

PROGRAM SCHEDULE

CANCER RESEARCH SYMPOSIUM

NOVEMBER 20, 2020

Welcome and Opening Remarks

10:00 A.M.

Eileen White, PhD

Associate Director, Basic Research, Chief Scientific Officer, Deputy Director and Member, Cancer Metabolism and Growth Program, Rutgers Cancer Institute of New Jersey, Professor, Molecular Biology and Biochemistry, Rutgers, The State University of New Jersey

Cancer Metabolism Session

10:00 A.M. – 11:20 A.M.

Chair: Joshua Rabinowitz, MD, PhD, Professor of Chemistry, Princeton University, Lewis-Sigler Institute for Integrative Genomics, Member, Cancer Metabolism and Growth Program, Rutgers Cancer Institute of New Jersey

10:05 A.M. – 10:50 A.M.

Joshua Rabinowitz, MD, PhD, *“Diet, Metabolism and Cancer Therapy”*

Professor of Chemistry, Princeton University, Lewis-Sigler Institute for Integrative Genomics, Member, Cancer Metabolism and Growth Program, Rutgers Cancer Institute of New Jersey

Eileen White, PhD, *“Metabolic Regulation of the Anti-Cancer Immune Response”*

Associate Director, Basic Research, Chief Scientific Officer, Deputy Director and Member, Cancer Metabolism and Growth Program, Rutgers Cancer Institute of New Jersey, Professor, Molecular Biology and Biochemistry, Rutgers, The State University of New Jersey

10:50 A.M. – 11:20 A.M.

“Exploiting a Metabolic Vulnerability in mTORC1-Driven Tumors”

Alexander J. Valvezan, Molly McNamara, Spencer Miller, Elizabeth Henske, John Asara, Brendan Manning

“Increased mTDNA Mutation Burden Limits Tumor Growth and Malignancy in NSCLC”

Eduardo Cararo-Lopes, Akshada Sawant, Vrushank Bhatt, Jessie Guo, Xiaoyang Su, Edmund Lattime, Shridar Ganesan, Eileen White

“SIRT1 Is a Novel Therapeutic Target in T-ALL”

Olga Lancho, Victoria da Silva-Diz, Luca Tottone, Shirley Luo, Amartya Singh, Hossein Khiabani, Daniel Herranz

11:20 A.M. – 11:40 A.M. Break

Cancer Genomics Session

11:40 A.M. – 1:00 P.M.

Chair: Shridar Ganesan, MD, PhD, Professor of Medicine and Pharmacology, Associate Director of Translational Research, Chief, Section of Molecular Oncology, Omar Boraie Chair in Genomic Science, Co-Leader and Member of the Clinical Investigations and Precision Therapeutics Program, Rutgers Cancer Institute of New Jersey, Rutgers Robert Wood Johnson Medical School

11:40 A.M. – 12:30 P.M.

Shridar Ganesan, MD, PhD, *“Monitoring Clonal Dynamics of Cancer in the Clinic”*

Professor of Medicine and Pharmacology, Associate Director of Translational Research, Chief, Section of Molecular Oncology, Omar Boraie Chair in Genomic Science, Co-Leader and Member of the Clinical Investigations and Precision Therapeutics Program, Rutgers Cancer Institute of New Jersey, Rutgers Robert Wood Johnson Medical School

Olga Troyanskaya, PhD, *“Decoding the Genome - Regulatory Mutations in Cancer”*

Professor of Computer Science, Princeton University, Lewis-Sigler Institute for Integrative Genomics, Deputy Director for Genomics, Center for Computational Biology, Flatiron Institute of the Simons Foundation, Member, Genomic Instability and Cancer Genetics Program, Rutgers Cancer Institute of New Jersey

12:30 P.M. – 1:00 P.M.

