

COMMUNITY

for a **CURE**



Happy Holidays from the USC Norris Comprehensive Cancer Center



Fifty years ago, the National Cancer Institute (NCI) designated the USC Norris Comprehensive Cancer Center as one of the nation's first eight comprehensive cancer centers. In the five decades since, USC Norris has remained steadfast at the forefront of the battle against cancer, leaving an indelible mark on countless lives. Since its inception in 1973, USC Norris has remained committed to eradicating the burden of cancer through innovative research. From uncovering the genetic underpinnings of various cancers to developing targeted therapies, the USC Norris research team has revolutionized cancer treatment and provided hope to patients and their families across the globe.

Today, more than at any other time in USC Norris' 50-year history, we have the opportunity to achieve the simple yet powerful vision of Kenneth T. Norris Jr. to "make cancer a disease of the past." Explore how USC Norris is igniting discovery for new ways to prevent, diagnose early, and treat cancer for all people by clicking [HERE](#).

The invaluable contributions of our exceptional faculty, staff, volunteers, and philanthropic friends here at USC Norris are integral to making all of this possible. We extend our heartfelt thanks and genuine appreciation to all of you for your tireless work, steadfast determination, and unwavering dedication.

As the holiday season unfolds, we extend our warmest wishes to you and your loved ones. No matter the holiday celebrated in your home this season, we hope your they are filled with peace, joy, and love. Here's to a joyous holiday and a prosperous New Year.

Honors and Recognitions



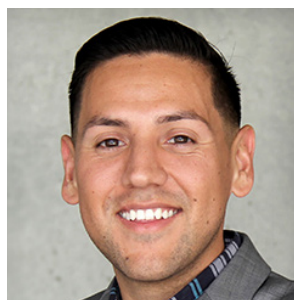
For the third consecutive year, USC Norris Cancer Hospital has earned the Leapfrog Top Teaching Hospital Award! Join us in congratulating our incredible team for delivering exemplary patient care. Learn more about this recognition [HERE](#).



Congratulations to Dr. Jennifer Tsui who has been appointed as the new co-leader for the Cancer Control Research Program at USC Norris. The Cancer Control Research Program seeks to modify cancer risk behaviors, improve cancer screening, and enhance cancer survivorship.

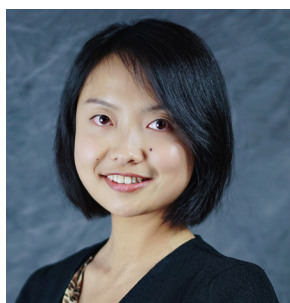


Congratulations to Dr. Heinz-Josef Lenz who was included in the Highly Cited Researchers list from Clarivate for 2023. The list identifies scientists who have demonstrated significant influence through publication of multiple highly cited papers during the last decade.



Dr. Albert Farias has been selected to receive an award in recognition of outstanding teaching in the academic year 2022-23 Health Justice & Systems of Care by the Department of Medical Education at Keck School of Medicine of USC. Great job!

New Grants



Dr. Bingfei Yu, member of the Tumor Immunology & Microenvironment Program, was recently awarded \$600,000 through the V Scholar Program from the V Foundation to fund her research in targeted anti-tumor therapy by programmable viral particles. These innovative viral particles will serve as a versatile and accessible therapeutic modality, synergizing with other immunotherapies to enhance cancer treatment.



