia University, New York, NY, Osaka University, Japan, Fox Chase Cancer Center, Philadelphia, PA, Case Western Reserve University, Cleveland, OH, Dana-Farber Cancer Institute, Boston, MA

857 Discovering molecular biomarkers through machine learning to assign patients to one of multiple arms for most-likely-to-benefit in an umbrella trial for glioblastoma

Session PO.BSB01.04 – Machine Learning and Artificial Intelligence for Omics, Imaging, and Diagnostics June 22, 2020, 9:00 AM – 6:00 PM; Bioinformatics and Systems Biology

Virtual Meeting II: E-Posters

Matthew E. Lee, Sen Peng, Brett Taylor, Shay Ferdosi, Harshil Dhruv, **Manmeet Ahluwalia**, Karen Fink, Michael Berens. The Translational Genomics Research Institute (TGen), Phoenix, AZ, Cleveland Clinic, Cleveland, OH, Baylor Scott & White Health, Dallas, TX

869 Leveraging a novel analysis pipeline for outcomes predictions from routine MRIs

Session PO.BSB01.04 - Machine Learning and Artificial Intelligence for Omics, Imaging, and Diagnostics June 22, 2020, 9:00 AM – 6:00 PM; Bioinformatics and Systems Biology

Virtual Meeting II: E-Posters

<u>Vachan Vadmal</u>, Kristin Waite, **Jill S. Barnholtz-Sloan**. Case Western Reserve University School of Med., Cleveland, OH, Case Western Reserve University School of Med., Cleveland, OH

971 Effects of tumor cryo-ablation on cGAS-STING pathway and antitumor immunity in syngeneic murine rhabdomyosarcoma

Session PO.IM02.12 – Immune Mechanisms Invoked by Therapies 1

June 22, 2020, 9:00 AM – 6:00 PM; Immunology - Immunology

Virtual Meeting II: E-Posters

Mohammad Abdulaziz Alshebremi Sr.. Case Western Reserve University, Lyndhurst, OH

1159 Circulating cell-free DNA (cfDNA) levels and fragmentation patterns discriminate muscle invasive from non-muscle invasive urothelial cancer of the bladder

Session PO.PR01.03 – Molecular Markers, Targets, and Microbiome

June 22, 2020, 9:00 AM – 6:00 PM; Prevention Research

Virtual Meeting II: E-Posters

Shinjini Ganguly, Jaleh Fallah, Hong Li, Wei Wei, Aysegul Balyimez, Claudia Marcela Diaz, Pat Rayman, Marcelo Lamenza, Priscilla Dann, Donna Company, Rahul Tendulkar, Jacob Scott, Mohamed Abazeed, Jorge A. Garcia, Moshe C. Ornstein, Brian R. Rini, Byron Lee, Petros Grivas, Omar Mian. Cleveland Clinic, Lerner Research Institute, Cleveland, OH, Cleveland Clinic, Cleveland, OH, Cleveland Clinic, Lerner Research Institute, Cleveland, OH, University of Washington, Seattle, WA

1170 Socioeconomic disparities in patients with esophageal cancer at time of diagnosis: A national cancer data base analysis

Session PO.EP01.03 – Cancer Disparities

June 22, 2020, 9:00 AM - 6:00 PM; Epidemiology

Virtual Meeting II: E-Posters

Meena Sadaps, Neal Mehta, Wei Wei, Katherine Tullio, Amit Bhatt, **Alok Khorana**. Cleveland Clinic Foundation, Cleveland, OH, Cleveland Clinic Foundation, Cleveland, OH

1233 Nuclear receptor Nurr1 controls chemoresistance and autophagy through transcriptional regulation of autophagy related proteins 7 and 12 in PDA

