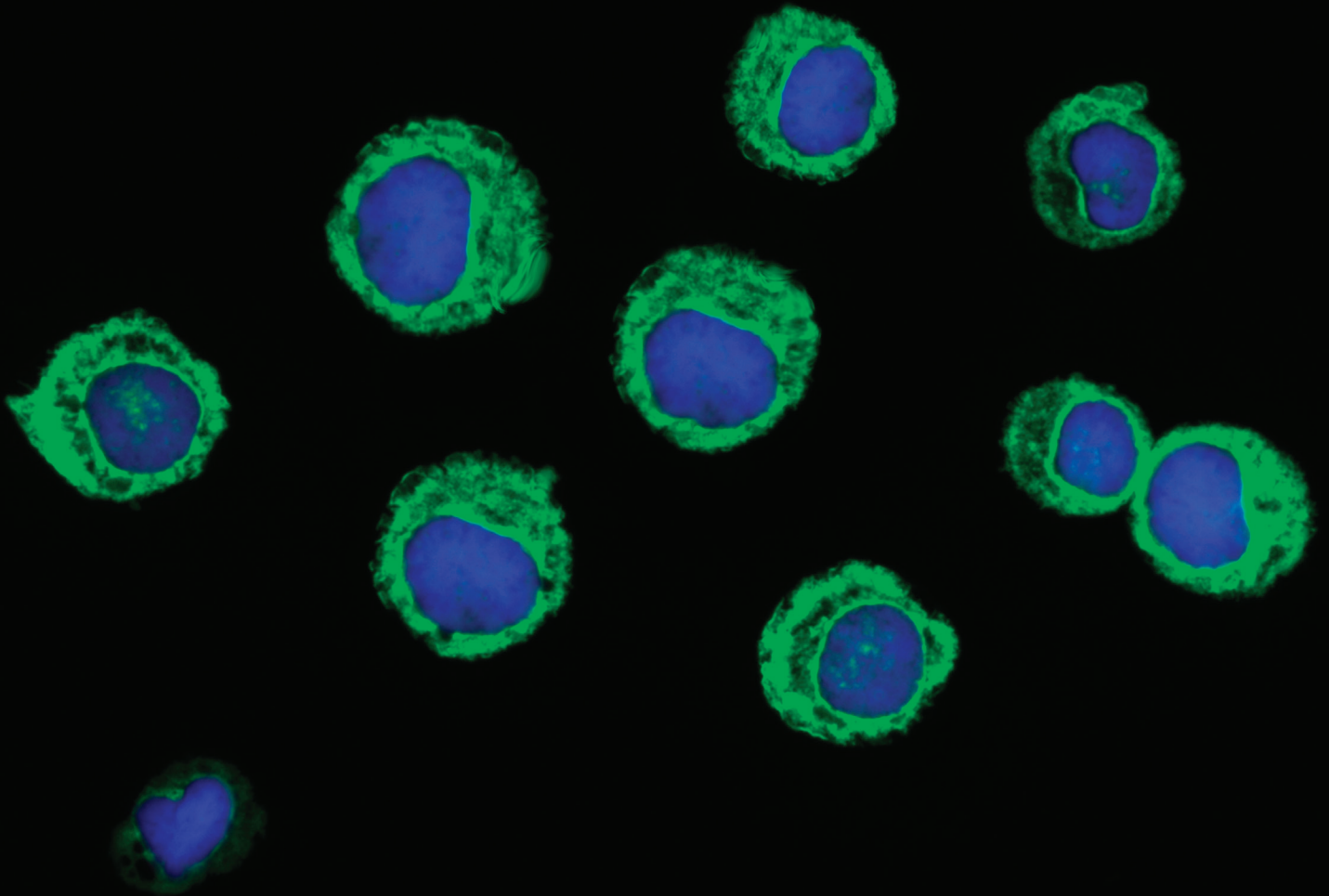


# Leukemia Translational Research Program





## Leukemia Translational Research Program

Leukemias are among the most aggressive and lethal forms of blood cancer. Despite dramatic advances in understanding cancer biology, there is still much work left to be done for people affected by these diseases. At the Robert H. Lurie Comprehensive Cancer Center of Northwestern University, our dedicated and multidisciplinary team of physicians, laboratory scientists, nurses, and other healthcare professionals is collaborating to diagnose, treat, and care for patients living with leukemia and related diseases.