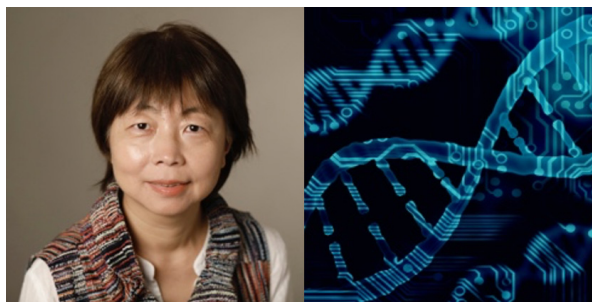
Dr. Evanthia Roussos Torres, member of the USC Norris Tumor Immunology & Microenvironment Program, was recently awarded R01 funding from the National Cancer Institute to investigate how targeting myeloid suppression enhances anti-tumor immunity in breast cancer. Her work will reveal how epigenetic modulation of myeloid suppression in breast cancers can improve response to checkpoint inhibition, and, along with collaborators, she will incorporate mathematical modeling that will decipher the complex and collective mechanisms of altered suppression, as well as predict tumor response to novel therapies.



Drs. Caryn Lerman and Adam Leventhal have received a \$20 million grant for research to inform government regulations overseeing tobacco and its marketing, with a focus on protecting young people. The USC Tobacco Center of Regulatory Science, an interdisciplinary initiative led by the USC Institute for Addiction Science, USC Norris Comprehensive Cancer Center, and the Department of Population and Public Health

Sciences at the Keck School of Medicine of USC, is one of seven programs nationwide to receive funding provided jointly by the Food and Drug Administration and the National Cancer Institute. Learn more [HERE](#).

Scientific Advances and Discoveries



Novel activity of histone methyltransferase Mixed Lineage Leukemia identified

When it comes to cancer, there's a common issue called epigenetic dysregulation, which means there are problems with the way certain genes are turned on or off. In the case of cancer, one specific group of genes called MLL/KMT2, which are like supervisors that control how other genes work, often have changes or mutations. This can contribute to the development of cancer. Published in *Nature Cell Biology*, Dr. Yali Dou, Associate Director for Basic Research at USC Norris, and her team identified a novel activity of histone methyltransferase Mixed Lineage Leukemia (MLL1) that is frequently mutated in human cancer. This new activity of MLL1 is essential for genome stability and can be exploited for cancer treatment.

“ My team has identified a novel activity of the Mixed Lineage Leukemia (MLL1) protein that methylates Borealin in the chromosome passenger complex. We show that MLL1, via Borealin methylation, regulates genome stability and faithful cell division. MLL1 is frequently mutated and dysregulated in human cancers. Our work highlights that targeting the novel MLL1 activity may be a valid therapeutic strategy for treatment of a subset of hepatocellular carcinoma.”

-Yali Dou, PhD

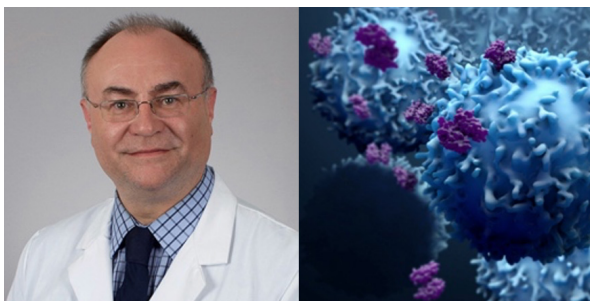


Liver cancer rates increase in each successive generation of Mexican Americans

Liver cancer is becoming a growing concern among Latinos, underscoring the importance of comprehending the factors driving this trend. Published in the journal *Cancer*, Dr. Wendy Setiawan, co-leader of the USC Norris Cancer Epidemiology Program, and her team analyzed risk for the disease across more than 30,000 Mexican Americans. They found that third-generation Mexican Americans are 66% more likely to get liver cancer than the first generation. In the future, identifying the risk factors within this group may facilitate the discovery of the underlying causes behind these observations. Read more about this study [HERE](#).