Session PO.MCB02.02 – Autophagy and Cancer

June 22, 2020, 9:00 AM – 6:00 PM; Molecular and Cellular Biology/Genetics

Virtual Meeting II: E-Posters

Sneha Harishchandra, Zuhua Yu, Ali Vaziri-Gohar, Mehrdad Zarei, Jessica Elswood, Heng Du, Weston Porter, Stephen Safe, <u>Mahsa Zarei</u>. Texas A&M University, College Station, TX, University Hospitals; Case Western University, Cleveland, OH, CFTRI, OH, Harvard Medical School, Boston, MA

1467 Metabolic reprogramming fuels prostate cancer cells towards enzalutamide resistance

Session PO.MCB08.02 – Signaling Pathways to Metabolism 1

June 22, 2020, 9:00 AM – 6:00 PM; Molecular and Cellular Biology/Genetics

Virtual Meeting II: E-Posters

Shiv S. Verma, Eswar Shankar, Rajnee Kanwal, Ricky Chan, Sanjay Gupta. Case Western Reserve University, Cleveland, OH, Case Comprehensive Cancer Center, Cleveland, OH

1660 Reflectance confocal microscopy modeling of lentigo maligna

Session PO.TB07.02 – Novel Tumor Imaging Techniques and Probes

June 22, 2020, 9:00 AM – 6:00 PM; Tumor Biology

Virtual Meeting II: E-Posters

Katharine L. Hanlon, James M. Grichnik. Cleveland Clinic, Indian River Hospital, Vero Beach, FL

1746 The BET inhibitor JQ-1 enhances radio-sensitivity in pediatric cancer cell lines by sustained p-gH2AX expression and enhanced differentiation

Session PO.ET06.02 – Epigenetic Targets

June 22, 2020, 9:00 AM – 6:00 PM; Experimental and Molecular Therapeutics – Drug Development Virtual Meeting II: E-Posters

<u>Tamara Mary Abou-Antoun</u>, Jad Abdallah, Amanda R. Khater, Sarra El-Soussi, Aysegul Balyimez, Shinjini Ganguly, Anthony Sandler, **Omar Mian**. Lebanese American Univ., Blat, Lebanon, Cleveland Clinic Foundation, Cleveland, OH, Children's National Health Systems, Washington, DC

1831 Mistletoe lectin induces apoptosis in MYC-driven cancers through post-translational downregulation of c-MYC protein

Session PO.ET02.02 – Mechanisms of Drug Action 2

June 22, 2020, 9:00 AM – 6:00 PM; Experimental and Molecular Therapeutics – Drug Development Virtual Meeting II: E-Posters

<u>Gabrielle Kennelley</u>, Eric Yuan, **Mohammad Shatat**, Betsy Gauthier, Peiying Yang, Analisa Difeo, **Richard Lee**. Case Western Reserve University, Cleveland, OH, MD Anderson Cancer Center, Houston, TX, University of Michigan, Ann Arbor, MI

2047 Association of retinoblastoma function with response to immune-oncology treatment in patients with small cell lung cancer

Session PO.CL01.02 – Translational Research with Immune Therapies

June 22, 2020, 9:00 AM – 6:00 PM; Clinical Research – Clinical Research Excluding Trials, Immunology Virtual Meeting II: E-Posters

<u>David Balli</u>, Xuya Wang, Naiyer A. Rizvi, **Timothy A. Chan**, **Afshin Dowlati**, Parul Doshi, Han Chang. Bristol-Myers Squibb, Princeton, NJ, Columbia University Medical Center, New York, NY, Memorial Sloan Kettering Cancer

Center, New York, NY, University Hospitals, Seidman Cancer Center, and Case Western Reserve University of Cleveland, Cleveland, OH

2082 Extragonadal and regional androgen biosynthesis associated with a common steroidogenic enzyme polymorphism promotes radioresistance in prostate cancer

Session PO.EN01.01 – Molecular, Preclinical, and Clinical Endocrinology 1

June 22, 2020, 9:00 AM – 6:00 PM; Endocrinology

Virtual Meeting II: E-Posters

Shinjini Ganguly, Aysegul Balyimez, Zaeem Lone, Aimalie Hardaway, Monaben Patel, Elai Davicioni, Rahul Tendulkar, **Eric Klein**, **Nima Sharifi**, **Omar Mian**. Cleveland Clinic, Lerner Research Institute, Cleveland, OH, Cleveland Clinic, Lerner Research Institute, Cleveland, OH, Decipher Biosciences, Inc, CA, Cleveland Clinic, Cleveland, OH, Cleveland, OH, Cleveland, OH