Establishing a **Leukemia Translational Research Program** within the Lurie Cancer Center will expand on the strength of Northwestern's Leukemia Program. The program provides an infrastructure to fast-track discovery and to improve patient outcomes and care by opening doors to targeted and more effective treatment options. This year, more than 175,000 people in the United States will be diagnosed with a form of leukemia. The Leukemia Translational Research Program will offer hope to newly diagnosed leukemia patients and patients who for years have been battling against acute and chronic leukemias, myelodysplastic syndrome, and other chronic myeloid neoplasms.

The Leukemia Translational Research Program will broaden global awareness of these life-threatening diseases, promote the importance of stem cell cord blood donations and transplants, and expand personalized care and treatment options to patients fighting to survive and resume normal life.

### Laboratory Research in Leukemia

We are leading a number of internationally recognized laboratory research programs at the Lurie Cancer Center that are focused on understanding the mechanisms that drive the development of leukemia and its resistance to therapy. The ultimate goal is to develop novel targeted drugs for patients with leukemia and related diseases. Some notable laboratories and areas of expertise include signal transduction, leukemogenesis, pharmacology, and epigenetics among others:

**Leon Platanius, MD, PhD, Jesse, Sara, Andrew, Abigail, Benjamin and Elizabeth Lurie Professor of Oncology and Director of the Robert H. Lurie Comprehensive Cancer Center of Northwestern University** – Dr. Platanius's research focuses on targeting pathways involved in signal transduction in leukemia cells and generating novel drugs that can be used alone or in combination with chemotherapy.

**Jessica Altman, MD, Associate Professor of Medicine-Hematology/Oncology, Co-Director of the Leukemia Program, and Director of the Acute Myeloid Leukemia Program** – Dr. Altman conducts research in Dr. Platanius's lab targeting mTOR pathway in acute leukemia cells. Through her research, she has identified new treatment options for patients suffering from acute leukemias.

**Olga Frankfurt, MD, Associate Professor of Medicine-Hematology/Oncology, Co-Director of the Leukemia Program, and Associate Director for Cord Blood Transplantation (Hematopoietic Stem Cell Transplant Program)** – Dr. Frankfurt is a clinical researcher, conducting a laboratory investigation aiming to understand the pattern and kinetics of the umbilical cords engraftment. The results of this study will allow for the optimal donor cord selection and the ability to predict successful engraftment early in the course of the transplantation. This study is being conducted in collaboration with Anat R. Tambur, DMD, PhD, a director of the Transplant Immunology Laboratory.



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“The Leukemia Translational Research Program will allow us to capitalize on existing research in leukemia, identify pathway abnormalities in patients, and develop drugs specific to these abnormalities. This is the future of personalized cancer care, and we have an opportunity to be at the forefront of discovery and care.”

Jessica Altman, MD  
Associate Professor in Medicine-Hematology/Oncology



## Clinical Research, Care, and Treatment

The Lurie Cancer Center's Leukemia Program is an internationally recognized referral center because of our approach to cancer care.

- We utilize the most advanced scientific information to make a diagnosis and to design a state-of-the-art and individualized treatment plan.
- We pursue psychological and emotional support for our patients and their loved ones, including exploring fertility preservation options.
- We design clinical trials based on the most promising work conducted by laboratories within the Lurie Cancer Center and around the world and in conjunction with industry partners.
- Our patients have first access to the most promising agents well before they become commercially available.
- Our research programs focus on developing non-chemotherapy approaches, small molecules, targeted agents, and immuno- and stem-cell therapies.
- We have one of the largest clinical research practices in the country of umbilical cord blood transplantations – a vital option for leukemia patients without alternative treatment options.