“A Tumor Suppressor Enhancer of PTEN in T-Cell Development and Leukemia”

Luca Tottone, Olga Lancho, Jui-Wan Loh, Amartya Singh, Victoria da Silva-Diz, Shirley Luo, Matthew A. Lawlor, Hossein Khiabani, Pedro P. Rocha, Daniel Herranz

“Tissue-Specific Tumorigenesis in Multiple Endocrine Neoplasia Type 1”

Juliet C. Gardiner, Sunita K. Agarwal, Asha Adem, Carmen Sánchez Claros, Sylvia Lee, Daniel Slegowski, Arnold J. Levine, Ziqiang Yuan, Steven K. Libutti

“Integrating Genetic Dependencies and Genomic Alterations across Pathways and Cancer Types”

Tae Yoon Park, Mark D.M. Leiserson, Gunnar W. Klau, Benjamin J. Raphael

1:00 P.M. – 2:00 P.M. Break



PROGRAM SCHEDULE

CANCER RESEARCH SYMPOSIUM

NOVEMBER 20, 2020



Tumor Microenvironment Session

2:00 P.M. – 3:20 P.M.

Chair: Yibin Kang, PhD, Warner-Lambert/Parke-Davis Professor of Molecular Biology, Princeton University, Member, Cancer Metabolism and Growth Program, Rutgers Cancer Institute of New Jersey

2:00 P.M. – 2:50 P.M.

“Therapeutic Targeting of MTDH in Metastatic Breast Cancer”

Yibin Kang, PhD, Warner-Lambert/Parke-Davis Professor of Molecular Biology, Princeton University, Member, Cancer Metabolism and Growth Program, Rutgers Cancer Institute of New Jersey

“Mechanisms of Colon Cancer Initiation and Progression”

Michael Verzi, PhD, Associate Professor of Genetics, Human Genetics Institute of New Jersey, School of Arts and Sciences, Rutgers, The State University of New Jersey, Member, Genomic Instability and Cancer Genetics Program, Rutgers Cancer Institute of New Jersey

2:50 P.M. – 3:20 P.M.

“Tumor Immune Profiling of Genetically Engineered Mouse Models with High Mutation Burden”

Akshada Sawant, Eduardo Cararo-Lopes, Somer Abdelfattah, Jennele Baul, Saurabh Laddha, Zhixian Hu, Peter Romanienko, Chang Chan, Edmund Lattime, Shridar Ganesan, Eileen White

“Deconvoluting the Mammary Stem Cell Niche”

Nicole M. Aiello-Couzo, Ramesh Gunaratna, Yong Wei, Yibin Kang

“Arginine Metabolism Confers Metabolic Vulnerability in the Microenvironment of Pancreatic Ductal Adenocarcinoma”

Sara Maimouni, Jianliang Shen, Eric Chiles, Irina Lu, Junrong Yan, Costas Lyssiotis, He Wang, Xiaoyang Su, Wei-Xing Zong

3:20 P.M. – 3:40 P.M. Break

Understanding and Addressing Cancer Burden in the Population Session

3:40 P.M. – 5:00 P.M.

Chair: Anita Kinney, PhD, RN, FAAN, FABMR, Professor, Department of Biostatistics & Epidemiology, Director, Center for Cancer Health Equity, Rutgers School of Public Health, Associate Director for Population Science and Community Outreach, Director, ScreenNJ, Member, Cancer Prevention and Control Program, Rutgers Cancer Institute of New Jersey

3:40 P.M. – 4:30 P.M.