2100 Deep learning can predict microsatellite instability from histology in colorectal cancer across different ethnic groups

Session PO.BSB02.01 – Machine Learning

June 22, 2020, 9:00 AM – 6:00 PM; Bioinformatics and Systems Biology

Virtual Meeting II: E-Posters

Isaiah S. D. Pressman, Hongming Xu, Jeonghyun Kang, Yoon Jin Cha, Sung Hak Lee, **Tae Hyun Hwang**. Cleveland Clinic, Cleveland, OH, Yonsei University College of Medicine, Seoul, Korea, Republic of, Yonsei University College of Medicine, Seoul, Korea, Republic of

2111 Transfer learning for tumor mutation burden prediction and spatial heterogeneity analysis from histopathology slides in bladder cancer

Session PO.BSB02.01 – Machine Learning

June 22, 2020, 9:00 AM – 6:00 PM; Bioinformatics and Systems Biology

Virtual Meeting II: E-Posters

<u>Hongming Xu</u>, Sung Hak Lee, **Tae Hyun Hwang**. Cleveland Clinic, Cleveland, OH, Seoul St.Mary's Hospital, College of Medicine, The Catholic University of Korea, Seoul, Korea, Republic of

2450 Methyl CpG Binding Protein 2 suppresses Myc targeting miRNAs to promote context dependent tumor proliferation

Session PO.MCB05.04 – Epigenetic Changes as Molecular Markers of Cancer 2

June 22, 2020, 9:00 AM – 6:00 PM; Molecular and Cellular Biology/Genetics

Virtual Meeting II: E-Posters

Aysegul Balyimez, Yihong Guan, Emily Esakov, Shinjini Ganguly, **Ofer Reizes**, **Daniel J. Lindner**, **Jaroslaw Maciejewski**, **Babal Jha**, **Omar Y. Mian**. Cleveland Clinic, OH

2603 Single cell RNA sequencing-based identification of molecular drivers in circulating tumor cell cluster formation and lung metastasis

Session PO.TB03.01 – Cell Adhesion, Intercellular Interactions, Metastasis, and Drug Resistance June 22, 2020, 9:00 AM – 6:00 PM; Tumor Biology

Virtual Meeting II: E-Posters

Rokana Taftaf, Xia Liu, Salendra Singh, Yuzhi Jia, David Scholten, Youbin Zhang, Andrew Davis, Carolina Reduzzi, Yue Cao, Yang Shen, Massimo Cristofanilli, William A. Muller, **Vinay Varadan**, Huiping Liu. Northwestern University, Chicago, IL, Case Western Reserve University, Cleveland, OH, Northwestern University, Chicago, IL, Texas A&M University Engineering, TX, Northwestern University, Chicago, IL

2690 Qualitatively distinct evolutionary games played by EGFR driven NSCLC

Session PO.TB10.02 – Methods to Measure Tumor Evolution and Heterogeneity

June 22, 2020, 9:00 AM – 6:00 PM; Tumor Biology

Virtual Meeting II: E-Posters

Nathan Farrokhian, Artem Kaznatcheev, Patrick Ellsworth, Masahiro Hitomi, Emily Dolson, Jacob G.

