







### PROGRAM SCHEDULE CANCER RESEARCH SYMPOSIUM OCTOBER 16, 2025

McDonnell Hall, Washington Road, Princeton University, Princeton, NJ 08540

## Welcome and Opening Remarks 10:00 A.M.

Eileen White, Ph.D., Deputy Director, Chief Scientific Officer, Rutgers Cancer Institute Board of Governors Professor, Molecular Biology and Biochemistry, Rutgers, The State University of New Jersey Associate Director, Ludwig Princeton Branch, Princeton University

## Cancer Metabolism Session 10:00 A.M. – 11:30 A.M.

*Chair:* Wenwei Hu, Ph.D., Professor of Radiation Oncology, Co-Leader, Cancer Metabolism and Immunology Program, Rutgers Cancer Institute, Rutgers, The State University of New Jersey

#### 10:00 A.M. - 11:00 A.M.

Exploiting a metabolic vulnerability in mTOR Complex 1-driven cancers

Alexander Valvezan, Ph.D.

Assistant Professor, Department of Pharmacology, Rutgers, The State University of New Jersey Member, Cancer Metabolism and Growth Program, Rutgers Cancer Institute Discovery and Characterization of Oncohistones Tom Muir, Ph.D.

Professor, Department of Chemistry,

Princeton University

Member, Cancer Pharmacology Program, Rutgers Cancer Institute

#### 11:00 A.M. - 11:30 A.M.

#### Tumors hijack macrophages for iron supply to promote bone metastasis and anemia

Yujiao Han, Hirak Sarkar, Zhan Xu, Sereno Lopez-Darwin, Yong Wei, Xiang Hang, Fengshuo Liu, Kimberley Tran, Wei Wang, Jennifer M. Miller, Christina J. DeCoste, Dylan Blohm, Robert L. Satcher, Xiang H.-F. Zhang, Yibin Kang

#### Pyruvate kinase as a therapeutic target in T-ALL

Rodrigo Prieto-Bermejo, Victoria da Silva-Diz, Luca Tottone, Amartya Singh, Maya Aleksandrova, Oekyung Kim, Olga Lancho, Xiaoyang Su, Matthew G. Vander Heiden, Daniel Herranz

#### Exploring the metabolic pathways of early-stage hormone receptor/HER2 negative breast cancer

Coral Omene, Shicha Kumar, Mridula George, Lindsay Potdevin, Jonathan Smith, Ankit Shah, Kant Matsuda, Deborah Toppmeyer, Meera Gupta, Kellen Olszewski, Eileen White, Joshua Rabinowitz

#### Lunch 11:30 A.M. – 12:00 P.M.

# Tumor Microenvironment and Immunology Session 12:00 P.M. – 1:30 P.M.

*Chair:* Yibin Kang, Ph.D., Warner-Lambert/Parke-Davis Professor, Department of Molecular Biology, Founding Member, Ludwig Princeton Branch, Princeton University, Member, Cancer Metabolism and Immunology Program, Rutgers Cancer Institute

#### 12:00 P.M. – 1:00 P.M.

Cell therapy for virus-associated and non-viral epithelial cancers

#### Christian Hinrichs, Ph.D.

Professor, Department of Medicine, Rutgers, The State University of New Jersey

Co-Director of the Duncan and Nancy MacMillan Cancer Immunology and Metabolism Center of

Excellence (CIMCoE), Chief of the Section of Cancer Immunotherapy, Co-Leader of the Cancer Metabolism and Immunology Program, Rutgers Cancer Institute Dietary lipids shape the anti-tumor immune response Lydia Lynch, Ph.D.

Professor, Department of Molecular Biology and Ludwig Princeton Branch, Princeton University Member, Cancer Metabolism and Growth Program, Rutgers Cancer Institute

#### 1:00 P.M. – 1:30 P.M.

### CXCR4+ mammary gland macrophageal niche promotes tumor initiating cell activity and immune suppression during tumorigenesis

Eunmi Lee, Jason J. Hong, Gabriel Samcam Vargas, Natalie Sauerwald, Yong Wei, Xiang Hang, Chandra L. Theesfeld, Jean Arly A. Volmar, Jennifer M. Miller, Wei Wang, Sha Wang, Gary Laevsky, Christina J. DeCoste, Yibin Kang

### Dysfunctional BLTP3A enhances anti-tumor immunity via autophagic regulation in high-grade serous ovarian cancer (HGSOC)

Elaheh S. Hosseini, Kristen E. Warrington, Steven Wang, Mona Arabzadeh, Rinkee Kumari, Maria Sogaard, Christopher Alcott, Lomaani Ranasinghe, Kyle K. Payne

#### GPR132 suppresses CD8 tissue-resident memory T cell formation and anti-tumor immunity

Jiangyan Zhang, Giuseppina Marchesini Tovar, Maria Elena Diaz Rubio, Eric Tang, Ariful Islam, Tania Wong Fok Lung, Xiaoyang Su, Tessa Bergsbaken

#### Cancer Genomics Session 1:30 P.M. – 3:00 P.M.

*Chair:* Samuel F. Bunting, MBiochem, Ph.D., Associate Professor, Department of Molecular Biology and Biochemistry, Rutgers, the State University of New Jersey, Member, Genomic Instability and Cancer Genetics Program, Rutgers Cancer Institute

#### 1:30 P.M. - 2:30 P.M.

Identifying and validating RNA biomarkers for Precision Oncology

Chang Chan, Ph.D.

Associate Professor, Department of Medicine, Rutgers, the State University of New Jersey Co-Leader, Genomic Instability and Cancer Genetics

Program, Rutgers Cancer Institute

Single-cell multi-omics reveals archetypal regulatory programs shared across T cell subsets Yuri Pritykin, Ph.D.

Assistant Professor, Department of Computer Science and Lewis-Sigler Institute for Integrative Genomics, Princeton University

Member, Cancer Metabolism and Immunology Program, Rutgers Cancer Institute

#### 2:30 P.M. - 3:00 P.M.

Complex HPV-human DNA structures revealed by large-scale DNA analyses in an HPV-cancer derived cell line

Eleanor J. Agosta, Yoke-Chen Chang, Vandya Rao, Jessie Hollingsworth, Michelle Brown, Debajyoti Kabiraj, Chang Chan, Subhajyoti De, Advaitha Madireddy, Brian J. Haas, Danny E. Miller, Jack Lenz, Cristina Montagna

Multimodal spatial alignment and morphology mapping with flow matching

Hongyu Zheng, Xinhao Liu, Peter Halmos, Hirak Sarkar, Julian Gold, Erik Storrs, Wen-hung Chou, Li Ding, Ben Raphael

Dissecting tertiary lymphoid structures in colorectal cancer through combined single cell and spatial transcriptomics analysis

Jose Gonzalez, Jiekun (Jackie) Yang, Wenwei Hu

Poster Session: Presentations & Wine and Cheese Reception 3:00 P.M. – 4:30 P.M.