2021 Broad Institute
Next Generation in Biomedicine
Symposium

January 27-28, 2021

WEDNESDAY, JANUARY 27

12:00 PM **Day I Opening: Todd Golub**

12:10 PM **Cancer & Immunology Session I**
Moderator: Ramnik Xavier

Metabolic contribution of neurons, via peripheral axons, to pancreatic tumorigenesis
Robert Banh

Recoding commensal-immune communication for cancer immunotherapy
Yiyin Erin Chen

The airway microbiome and inflammation in asthma phenotype
Ariangela J. Kozik

1:10 PM **Spatial Chat with Cancer & Immunology Session I speakers**: broad.io/nextgenchat

1:30 PM **Cancer & Immunology Session II**
Moderator: Robert Manguso

Developing personalized treatment strategies which minimize the emergence of antibiotic resistance
Mathew Stracy

Hijacking host motor proteins for viral entry
Chelsey Cierra Spriggs

EcDNA hubs drive cooperative intermolecular oncogene expression
Kathryn Yost

2:30 PM **Spatial Chat with Cancer & Immunology Session II speakers**: broad.io/nextgenchat

2:45 PM **Neuroscience**
Moderator: Morgan Sheng

A ventrolateral medulla-midline thalamic circuit for hypoglycemic feeding
Sofia Beas

Risk factors for aging and Alzheimer's disease in Blacks
Kacie Deters

Neuroimmune circuits regulate intestinal immune-metabolic homeostasis
Jhimmy Talbot

3:45 PM **Day I Closing: Todd Golub**

3:45 PM **Spatial Chat with Neuroscience Session speakers**: broad.io/nextgenchat

12:00 PM   **Day II Opening: Todd Golub**

12:05 PM   **Tools & Technology Session I**
Moderator: Fei Chen

Synthetic recording of cell lineage and molecular history with image based readout
Amjad Askary

Molecular programming using de novo designed proteins
Zibo Chen

Radiogenomics data integration for predictive oncology
Mireia Crispin-Ortuzar

1:05 PM   **Spatial Chat with Tools & Technology Session I speakers**: broad.io/nextgenchat

1:25 PM   **Tools & Technology Session II**
Moderator: Xiao Wang

Programmable transcriptional memory by CRISPR-based epigenome editing
James Nuñez

Functional and antigenic evolution of the SARS-CoV-2 receptor-binding domain
Tyler Starr

Kethoxal-assisted profiling of transcription dynamics and RNA-RNA interactions
Tong Wu

2:25 PM   **Spatial Chat with Tools & Technology Session II speakers**: broad.io/nextgenchat

2:40 PM   **Chemical Biology**
Moderator: Bridget Wagner

Engineering biological functions with synthetic protein switches
Xin Zhou

Sensory mechanisms underlying feeding regulation
Ling Bai

Structural insights into the analgesic drug target TRPM8
Melinda Diver

Chemical genetic assessment of tyrosine kinase signaling in the animal stem lineage
Florentine Rutaganira

A chemical strategy for brain-specific inhibition of mTOR
Ziyang Zhang

4:20 PM   **Day II Closing: Todd Golub**

4:20 PM   **Spatial Chat with Chemical Biology Session speakers**: broad.io/nextgenchat