Scott. Case Western Reserve University, Cleveland, OH, University of Oxford, Oxford, United Kingdom, Cleveland

Clinic, Cleveland, OH

2978 Cyclic GMP-independent inhibition of colon cancer cell growth by phosphodiesterase inhibitors

Session PO.ET02.03 – Mechanisms of Drug Action 3

June 22, 2020, 9:00 AM – 6:00 PM; Experimental and Molecular Therapeutics – Drug Development Virtual Meeting II: E-Posters

<u>Bianca N. Islam</u>, Yali Hou, Namratha Mylarapu, Kaylin A. Browning, Kenneth J. Vega, Darren D. Browning. Case Western Reserve University, Cleveland, OH, Medical College of Georgia at Augusta University, Augusta, GA, Medical College of Georgia at Augusta University, Augusta, GA

2981 Biased activation of PP2A through selective heterotrimer binding and stabilization

Session PO.ET02.03 – Mechanisms of Drug Action 3

June 22, 2020, 9:00 AM – 6:00 PM; Experimental and Molecular Therapeutics – Drug Development Virtual Meeting II: E-Posters

Daniel Leonard, Wei Huang, Sudeh Izadmehr, Caitlin M. O'Connor, Danica D. Wiredja, Zhizhi Wang, Nilesh Zaware, Daniela M. Schlatzer, Stefan Schuchner, Janna Kiselar, Yinghua Chen, Nikhil Vasireddi, Abbey L. Perl, Matthew D. Glasky, Wenqing Xu, David L. Brautigan, Egon Ogris, **Derek J.**

Taylor, Goutham Narla. Case Western Reserve University, Cleveland, OH, Case Western Reserve University, Cleveland, OH, Icahn School of Medicine at Mount Sinai, New York, NY, University of Michigan, Ann Arbor, MI, Case Western Reserve University, Cleveland, OH, University of Washington, Seattle, WA, Icahn School of Medicine at Mount Sinai, New York, NY, Medical University of Vienna, Vienna, Austria, Case Western Reserve University, Cleveland, OH, Icahn School of Medicine at Mount Sinai, New York, NY, University of Virginia, Charlottesville, VA, Medical University of Vienna, Vienna, Austria, University of Michigan, Ann Arbor, MI

3094 Development of a prognostic and predictive 32 gene signature for gastric cancer

Session PO.CL11.10 – Circulating Markers 3

June 22, 2020, 9:00 AM – 6:00 PM; Clinical Research – Clinical Research Excluding Trials Virtual Meeting II: E-Posters

<u>Sunho Park</u>, Jae-Ho Cheong, Sam C. Wang, ChangJin Hong, Matthew Porembka, **Tae Hyun Hwang**. Cleveland Clinic, Cleveland, OH, Yonsei University College of Medicine, Seoul, Korea, Republic of, University of Texas Southwestern Medical Center, Dallas, TX

3517 A germline variant at 8q24 contributes to familial clustering of prostate cancer in men of African ancestry

Session PO.EP01.05 – Prostate and Other Genitourinary Cancers

June 22, 2020, 9:00 AM – 6:00 PM; Epidemiology – Genitourinary Cancer

Virtual Meeting II: E-Posters

Burcu F. Darst, Jeannette T. Bensen, Sue A. Ingles, Benjamin A. Rybicki, Barbara Nemesure, Esther M. John, Jay H. Fowke, Victoria L. Stevens, Sonja I. Berndt, Chad D. Huff, Jong Y. Park, Wei Zheng, Elaine A. Ostrander, Shiv Srivastava, John Carpten, Thomas A. Sellers, Maureen Sanderson, Dana C. Crawford, Olivier Cussenot, Jennifer Cullen, Rick A. Kittles, Jianfeng Xu, Zsofia Kote-Jarai, Luc Multigner, Marie-Elise Parent, Florence Menegaux, Geraldine Cancel-Tassin, Adam S. Kibel, Eric A.

