



UNIVERSITY of MARYLAND

MARLENE AND STEWART GREENEBAUM COMPREHENSIVE CANCER CENTER

The University of Maryland Marlene and Stewart Greenebaum Comprehensive Cancer Center is one of the top cancer treatment and research centers in the country. In 2016, the National Cancer Institute elevated UMGCCC to its designation as a comprehensive cancer center — one of just 51 in the nation. As part of the University of Maryland Medical Center, we offer innovative approaches to diagnosing and treating all types of cancer, conduct cutting-edge research to bring the latest advances in cancer treatment directly to our patients, and provide cancer screening and patient education services.

OUTSTANDING PATIENT CARE & SCIENTIFIC EXCELLENCE

A team approach to care, in which specialists from all cancer disciplines work together to develop an individualized treatment plan for each patient.

Minimally invasive treatment options, including stereotactic body radiation therapy, robot-assisted surgery and the newest, targeted drug therapies.

Innovative clinical trials offering patients promising new therapies, often years before they are available commercially.

Patient-focused treatment environment featuring private rooms for all inpatients, the Stoler Pavilion for outpatient care and a dedicated pharmacy and infusion center.

An active translational **research program**, making advances in developing cancer vaccines, new technologies, novel cancer-fighting agents and promising combination therapies.

Top-rated nursing staff specially trained in cancer care and consistently rated as outstanding in patient satisfaction surveys.

Support services, including social work, patient navigators, genetic and nutrition counseling, an image renewal center and integrated medicine for cancer symptom management.

Education, outreach and free cancer screenings for underserved individuals through the **Baltimore City Cancer Program**.

The University of Maryland Cancer Network allows Maryland residents to benefit from specialized cancer expertise and clinical trials close to home.

FACTS



QUICK NUMBERS

57,000+	Outpatient Visits
1,300+	Inpatient Admissions
3,000+	New Patients Annually
218	Clinical Trials
280	Physicians and Researchers
\$113 Million	Research Funding



A Cancer Center Designated by the
National Cancer Institute

CANCER TREATMENT SPECIALTIES

Blood and Marrow Transplant	Genitourinary Cancer
Bone and Soft Tissue Cancer	Gynecologic Cancer
Brain Cancer	Head and Neck Cancer
Breast Evaluation and Treatment	Hematologic Malignancies
Endocrine Malignancies	Pediatric Oncology
Gastrointestinal Cancer	Skin Cancer
	Thoracic Cancer





OUR NATIONAL PROFILE

In 2016, UMGCCC became a National Cancer Institute (NCI)-Designated **Comprehensive Cancer Center**, a distinction shared by just 51 centers across the US.

UMGCCC is ranked among the top 20 cancer programs in the country, according to *U.S. News & World Report's* Best Hospitals list.

Cancer research funding at UMGCCC has grown dramatically since 2002—from \$19.4 million to \$113 million—and continues to drive scientific discovery by our cancer experts, all of whom are faculty of the UM School of Medicine.

UMGCCC is a leader in addressing **cancer disparities**, with research focused on improving access to care and treatment outcomes for minorities, who represent 65 percent of the patients in our clinical trials, compared to 16 percent nationally.

The Maryland Proton Treatment Center, a next-generation radiation treatment facility, began treating patients in 2016 in the University of Maryland BioPark. Because of its precision, proton therapy is thought to be beneficial for some patients with tumors near vital organs, as well as for pediatric patients.

UMGCCC is a national leader in developing new **immunotherapy** approaches that train a patient's own immune system to fight cancer. More than two dozen clinical trials utilize immunotherapy. These trials are supported by UMGCCC's new Fannie Angelos **GMP (Good Manufacturing Practice) Lab** which permits cancer center investigators to genetically engineer patients' T cells to recognize and attack their cancers.

The UMGCCC was the first cancer center in the Baltimore/Washington area to offer **CAR-T cell therapy** for B cell lymphomas. A number of clinical trials with this innovative therapy are currently underway for lymphoma and leukemia.

Dr. Cedric Yu and Dr. William Regine invented and developed the **GammaPod**, a stereotactic radiotherapy system uniquely dedicated to treating early-stage breast tumors. Now FDA cleared, the device is undergoing clinical trials which may simplify the treatment of early breast cancers with fewer side effects.

Galeterone, a drug invented at UMGCCC by investigators **Angela Brodie** and **Vincent Njar**, has shown significant activity against advanced prostate cancer. More recent studies are promising in laboratory models of pancreatic cancer. A clinical trial for this difficult disease starts soon.

Dr. Graeme Woodworth received FDA clearance to become the first in the US to **open the blood-brain barrier**, which protects the brain from toxins but makes it difficult to treat brain cancer with chemotherapy. By using focused ultrasound and microbubbles, UM can disrupt the barrier and inject an agent directly into a brain tumor.

UM's **950 MHz Nuclear Magnetic Resonance (NMR) magnet** makes possible **Dr. Kristin Varney** and **Dr. David Weber's** study of RAS proteins, which drive the growth of most cancers. This cutting-edge technology is now complemented by the state-of-the-art cryo-electron microscopy facility which gives UMGCCC the most advanced structural biology analysis capabilities in the country.

Rendering of the calmodulin protein, which NMR experiments show binds to RAS

