THE CANCER INSTITUTES AT NORTHWESTERN MEDICINE
SKIN CANCER INSTITUTE
Skin cancer—the most common form of cancer in the United States—impacts all of our lives. It is estimated that at least one in five Americans will develop skin cancer during a lifetime. Unlike many common cancers that are becoming less widespread, the incidence of all forms of skin cancer continues to rise as shown in epidemiologic studies over the last few decades.

At Northwestern Medicine, we are deeply committed to reversing the growing prevalence of all forms of skin cancer. Through our Skin Cancer Institute of Northwestern Medicine (SCINMed) within the Robert H. Lurie Comprehensive Cancer Center of Northwestern University, we are providing expert patient care and spearheading high-impact research, education, and training. With director Joan Guitart, MD, and esteemed co-directors Timothy Kuzel, MD, and Jeffrey Wayne, MD, we offer multidisciplinary leadership and care from leading figures in dermatology, surgical oncology, medical oncology, and radiation oncology. The work and vision of our leaders are based on cutting-edge laboratory and clinical research. More than a dozen investigators at Northwestern perform research funded by the National Institutes of Health that focuses on skin cancers. We are the Chicago area’s leading site for the care of patients with skin cancers (including melanomas, cutaneous lymphomas, and carcinomas) and are proud to offer a comprehensive and patient-centered clinical program. As a premier teaching institution, we are training the next generation of skin cancer specialists and researchers.

THE FIVE ARMS OF THE SKIN CANCER INSTITUTE

Melanoma

Melanoma is the most deadly form of skin cancer. Promising breakthroughs are on the horizon, but much work needs to be done. At the Skin Cancer Institute, we are studying and developing new detection techniques and markers, as well as novel therapies that will help patients receive care that is personalized and more effective in treating their particular melanoma diagnosis. In our Melanoma Multidisciplinary Clinic, we conduct mole mapping and total body photography to monitor high-risk patients. We work closely with our patients to coordinate their dermatologic, medical, and surgical oncologic care. Northwestern is the region’s largest center for the surgical treatment of melanoma and a research center for testing new systemic interventions for metastatic melanoma.

We offer a vast expertise in histology and molecular diagnostics. The Northwestern Molecular Diagnostics Laboratory is one of only four laboratories in the nation to perform fluorescence in situ hybridization (FISH) as a diagnostic tool for distinguishing between benign and malignant melanocytic neoplasms. We are developing a promising molecular technique to test the prognosis of melanoma with a simple scraping of the skin.

Cutaneous Lymphomas

Cutaneous lymphomas are rare, yet the incidence has doubled during the past 25 years (4,500 new patients nationally per year). Patients with cutaneous lymphomas, the cause or risk factors of which are unknown, often suffer from intractable itchiness, skin pain, ulcers, and infections that greatly impair quality of life at many levels, including one’s ability to sleep. Many of the currently utilized medical and phototherapeutic approaches to treat cutaneous lymphoma were originally developed and/or tested at Northwestern, and we continue to develop and review new methods.

At Northwestern Medicine, we are defining the underlying genetic changes that cause skin lymphomas. Our Cutaneous Lymphoma Clinic is recognized internationally as a model for patient care, with experts in hematology/oncology, dermatology, and dermatopathology who consult with radiation oncologists, surgeons, and psychologists as needed. Current therapies include biologic treatments, chemotherapy, phototherapy, and photopheresis. Northwestern also pioneered allogenic stem cell transplantation for cutaneous lymphoma, a promising technique that can provide long-term, disease-free prognosis for patients with advanced disease.

“Through the Skin Cancer Institute, we are endeavoring to reverse the growing incidence of all forms of skin cancer by contributing breakthroughs and innovations to help patients today and in the future. Based on our excellence in research, Northwestern is one of only six Skin Disease Research Centers as designated by the National Institutes of Health.”