“Maximizing Impact by Overcoming Cancer Disparities and Translational Divides in Genomics, Public Health and Care Delivery”

Anita Kinney, PhD, RN, FAAN, FABMR, Professor, Department of Biostatistics & Epidemiology, Director, Center for Cancer Health Equity, Rutgers School of Public Health, Associate Director for Population Science and Community Outreach, Director, ScreenNJ, Member, Cancer Prevention and Control Program, Rutgers Cancer Institute of New Jersey

“Policy and Regulatory Tools to Curb Tobacco Caused Cancers”

Cristine Delnevo, PhD, MPH, Director, Rutgers Center for Tobacco Studies, Professor, Department of Health Behavior, Society & Policy, Rutgers School of Public Health, Member, Cancer Prevention and Control Program, Rutgers Cancer Institute of New Jersey

“COVID-19 and Missed Screenings: Policy Levers to Expand Access to Cancer Prevention”

Heather Howard, JD Director, Lecturer in Public Affairs, Director, State Health and Value Strategies Program, Faculty Affiliate, Center for Health and Wellbeing, School of Public and International Affairs, Princeton University

4:30 P.M. – 5:00 P.M.

“Financial Toxicity among the New Jersey State Cancer Registry Cohort”

Irina B. Grafova, Sharon L. Manne, Elisa V. Bandera, Biren Saraiya, Adana A. M. Llanos, Katie A. Devine, Shawna V. Hudson, Jennifer Elliott, Antoinette M. Stroup, Paul R. Duberstein

“Feasibility and Acceptability of a Self-Management + Peer Mentoring Intervention for Adolescent and Young Adult Childhood Cancer Survivors”

Gary K. Kwok, Kristine Levonyan-Radloff, Margaret Masterson, Sharon Manne, Pamela Ohman Strickland, Elizabeth Bouchard, Tonya Palermo, Katie A. Devine

“Factors Influencing Rates of Genetic Testing of High-Risk Women in a Diverse Academic Institution”

Jharna Patel, Eugenia Girda, Jenna Marcus, Kateryna Kolesnikova

PROGRAM SCHEDULE

CANCER RESEARCH SYMPOSIUM

NOVEMBER 20, 2020

Poster Flash Talks Session

5:00 P.M. – 6:00 P.M.

“Autophagy Inhibition Sensitizes LKB1-Deficient Kras-Driven Lung Tumors to MEK Inhibitor Trametinib”

Vrushank Bhatt, Taijin Lan, Wenping Wang, Khoosheh Khayati, Jerry Kong, Akash Raju, Xuefei Luo, Xiaoyang Su, Jessie Yanxiang Guo

“SOX4 and SMARCA4 Upregulate Glycolysis-Driven Tumor Proliferation through Hexokinase 2 in Triple Negative Breast Cancer”

Pooja Khanna, Gaurav Mehta, Vrushank Bhatt, Jessie Guo, Michael L. Gatz

“A Novel and Highly Effective Mitochondrial Uncoupling Drug in T-Cell Leukemia”

Victoria da Silva-Diz, Bin Cao, Olga Lanchi, Eric Chiles, Amer Alasadi, Shirley Luo, David Augeri, Sonia Minuzzo, Stefano Indraccolo, Xiaoyang Su, Shengkan Jin, Daniel Herranz

“Emergent in Vitro Cancer Tumor Hypoxia and K-Core Collapse”

Robert Austin, Yusha Sun, Yihua Zhao, Junli Qu, Ken Pienta, Sarah Amend, Joel Brown, Emma Hammarlund

“Synergistic Anti-Cancer Effect of NAMPT Inhibitor in Combination with NADK Inhibitor against IDH1 Mutant Cells”

Alvinsyah A. Pramono, Gulam M. Rather, Joseph R. Bertino

“Modulating DNA Repair Choice To Improve Efficiency Of CRISPR-Based Gene Editing”

Husam Al-hraishawi, Atul Kulkarni, Shridar Ganesan

“Mechanisms of Adaptation to Ibrutinib in High-Risk Chronic Lymphocytic Leukemia”

