YaleNewHavenHealth
Smilow Cancer Hospital

Yale CANCER CENTER
A Comprehensive Cancer Center Designated by the National Cancer Institute

Grand Rounds

Tuesday, February 24, 2026
12:00pm

Smilow Auditorium, 55 Park Street
Zoom Access
Lunch will be available

The Geography of Acute Leukemia: Spatial Mapping of Myeloid Neoplasm

Iannis Aifantis, PhD

Chair, Department of Pathology; Hermann M. Biggs Professor of Pathology, Department of Pathology at NYU Grossman School of Medicine

Needs:
Advancements in our understanding of hematopoietic stem cell differentiation and malignant transformation are crucial for developing effective therapeutic strategies for leukemia and lymphoma. Despite progress, there are still gaps in understanding the underlying molecular mechanisms that drive these processes, particularly in the areas of genomic, epigenetic, and proteomic regulation.

Objectives:
1. Understanding extra-medullary leukemia
2. Basics of leukemia tumor microenvironment
3. Novel immune treatments in leukemia

Iannis Aifantis, PhD

Dr. Iannis Aifantis is the Hermann M. Biggs Professor of Pathology and the Chair of the Department of Pathology at the NYU School of Medicine. He is also a member of the NYU Perlmutter Cancer Center. He has completed his BS (Molecular Biology) and MSc (Genetics, Immunology) at the University of Crete in Greece. He obtained his PhD from the University of Paris V (Institut Necker) in France and completed a post-doctoral training in Immunology and Hematology at the Dana-Farber Cancer Institute (Harvard Medical School) both under the supervision of Dr. Harald von Boehmer. Dr. Aifantis became an Assistant Professor in Medicine at the University of Chicago and moved to NYU School of Medicine in 2006. He has been a member of the Howard Hughes Medical Institute (HHMI) as an early career investigator (2009-2015).

His laboratory focuses on mechanisms of differentiation and transformation of hematopoietic stem cells and progenitors. More specifically, it focuses on the molecular mechanisms of both lymphoid and myeloid malignancy induction and maintenance. His work has identified and studied novel oncogenes, tumor suppressors and downstream oncogenic signaling pathways. The Aifantis lab is using these pathways to design molecularly targeted therapeutic protocols that influence disease progression and drug resistance. More recently, the lab has focused on the epigenetic regulation of leukemia, with focus on DNA methylation and the impact of the leukemia microenvironment on disease initiation and progression.

Continuing Medical Education
Yale CME