

SCHEDULE

Breakfast and Check In

8:00 to 9:00 am Event Room A and B

Welcome and Introduction

9:00 to 9:30 am – Andre Levchenko, PhD
John C. Malone Professor of Biomedical Engineering, Director of Yale Systems Biology Institute, Director of Cancer Systems Biology @Yale (CaSB@Yale), Editor-in-Chief of “Current Opinion in Systems Biology”

The Pyruvate Kinase Type M2 Site-Specific Phosphorylation Tweak That Benefits Cancer Progression

9:30 to 9:45 am – Maria Apostolidi, PhD, Postdoctoral Associate, Rinehart Lab, Yale Systems Biology Institute

Entropy Production in Particles, Fields, and Biology

9:45 to 10:00 am – Daniel Seara, MS, Graduate Student in Physics, Murrell Lab, Yale Systems Biology Institute

Gene Editing Applications in Cancer Systems Biology

10:00 to 10:15 am – Sidi Chen, PhD, Assistant Professor of Genetics, Yale Systems Biology Institute

Cancer Cells on the Racing Track

10:15 to 10:30 am – JinSeok Park, PhD, Postdoctoral Associate, Levchenko Lab, Yale Systems Biology Institute

Break - 10:30 to 10:45 am Event Room A and B

Investigating How Altered EGFR Signaling Dynamics Affect Cellular Outcome

10:45 to 11:00 am – Chun Hu, MS, Graduate Student in Pharmacology, Lemmon Lab, Yale Cancer Biology Institute

Modular Engineering for CAR-T Cells

11:00 to 11:10 am – Jonathan Park, BS, Graduate Student in MD/PhD Program, Chen Lab, Yale Systems Biology Institute

Highlights from Cancer Systems Biology at Yale Education and Outreach

11:10 to 11:25 am – Corey S. O’Hern, PhD, Professor of Mechanical Engineering & Material Sciences, Yale University

Poster Presentations

11:25 am to 12:00 pm – Research highlights by junior investigators

Lunch - 12:00 to 1:00 pm Event Room A and B

Poster Session - 1:00 to 2:00 pm Event Room A and B

Keynote Presentation: Molecular Engines of Migration in Brain Cancer: Tools, Tracks, Tailor-Made Therapies

2:00 to 2:45 pm – Alfredo Quinones-Hinojosa, MD, William J. and Charles H. Mayo Professor and Chair of Neurologic Surgery, Mayo Clinic, Jacksonville, Florida

Cooperation Is in Our Nature – Using Image Guided Genomics to Probe Collective Invasion

2:45 to 3:00 pm – Adam Marcus, PhD, Professor of Hematology and Medical Oncology, Emory University School of Medicine; Associate Director for Basic Research and Shared Resources, Winship Cancer Institute of Emory University

Microfabricated Tools for Cancer Systems Biology Research

3:00 to 3:15 pm – Rong Fan, PhD, Associate Professor of Biomedical Engineering, Yale University

Emergence of Phenotypic Heterogeneity in Hypoxic Cancer

3:15 to 3:30 pm – Kshitiz, PhD, Assistant Professor, Dept. of Biomedical Engineering, UConn Health; Kshitiz/Wagner Labs, Yale Systems Biology Institute

Gene Expression and Noise Dynamics During Single-Cell Aging

3:30 to 3:45 pm – Murat Acar, PhD, Assistant Professor of Molecular, Cellular and Developmental Biology and of Physics, Yale Systems Biology Institute

Break - 3:45 to 4:00 pm Event Room A and B

Characterization of Cell-Cell Communication Networks in the Melanoma Tumor Microenvironment

4:00 to 4:10 pm – Gabriela Pizzurro, PhD, Postdoctoral Associate, Miller-Jensen Lab, Biomedical Engineering Dept., Yale University

Proteomic Quest for Invasive Phenotype in Cancer Cells

4:10 to 4:20 pm – Yansheng Liu, PhD, Assistant Professor of Pharmacology, Yale Cancer Biology Institute

Human Gene Editing Using an Engineered Cas9 System that Senses Dynamic Cellular States

4:20 to 4:35 pm - Benjamin Akhuetie-Oni, MS, Graduate Student; Molecular, Cellular and Developmental Biology; Isaacs Lab, Yale Systems Biology Institute

Note of Thanks and Awards

4:35 to 4:45 pm

Reception and Networking

4:45 to 5:45 pm Event Room A and B