J. Loh, G. Forestieri, L. Terzi-di-Bergamo, A. Singh, V. Spina, A. Zucchetto, A. Condoluci, A. Bruscaggin, W. Wu, M. Faderl, F. Bonfiglio, E. Flospergher, T. Bittolo, E. Tissino, L. De Paoli, C. Deambrogi, A. M. Frustaci, M. Deodato, F. Autore, M. Merli, L. Scarfò, S. Rasi, R. Lucchini, J. Passweg, P. Ghia, F. Cavalli, B. Gerber, G. Stuessi, F. Passamonti, M. Gregor, L. Laurenti, D. Efremov, A. Tedeschi, G. Gaidano, H. Khiabanian, V. Gattei, D. Rossi

“SOX4 and SMARCA4 Cooperatively Regulate PI3K Signaling through Transcriptional Activation of TGFBR2 in Triple Negative Breast Cancer”

Gaurav A. Mehta, Steven P. Angus, Christen Khella, Kevin Tong, Pooja Khanna, Mike Verzi, Gary L. Johnson, Michael L. Gatz

“LIF Is Essential for ISC Function and Protects against Radiation-Induced Gastrointestinal Syndrome”

Jianming Wang, Huaying Wang, Yuhua Zhao, Xiao Zhang, Juan Liu, Cen Zhang, Bruce Haffty, Michael Verzi, Lanjing Zhang, Nan Gao, Zhaohui Feng, Wenwei Hu

“Germline Genetic Testing Validates Inference of Mutational Status for Variants Detected in Tumor-Only Sequencing”

Nahed Jalloul, Israel Gomy, Samantha Stokes, Judy Garber, Shridar Ganesan, Hossein Khiabanian

“Machine Learning-Based Cell Segmentation in Cancer Tissues Enables Spatial Single-Cell Analysis of the Tumor Immune Microenvironment”

Jasper Lee, Sascha Marx, Kai Wucherpfennig

“The Tumor Suppressor TRAF3 Promotes Tumor Immunity by Controlling the Expansion of Myeloid-Derived Suppressor Cells”

Sining Zhu, Almin I. Lalani, Derek Sant'Angelo, Lori Covey, Howard A. Young, Suzanne Ostrand-Rosenberg, Ping Xie

“KDM8 Regulates Hypoxia-Induced Chromatin Accessibility and Metastasis of Pancreatic Ductal Adenocarcinoma”

Shang-Hsin Wu and Shin-Heng Chiou

“Efficacy of Anti-CD147 Chimeric Antigen Receptors Targeting Hepatocellular Carcinoma”

Hsiang-Chi Tseng, Wei Xiong, Saiaditya Badeti, Yan Yang, Minh Ma, Ting Liu, Carlos A Ramos, Gianpietro Dotti, Luke Fritzky, Jie-Gen Jiang, Qing Yi, James Guarrera, Wei-Xing Zong, Chen Liu, Dongfang Liu

“Cell-Level Heterogeneity Promotes Invasion and Dissemination of Breast Cancer Cells”

Susan E. Leggett, Molly C. Brennan, Celeste M. Nelson

“Biomarkers in Human Cerebrospinal Fluid”

Kayla Baker, Frank Diglio, Shengguo Li, Ashley Rodgers, Peter Cole

“Correlates to Daily Aspirin Use and Genomic Testing Interest for Recurrence Risk Management in a Diverse Sample of Colorectal Cancer Survivors”

Denalee M. O'Malley, C.K. Blair, A. Greenbaum, C.L. Wiggins, A. Rajput, V.K. Chiu, Anita Y. Kinney

“Lung Cancer Stigma to Loss- And Gain-Framed Smoking Cessation Advertising”

Kristen Riley, Olivia Wackowski, Joseph Cappella, Lisa Carter-Harris, Lesia Ruglass, Matthew Valdespino, Molly Stern, Jamie Ostroff

“HPV Vaccination Knowledge among Diverse, Immigrant Parents in New Jersey”

Bianca Anuforo, Jennifer McGee-Avila, Lindsey Toler, Baichen Xu, Racquel E. Kohler, Sharon Manne, Jennifer Tsui