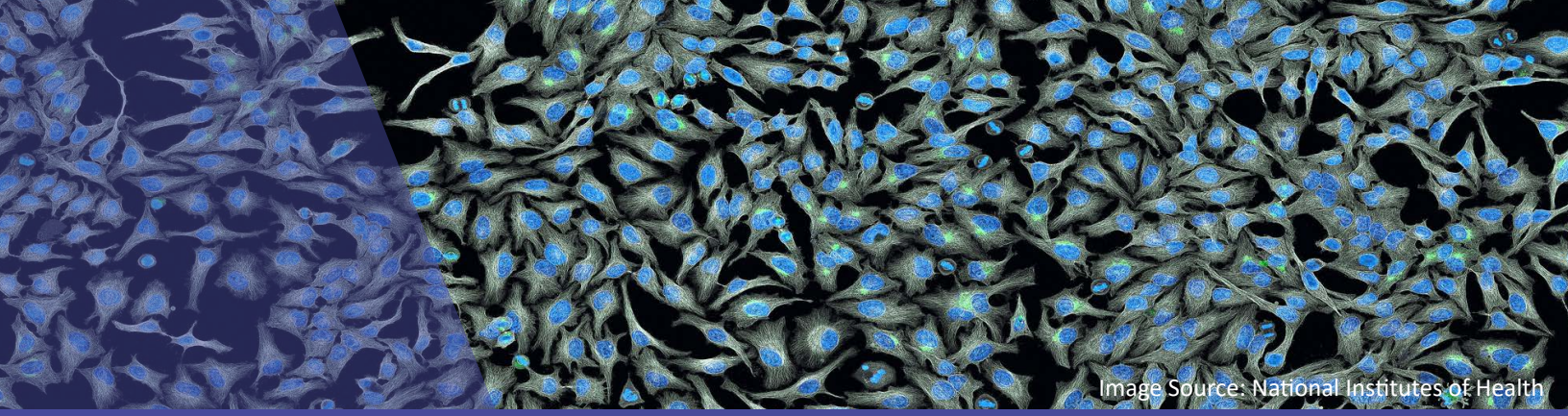


Robert H. Lurie Comprehensive Cancer Center of Northwestern University

Lurie Cancer Center's Basic Research Seminar Series

Epigenetic Regulation of T Cell Exhaustion in Chronic Viral Infection and Cancer

Tuesday, March 5, 2024

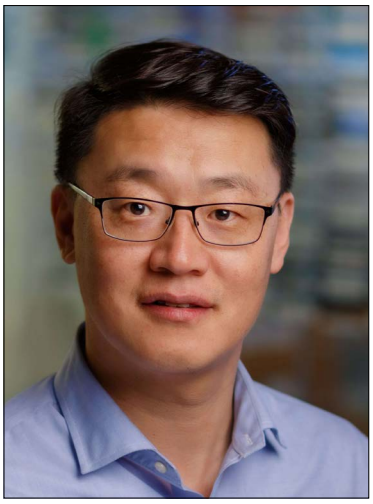
11:00 a.m.- 12:00 p.m. CT

Baldwin Auditorium, 1st Floor

Robert H. Lurie Medical Research Center
303 E. Superior St., Chicago, IL

Host: Deyu Fang, PhD

My research interest has mainly focused on how cytokine signals and genetic pathways influence effector and memory T cell differentiation as well as T cell exhaustion. I have discovered multiple signaling pathways and transcriptional circuits that regulate both terminally differentiated/senescent effector T cell and long-lived memory T cell fate decisions. My work has uncovered a novel pathway, connecting CD4-derived IL-21 to STAT3-BATF regulated transcriptional machinery in CD8 T cells, which vigorously sustains the effector function in CD8 T cells, which can be harnessed to fight cancer. In addition, we have recently employed single-cell transcriptomics studies and discovered new immune cells in the context of chronic viral infection and tumorigenesis. The overarching goal of my research is to find new ways to reverse T cell exhaustion and improve control over chronic viral infection and cancer.



Weiguo Cui, PhD
Professor of Pathology
Northwestern University Feinberg School of Medicine

Northwestern Medicine

Robert H. Lurie Comprehensive Cancer Center of Northwestern University

Basic Sciences Research Division of the Robert H. Lurie Comprehensive Cancer Center of Northwestern University
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