Klein, Phyllis J. Goodman, Jennifer J. Hu, Graham Casey, Anselm J. M. Hennis, Ian M. Thompson Jr., Robin

Leach, James L. Mohler, Elizabeth T. H. Fontham, Gary J. Smith, Jack A. Taylor, Rosalind A. Eeles, Laurent Brureau, Stephen J. Chanock, Stephen Watya, Janet L. Stanford, Diptasri Mandal, William B. Isaacs, Kathleen A. Cooney, William J. Blot, David V. Conti, Christopher A. Haiman. University of Southern California, Los Angeles, CA, University of North Carolina at Chapel Hill, Chapel Hill, NC, Henry Ford Hospital, Detroit, MI, Stony Brook University, Stony Brook, NY, California Prevention Institute of California, Fremont, CA, Vanderbilt University Medical Center, Nashville, TN, American Cancer Society, Atlanta, GA, National Cancer Institute, National Institute of Health, Bethesda, MD, University of Texas M.D. Anderson Cancer Center, Houston, TX, Moffitt Cancer Center & Research Institute, Tampa, FL, Vanderbilt University School of Medicine, Nashville, TN, National Human Genome Research Institute, National Institutes of Health, Bethesda, MD, Uniformed Services University of the Health Sciences, Bethesda, MD, University of Southern California, Los Angeles, CA, Meharry Medical College, Nashville, TN, Case Western Reserve University, Cleveland, OH, CeRePP & Sorbonne Universite, Paris, France, University of Arizona College of Medicine and University of Arizona Cancer Center, Tucson, AZ, NorthShore University HealthSystem, Evanston, IL, The Institute of Cancer Research, London, United Kingdom, Inserm U1085 – IRSET, Rennes, France, Universitý of Quebec, Laval, QC, Canada, Université Paris-Saclay, Université Paris-Sud, CESP (Center for Research in Epidemiology and Population Health), Inserm, Team Cancer-Environment, Villejuif, France, Brigham and Women's Hospital/Dana-Farber Cancer Institute, Boston, MA, Cleveland Clinic, Cleveland, OH, Fred Hutchinson Cancer Research Center, Seattle, WA, University of Miami Miller School of Medicine, Miami, FL, University of Virginia, Charlottesville, VA, University of Texas Health Science Center at San Antonio, San Antonio, TX, University of Texas Health Science Center at San Antonio,, San Antonio, TX, University of North Carolina at Chapel Hill, Chapel Hill, NC, Louisiana State University Health Sciences Center, New Orleans, LA, Roswell Park Cancer Institute, Buffalo, NY, National Institute of Environmental Health Sciences, Research Triangle Park, NC, Royal Marsden NHS Foundation Trust, London, United Kingdom, University Hospital of Pointe-à-Pitre, Guadeloupe, France, Makerere University College of Health Sciences, Kampala, Uganda, Fred Hutchinson Cancer Research Center, Seattle, WA, Louisiana State University Health Sciences Center, New Orleans, LA, Johns Hopkins Hospital and Medical Institution, Baltimore, MD, Duke University School of Medicine, Durham, NC

3638 Analysis of the clinical benefit of comprehensive genome profiling derived therapeutic associations in advanced cancer

Session PO.MCB09.05 – Genomic Profiling of Tumors and Microarrays June 22, 2020, 9:00 AM – 6:00 PM; Molecular and Cellular Biology/Genetics Virtual Meeting II: E-Posters

Jean Rene Clemenceau, Sung Hak Lee, Alex Milinovich, Jian Jin, **Nathan Pennell**, Davendra Sohal, **Tae Hyun Hwang**. Cleveland Clinic Lerner Research Institute, Cleveland, OH, Cleveland Clinic Taussig Cancer Institute, Cleveland, OH

4097 Enhanced synergistic efficacy of simvastatin and metformin on enzalutamide resistant prostate cancer

Session PO.ET03.03 – Mechanisms of Sensitivity and Resistance to Targeting Hormone Responsive Cancer

June 22, 2020, 9:00 AM – 6:00 PM; Experimental and Molecular Therapeutics – Drug Development Virtual Meeting II: E-Posters

<u>Eswar Shankar</u>, **Pingfu Fu**, **Gregory T. MacLennan**, Sanjay Gupta. Case Western Reserve University School of Med., Cleveland, OH, Case Western Reserve University School of Med., Cleveland, OH, Case Western Reserve University School of Med., Cleveland, OH

