

# Tulane Cancer Center



"The driving force shaping Tulane Cancer Center's development has been the urgency to address the deplorable problem of cancer mortality in this region. Since its founding, our matrix center has expanded from 20 to 127 faculty members, 50 of whom are grant-funded programmatic cancer investigators. We have built world-class teams in key cancer research specialties, including prostate cancer, genetic instability, health disparities, circadian rhythm disruption, viruses and cancer, and cancer drug discovery. Our lab bench-to-bedside philosophy translates research discoveries into better treatment options for our patients."

Prescott Deininger, PhD  
Director



Oliver Sartor, MD, is  
Tulane Cancer Center's medical director

The Tulane Cancer Center was founded as a matrix center in 1993, a resource for supporting cancer-focused basic research and clinical faculty from home departments across the University. Since its founding, Tulane Cancer Center has invested and leveraged its assets into growing and enhancing our research programs and has developed several to levels of national and international prominence. These research endeavors have established a pipeline to translate key laboratory discoveries into improved treatment options for our patients. As an academic cancer center, we offer our patients the benefits of a multidisciplinary approach as well as access to cutting-edge investigational treatment and prevention trials. Through focused mentorship and training, we have also prioritized preparation and education of the next generation of cancer researchers and physician scientists.

## Highlights

- Research

Tulane Cancer Center has the highest concentration of researchers in the world working on the health impacts of human mobile elements. Mobile elements are segments of DNA that can move from one place to another in a cell's genome, reshuffling genetic material and causing mutations or breaks in DNA that could lead to the formation or faster progression of tumors.

Tulane's Circadian Cancer Biology Group is one of the only programs in the world focused on disruptions of the body's internal clock mechanism and their impact on cancer risk. Two of our circadian rhythms researchers - David Blask, MD, PhD, and Robert Dauchy - are prominently featured in three recently-produced documentaries on the negative health impacts of exposure to light at night.

Between 2010-2013, the U.S. Food and Drug Administration approved six new drugs for the treatment of advanced prostate cancer. Oliver Sartor, MD, Tulane Cancer Center medical director and one of the few medical oncologists in the world specializing in prostate cancer, played a lead role in the development of two of these drugs and served in an advisory role for two others. These are the first new treatment options offering hope for men with advanced disease since 2004.

Tulane Cancer Center's Next Generation Sequencing Core provides cancer investigators state-of-the-art technology for thorough analysis of nearly all of the genetics related to a biological sample in one test. While there are many NGS centers located throughout the world, Tulane's is unique in that it helps laboratories develop the expertise to analyze and interpret the masses of NGS data available.

Our record of minority accruals to clinical research trials has been commended. In 2016, 40% of new patients enrolled into cancer clinical trials at Tulane Cancer Center were minority. In comparison, only about 16% of participants in National Cancer Institute studies from 2000-2010 were from minority populations. Without adequate representation of all populations in clinical trials, researchers are less likely to learn about important differences among various demographic groups.

Several of our investigators have competed successfully for federal research grants to study the biological basis of cancer health disparities, making this a major area of focus for our Center.

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The Tulane Cancer Center recently relocated a number of its cancer investigators, their laboratory teams and its administrative unit into the new Louisiana Cancer Research Center, a 10-story, \$102 million state-of-the-art cancer research facility adjacent to the Tulane University School of Medicine campus. In all, approximately 100 cancer center personnel work in the new, state-funded building, which features an open-lab format, the new standard for modern research facilities.

- **Clinical Care**

Tulane's Stem Cell Transplant program performs both autologous (stem cells harvested from the patient) and allogeneic (stem cells harvested from a matched donor, related or unrelated) transplants for adults and pediatric patients, and is the only source in Louisiana for matched unrelated donor transplants for adults.

The Tulane Comprehensive Cancer Clinic serves patients from New Orleans and the Gulf Coast, as well as locations across the United States and throughout the world. The clinic offers radiation oncology services, an infusion suite, a patient resource library, genetic and psychosocial counseling, and access to cancer clinical trials.

The Patricia Trost Friedler Center for Psychosocial Oncology offers psychological, emotional, and educational support for our patients and their family members through a number of services, including individual counseling, support groups, wellness workshops, a resource library, and access to a patient navigator who is available to assist during outpatient clinic visits.

Our Arts in Medicine (AIM) program provides arts-related workshops, activities and performances for patients and their caregivers. AIM recognizes the integral role of the arts in healing the spirit and transforming the treatment experience.

Our Woman to Woman Program, funded by a \$50,000 grant from Ovarian Cancer Research Fund, pairs gynecologic cancer patients with trained and supervised volunteer survivors who provide one-on-one emotional support and mentoring.

When cancer is found early, it is more successfully treated. Tulane Cancer Center offers free cancer screenings for those diseases where early detection has been shown to make a difference. The screenings currently include prostate cancer screenings, which include a PSA blood test, and skin cancer screenings, which include a visual exam. Specialized oncology physicians and nursing personnel in each field perform these exams.

- **Mentorship**

The National Institutes of Health awarded Prescott Deininger, PhD, a total of \$21 million through a Center of Biomedical Research Excellence grant to develop a mentorship program in cancer genetics. The center has matched 14 junior investigators with a team of senior scientists who act as mentors, guiding research progress as well as career development. Nine of those COBRE mentees have already gone on to become independently funded researchers.

Since 2002, a total of thirteen Tulane University postdoctoral researchers were selected to receive the National Institutes of Health's prestigious Ruth L. Kirschstein National Research Service Award (NRSA) F32 grant. Of these, seven trained with Tulane Cancer Center faculty, and five of these were initially supported by Tulane Cancer Center funds.

Since 1994, Tulane Cancer Center has provided an additional \$2,047,000 in research support to 156 graduate students or postdoctoral candidates through our Matching Funds Program, which pairs junior researchers with faculty mentors in an effort to prepare these young investigators for successful research careers.

## **Founded**

1993

## **Faculty**

127 Cancer Center Members  
Representing home departments throughout  
Tulane University School of Medicine  
Tulane University School of Public Health &  
Tropical Medicine  
Tulane National Primate Research Center  
Tulane University's Undergraduate Campus

## **Research Strengths**

Genetic Instability & Mobile Elements  
Prostate Cancer  
Cancer Health Disparities  
Circadian Cancer Biology  
Viruses and Cancer  
Cancer Drug Discovery

## **Grant Funding**

\$9.8 million in active cancer-relevant federal funding (annual total)

## **Research Space**

Approximately 40,000 sq. ft. supported by the TCC

## **Cancer Clinical Trials**

46 Open Protocols  
310 New Patient Accruals in 2015

## **Address**

1430 Tulane Avenue  
New Orleans, Louisiana 70112  
(504) 988-6592

## **Website**

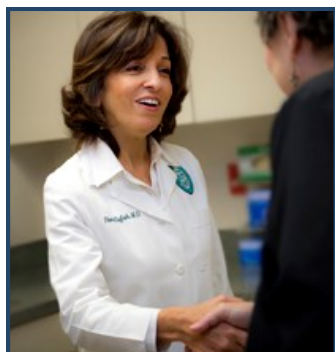
[tulane.edu/som/cancer/](http://tulane.edu/som/cancer/)



Victoria Belancio, PhD (center) accepts a \$100,000 check from the Kay Yow Cancer Fund to support her research into lung cancer genetics



Zachary Pursell, PhD, studies the human DNA polymerase Pol epsilon



Hana Safah, MD, is director of Tulane's Stem Cell Transplant program



William "Rusty" Robinson, MD, heads up Woman to Woman



Asim Abdel-Mageed, PhD, and his team are studying exosomes and tumors