



Mays Cancer Center

UT Health MDAnderson
San Antonio ~~Cancer Center~~

FUTURE FOCUS

SHARING CANCER CENTER NEWS AS WE CHAMPION HEALTH TOGETHER.

NEWSLETTER

11.14.2019

Dear Mays Cancer Center Community:

Great News! The voters of Texas passed overwhelmingly Proposition 6 to extend the bond-based funding of the Cancer Prevention Research Institute of Texas (CPRIT). This unique program across the state now extends its funding from \$3 billion to \$6 billion, thus extending its ability to fund cancer research for well over the next 10 years!



The Mays Cancer Center has received almost \$100 million in grant funding over the first decade of CPRIT and has been essential for our center, our investigators, and our programs. We are confident that our ability to leverage the opportunities of CPRIT funding will grow significantly over the next few years and play a key role in our strategic goals of becoming an NCI Comprehensive Cancer Center by the time of our next NCI renewal.

These key CPRIT resources aid us with the recruitment of both senior, and now junior faculty, and help us advance cancer prevention, screening research and implementation. It can also support business development in cancer, and most importantly, can fund direct investigator research projects.

Deepest thanks to everyone for your hard work in helping to secure the renewal of this incredibly important program for our center, our community and the State of Texas.

All my best,

Ruben Mesa, MD, FACP
Director, Mays Cancer Center



Join us for an employee appreciation Holiday Luncheon

Friday, December 13th
Mabee Conference Room (G406)
11:30am – 1:00pm

Wear your favorite holiday themed attire – cute or funny, but work-appropriate.



Scientists find new use for popular heartburn drug

By Molly Chiu , Baylor College of Medicine
View original story on bcm.edu



Radiation therapy is part of the standard-of-care treatment regimen for many cancers, including breast and lung. Unfortunately, the treatment can negatively impact healthy tissue, and many patients suffer radiation-induced complications. One example is radiation dermatitis, an inflammation of skin tissue that can adversely affect patients' quality of life by interrupting treatment, increasing risk of cancer relapse, and negatively impacting cosmetic appearance. In a new article published in [Radiation Research](#), a team of scientists from Baylor College of Medicine discovered a new use for the FDA-approved and widely used class of drug, proton pump inhibitors (PPIs), as a potential therapy.

PPIs control the production of stomach acid and are more commonly used to treat conditions like gastroesophageal reflux disorder and ulcers. The team wanted to evaluate the efficacy of the PPI esomeprazole when reformulated into a topical product. In preclinical studies, they found the drug dramatically improved the appearance of the skin and accelerated wound healing.

"We screened a library of 130,000 compounds in a quest to find candidate drugs that can regulate inflammation and were surprised to find that the entire class of PPIs possesses a previously unappreciated yet potent anti-inflammatory effect," said Dr. Yohannes Ghebre, senior author of the study, associate professor of radiation biology at Baylor and member of the Dan L Duncan Comprehensive Cancer Center.

Other researchers have studied the effectiveness of pharmacological treatments like corticosteroids, but there is currently no gold standard.

"The use of topical corticosteroids for radiation dermatitis is limited due to the risk of cutaneous atrophy, stretch marks and secondary skin infection," said study author Dr. Mark Bonnen, former chair of the Department of Radiation Oncology at Baylor and current chair of the Department of Radiation Oncology at the Long School of Medicine at UT Health San Antonio. "Accordingly, there is an unmet clinical need to develop safe and effective topical formulations."

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Dr. Yohannes Ghebre

Over-the-counter remedies also have been tested but do not offer a perfect fix.

"Skin care practices such as cleansing the irradiated area with mild soap and water-based moisturizers, as well as the use of alternative and homeopathic remedies such as aloe vera gel, honey, curcumin, wheatgrass extract cream and almond oil have been evaluated in clinical studies," said Dr. Michelle Ludwig, associate professor of radiation oncology at Baylor, member of the Dan L Duncan Comprehensive Cancer Center and co-author of the study. "However, the use of almost all of these agents is not recommended either due to lack of efficacy or insufficient clinical data."

Bonnen said the publication provides proof-of-principle data demonstrating the efficacy of topical PPIs in activating endogenous antioxidant defense mechanisms and mitigating radiation-induced dermal inflammation and scarring in human 3D skin and animal models.

"We hope to soon launch clinical studies to evaluate the efficacy of topical PPI in cancer patients who are at risk of developing radiation dermatitis," added Bonnen.

Other contributors to this work include Ngoc Pham, Min Wang, Afshin Ebrahimpour, Abdul Hafeez Diwan, Soo Jung Kim, Jared M Newton, Andrew G Sikora, Donald T Donovan, and Vlad Sandulache of Baylor College of Medicine and Jason Bryan of Harris Health System.

Now accepting applications for the **Latino Cancer Research Training and Internship Program**



Apply now for the **2020 Éxito! Latino Cancer Research Leadership Training program** and optional \$3,250 internships from the Institute for Health Promotion Research (IHPR) at UT Health San Antonio!

APPLY NOW

Each year, the Éxito! program recruits 25 U.S. master's level students and professionals to participate in a five-day, culturally tailored Éxito! summer institute to promote pursuit of a doctoral degree and cancer research.

At the next **Éxito! summer institute, set for June 1-5, 2020** in San Antonio, participants will interact with Latino researchers, mentors, and doctoral experts to learn about Latino cancer, succeeding in a doctoral program, and the diversity of careers in cancer research.

Ten optional internships also are available to program participants. [Applications](#) are due by 11:59 p.m. CST, **Monday, March 2, 2020.**



HALLOWEEN FUN