4129 Rational approaches for disrupting the oncogenic nexus of MAPK or PI3K/mTOR pathways with cell cycle checkpoint ATR inhibition in endometrial and ovarian cancers for therapeutic development Session PO.ET04.06 – Modulation of DNA Repair, New Nonclinical Models for Targets, and Other Targets June 22, 2020, 9:00 AM – 6:00 PM; Experimental and Molecular Therapeutics – Drug Development Virtual Meeting II: E-Posters

Hussein Al-Sudani, Metis Hasipek, Yihong Guan, Dale Grabowski, **Daniel Lindner**, **Babal Jha**, <u>Haider</u> **Mahdi**. Cleveland Clinic, Cleveland, OH

4415 Exploiting convergent evolution to derive a cisplatin sensitivity gene expression signature in epithelial based cancer

Session PO.BSB01.06 – Tumor Heterogeneity and Microenvironment: Next-Generation Sequencing, Single Cell, and Imaging

June 22, 2020, 9:00 AM – 6:00 PM; Bioinformatics and Systems Biology

Virtual Meeting II: E-Posters

Jessica Scarborough, Andrew Dhawan, Jacob Scott. Cleveland Clinic, OH

5499 Cell cycle-dependent, comprehensive mathematical modeling of the role of DNA repair in response to radiotherapy for prostate cancer

Session PO.BSB02.02 – Mathematical Modeling

June 22, 2020, 9:00 AM – 6:00 PM; Bioinformatics and Systems Biology

Virtual Meeting II: E-Posters

Mengdi Qian, **Alexandru Almasan**, <u>Evren Gurkan-Cavusoglu</u>. Case Western Reserve University, Cleveland, OH, Cleveland Clinic, Cleveland, OH

5535 SEA-CD40 is a non-fucosylated anti-CD40 antibody with potent pharmacodynamics activity in preclinical models and patients with advanced solid tumors

Session PO.IM02.16 – Immune Response to Therapies 1

June 22, 2020, 9:00 AM – 6:00 PM; Immunology

Virtual Meeting II: E-Posters

Haley Neff-LaFord, Juneko E. Grilley-Olson, David C. Smith, Brendan Curti, Sanjay Goel, Timothy M. Kuzel, Svetomir N. Markovic, Olivier Rixe, **David L. Bajor**, Thomas F. Gajewski, Martin Gutierrez, Elisabeth I. Heath, John Thompson, Sahar Ansari, Shyra Gardai, Celine Jacquemont, Michael Schmitt, Andrew L. Coveler. Seattle Genetics, Bothell, WA, UNC Lineberger Comprehensive Cancer Center/University of North Carolina, Chapel Hill, NC, University of Michigan, Ann Arbor, MI, Providence Cancer

Center/University of North Carolina, Chapel Hill, NC, University of Michigan, Ann Arbor, MI, Providence Cancer Institute, Portland, OR, Montefiore Medical Center, Bronx, NY, Rush University Medical Center, Chicago, IL, Mayo Clinic Minnesota, Rochester, MN, University of New Mexico Cancer Center, Albuquerque, NM, Case Western Reserve University/University Hospitals Cleveland Medical Center, Cleveland, OH, University of Chicago Medical Center, Chicago, IL, Hackensack University Medical Center, Hackensack, NJ, Karmanos Cancer Institute, Detroit, MI, Seattle Cancer Care Alliance/University of Washington, Seattle, WA, Seattle Cancer Care Alliance/University of Washington, Seattle, WA

5611 Immunogenomic signatures and immune cells infiltration predicts survival in ovarian and endometrial cancers: Potential strategies in understanding the tumor immune microenvironment for future rationale combinational immunotherapy.