Joan Guitart, MD
Basal Cell and Squamous Cell Carcinomas

Approximately 13 million Americans have a history of non-melanoma skin cancer, typically diagnosed as basal cell carcinoma or squamous cell carcinoma. Both of these are curable. Northwestern is a leading center in the care of skin cancer patients with extensive sun damage and immune suppression, such as those who have received solid organ transplants (kidney, heart, lung, pancreas, liver, and small bowel). After transplant, these patients are at 100-fold increased risk of developing squamous cell skin cancer. Through the Skin Cancer Institute, we carefully evaluate their skin before transplantation and then follow-up annually to ensure early detection of these cancers. We provide education about sun protection. We also monitor other individuals who are at heightened risk, such as those with chronic leukemia, HIV, inflammatory bowel disease, lupus, rheumatoid arthritis, Parkinson’s disease, and multiple sclerosis.

Research in this area at Northwestern is flourishing. Northwestern is one of 11 collaborating sites studying hedgehog pathway inhibitors and their role in treating basal cell cancers, which are currently treated primarily surgically. These hedgehog pathway-inhibiting drugs may be able to prevent, cure, or provide alternative treatment for those who have cancer that is inoperable or cannot be treated with radiation (i.e. basal cell cancer near the eye).

OncoDermatology (Skin and Mucosal toxicities of Anticancer and Radiation Therapies/ SMART)

Northwestern has the only formal division in the nation dedicated to the care of the mucocutaneous side effects of traditional chemotherapy, newer targeted anti-cancer therapies, and stem cell transplantation. Our clinical team has several dedicated SMART clinics weekly and is deeply committed to ameliorating the quality of life of patients undergoing chemotherapy who often suffer from severe rashes, skin tumors, and itchiness. Our efforts have allowed individuals who develop these complications to continue their life-saving medications.

Northwestern has invested more than $1 million to grow the clinical program, with a goal to expand to 5 full-time clinical faculty in the next 5 years. We are seeking funds to complement the clinical growth with a research initiative that enables us to study and, thereby, better understand and manage the skin complications of cancer drugs and transplants.

Skin Cancer Prevention and Education

The Skin Cancer Institute is a trailblazer in education and research that focuses on preventing and detecting skin cancer. We are performing research on how people learn and can be motivated to change their behavior. These studies are leading to out-of-the-box thinking about early detection and changing behavior to prevent skin cancer.

Project Skin Watch is an educational research study that teaches melanoma patients and their partners how to perform accurate skin checks and detect skin cancer early. When melanoma is detected in its early stages, the 5-year survival rate is nearly 100 percent. Since only 16 percent of melanomas are found by physicians, direct patient education is crucial. This novel study was awarded a Research Project Grant from the National Institutes of Health.

NORTHWESTERN MEDICINE

Northwestern Memorial HealthCare and Northwestern University Feinberg School of Medicine are seeking to impact the health of humankind through Northwestern Medicine. We aspire to be the destinations of choice for people seeking quality healthcare; for those who provide, support, and advance that care through leading-edge treatments and breakthrough discoveries; and for people who share our passion for educating future physicians and scientists. Our commitment to transform healthcare and to be among the nation’s top academic medical centers will be accomplished through innovation and excellence.

The Cancer Institutes within our world-class Robert H. Lurie Comprehensive Cancer Center of Northwestern University are providing exciting opportunities to bring our best people, programs, and resources together to plan, coordinate, and implement patient care, research, education, community service, and advocacy across the realm of cancer. We will establish several new institutes and centers within the next few years to facilitate the work of our cancer physicians and scientists. These robust interfaces and collaborations will undoubtedly lead to clinical advances that benefit patients and their families locally, nationally, and across the globe.
About the Lurie Cancer Center

- The Robert H. Lurie Comprehensive Cancer Center of Northwestern University—one of 45 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 25 of the nation’s leading cancer centers dedicated to improving the quality and effectiveness of cancer care through development of clinical treatment guidelines and longitudinal outcomes research.
- 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 Lurie Cancer Center’s patient care, services and programs, research and education, clinical trials, and faculty at cancer.northwestern.edu.