As cancer research at Northwestern Medicine continues to evolve and expand, there is critical need for the safe and quick delivery of novel, breakthrough compounds and approaches. The Leukemia Translational Research Program bridges the gap between advances in the molecular understanding of leukemia and clinical care. This program provides the infrastructure to

offer targeted and more effective therapies to people affected by these diseases and strengthens our understanding of umbilical cord blood transplantation.

## Medical Education

Our leaders of the Leukemia Program at Northwestern Medicine are nationally and internationally prominent in research and education. These physician-scientists are members of the prestigious National Comprehensive Cancer Network (NCCN) guidelines panels and leaders within the National Cancer Institute (NCI) cooperative groups for clinical trials. Our leaders are passionate about educating and training the next generation of clinical translational physicians.

## Northwestern Medicine

Northwestern Memorial HealthCare and Northwestern University Feinberg School of Medicine are seeking to impact the health of humankind through Northwestern Medicine. Our commitment to transform healthcare and to be among the nation's top academic medical centers will be accomplished through innovation and excellence. At the Lurie Cancer Center, we recognize that every positive contribution we have made to cancer care, research, and education has been made possible by generous donors who have entrusted us with their philanthropic support.

We invite loyal donors and friends to join us in advancing the vision of the Leukemia Translational Research Program. Your gifts of outright support and endowment will provide the resources we need to introduce breakthroughs that will improve the diagnosis and treatment of people living with cancer today and in the future.



“Our Leukemia Translational Research Program will further enable the application of the most advanced scientific discoveries to the art of patient care, paving the way for a cure in our lifetime. Our program will increase awareness and support of research in umbilical cord blood transplantation, providing a vital treatment option for the patients without donor match. We are excited about this new frontier to save lives of patients affected by leukemia.”

Olga Frankfurt, MD  
Associate Professor in Medicine-Hematology/Oncology

# THROUGH NORTHWESTERN MEDICINE, WE ARE CREATING A NATIONAL EPICENTER FOR HEALTHCARE, EDUCATION, RESEARCH, COMMUNITY OUTREACH, AND ADVOCACY.

## About the Lurie Cancer Center

- The Robert H. Lurie Comprehensive Cancer Center of Northwestern University—one of 51 National Cancer Institute-designated Comprehensive Cancer Centers in the nation—is committed to being a national leader in the battle to overcome cancer.
- Recognized as a national leader in cancer treatment, the Lurie Cancer Center supports care for a broad range of cancer types through comprehensive research; distinguished and dedicated faculty and staff; a world-class teaching program; and ongoing advances in medical, surgical, radiation, and interventional oncology.
- We are a founding member of the National Comprehensive Cancer Network (NCCN): an alliance of 28 of the nation's leading cancer centers dedicated to improving the quality, effectiveness, and efficiency of cancer care so that patients can live better lives.
- Northwestern's Lurie Cancer Center is a founding member of the Big Ten Cancer Research Consortium, which collaborates on oncology clinical trials that leverage the scientific and clinical expertise of the Big Ten universities.
- The Lurie Cancer Center has established major research strengths in breast, genitourinary, gastrointestinal, aero-digestive, neurologic, and gynecologic cancers; hematologic malignancies, sarcoma, melanoma, cutaneous lymphoma, and pediatric oncology.
- Our research programs in hormone action/signal transduction, angiogenesis, gene regulation, biologic therapies, mathematical modeling, and nanotechnology are nationally and internationally recognized.
- Our outstanding basic, translational, and clinical research complements a full range of prevention, early detection, treatment, rehabilitation, and palliative care programs for all types of cancer.
- Our nationally recognized supportive oncology programs and survivorship specialty clinics include fertility preservation services for young adult cancer survivors.

Learn more about the Leukemia Translational Research Program at [cancer.northwestern.edu/ltrp](https://cancer.northwestern.edu/ltrp).