Session PO.IM02.21 – Inflammation, Immunity, and Cancer/Modifiers of the Tumor Microenvironment 2 June 22, 2020, 9:00 AM – 6:00 PM; Immunology

Virtual Meeting II: E-Posters

Haider Mahdi, Amy Joehlin-Price, Ying Ni. Cleveland Clinic, Cleveland, OH

5902 Integrative genomic analysis of checkpoint blockade in lung cancer: A multi-institution SU2C collaborative

Session PO.MCB09.07 – Genomic Profiling of Tumors 5

June 22, 2020, 9:00 AM – 6:00 PM; Molecular and Cellular Biology/Genetics

Virtual Meeting II: E-Posters

Monica Arniella, Arvind Ravi, Chip Stewart, Sam Freeman, Mark Awad, Patrick Forde, Valsamo Anagnostou, Brian Henick, Jonathan Riess, Don Gibbons, **Nathan Pennell**, Vamsidhar Velcheti, Ignaty Leshchiner, Jaegil Kim, Subba Digumarthy, Mari Mino-Kenudson, John Heymach, Nir Hacohen, Naiyer Rizvi, Roy Herbst, Victor Velculescu, Julie Brahmer, Kurt Schalper, Pasi Jänne, Jedd Wolchok, Alice Shaw, Justin Gainor, Matthew Hellmann, Gad Getz. Broad Institute, Cambridge, MA, Dana-Farber Cancer Institute, Boston, MA, Johns Hopkins Kimmel Cancer Center, Baltimore, MD, Columbia University Medical Center, New York, NY, UC Davis Comprehensive Cancer Center, Sacramento, CA, MD Anderson Cancer Center, Houston, TX, Cleveland Clinic Cancer Center, Cleveland, OH, Massachusetts General Hospital, Boston, MA, Yale Cancer Center, New Haven, CT, Memorial Sloan Kettering Cancer Center, New York, NY

6084 Wave3 tyrosine phosphorylation activates the invasion-metastasis cascade of triple negative breast cancer tumors through the maintenance of the cancer stem cell niche

Session PO.TB04.04 – Metastasis Genes and Pathways

June 22, 2020, 9:00 AM - 6:00 PM; Tumor Biology

Virtual Meeting II: E-Posters

Wei Wang, Urna Kansakar, Vesna Markovic, **Khalid Sossey-Alaoui**. Case Western Reserve University, School of Medicine, Cleveland, OH

6462 Radiomics features of 18F-fluorodeoxyglucose positron-emission tomography as a novel prognostic signature in colorectal cancer

Session PO.CL11.12 - Circulating Tumor Cells, Prognosis, and Markers of Metastases

June 22, 2020, 9:00 AM – 6:00 PM; Clinical Research – Clinical Research Excluding Trials

Virtual Meeting II: E-Posters

Jeonghyun Kang, Jean Rene Clemenceau, Sunho Park, Hongming Xu, Changjin Hong, <u>Tae Hyun Hwang</u>. Cleveland Clinic, Cleveland, OH, Cleveland Clinic, Cleveland, OH

6557 Aescin, a triterpene saponin induces apoptosis & oxidative damage in human oral & laryngeal cancer cells via notch signaling

Session PO.CH01.04 – Natural Products as Starting Points for Cancer Drug Discovery

June 22, 2020, 9:00 AM – 6:00 PM; Cancer Chemistry

Virtual Meeting II: E-Posters

<u>Suresh Kathiresan Sr.</u>, Hemavardhini Ramadoss Jr., Sanjay Gupta Sr.. Annamalai University, Chidambaram, India, Case Western Reserve University, Cleveland, OH

6563 Network potential identifies therapeutic miRNA cocktails in Ewings Sarcoma

Session PO.BSB02.03 – Network Biology/Multi-omics

June 22, 2020, 9:00 AM – 6:00 PM; Bioinformatics and Systems Biology

Virtual Meeting II: E-Posters

Davis T. Weaver, Kathleen I. Pishas, Drew Williamson, Jessica Scarborough, Stephen L. Lessnick, Andrew Dhawan, **Jacob G. Scott**. Case Western Reserve University School of Medicine, Cleveland Heights, OH, Peter MacCallum Cancer Center, Melbourne, Australia, Brigham and Women's Hospital, Boston, MA, Case Western Reserve University School of Medicine, Cleveland, OH, Nationwide Children's Hospital, Columbus, OH, Cleveland Clinic, Cleveland, OH