“**In the United States, liver cancer rates have more than tripled since 1980. Some groups, including Latinos, face an even higher risk than the general population—but researchers do not fully understand why. Further research on lifestyle and neighborhood factors, including data on diet, education, and environmental exposures, can help researchers continue to explain the ethnic disparities in liver cancer risk. That knowledge can ultimately support targeted prevention efforts to protect high-risk populations from developing the disease.**”

-Wendy Setiawan, PhD

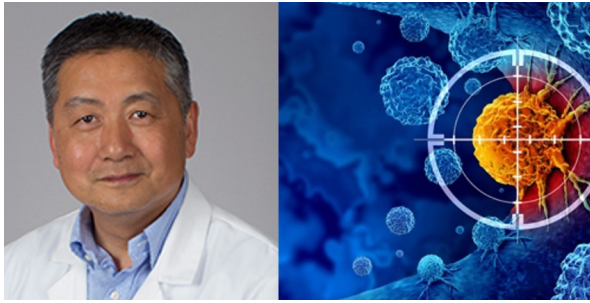


Novel predictive and prognostic biomarkers discovered in a large cooperative clinical trial with a diverse patient population

Published in the *Journal of Clinical Oncology*, Dr. Heinz-Josef Lenz, Deputy Director for Research Programs at USC Norris, and his team identified novel predictive and prognostic biomarkers to anti-vascular endothelial growth factor and anti-epidermal growth factor receptor antibodies, two key elements in the growth and dissemination of tumors, in a large cooperative clinical trial with a diverse patient population including over 500 patients. The findings have the potential to accelerate drug development strategies and lead to much needed improvement in outcomes, particularly in African American patients.

“**CALGB (Alliance)/SWOG 80405 was a randomized phase III trial in first-line metastatic colorectal cancer patients treated with bevacizumab or cetuximab with chemotherapy which aimed to discover novel mutated genes associated with prognosis and differential response to therapy in diverse populations. These results can provide new tools to predict patient outcome and improve therapeutic decisions and trial participation in patient minorities.**”

-Heinz-Josef Lenz, MD



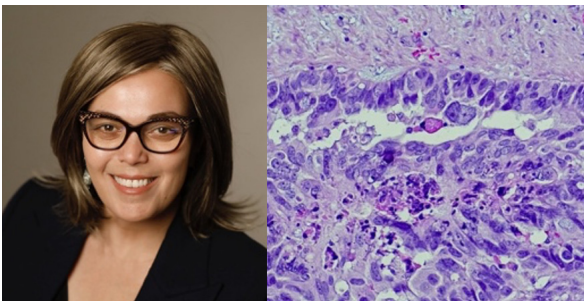
USC Norris member identifies a promising approach to treat kidney cancer by blocking DNA changes and repair mechanisms

Published in *Cancer Research*, Dr. Gangning Liang and his team discovered that this combination treatment approach using DNA hypomethylating agents and PARP inhibitors, which are two types of drugs - one

to loosen up the DNA and the other to block a repair system in the cancer cells - could have strong anti-tumor activity in SETD2-deficient kidney cancer. In addition, this study identifies a precision medicine-based approach for SETD2-compromised cancers, as the treatment can be tailored to each person based on their unique genetic makeup. This combination treatment could prove to be a promising potential therapeutic strategy for treating SETD2-compromised clear cell renal cell carcinoma (ccRCC).

“ **SETD2 deficiency is common in aggressive ccRCC and is associated with poor survival in patients. However, in this study we have shown that SETD2 deficiency leads a vulnerable epigenetic status to generate efficacious anti-tumor effects via the combination treatment of two clinically available anti-tumor drugs (Decitabine and BMN-673) to inhibit for DNA methylation and PARP. This study suggests a precision medicine-based approach for treating SETD2-compromised kidney cancers by combining inhibitors for DNA methylation and PARP, which could lead to efficacious anti-tumor effects.**”

- Gangning Liang, PhD



USC Norris member develops blood test for early-stage ovarian cancer

High-grade serous ovarian carcinoma is the most lethal epithelial ovarian cancer and is often diagnosed at late stage. Currently, in women with a known pelvic mass, a pathological assessment of tissue after surgery is the most reliable way to diagnose epithelial ovarian

cancer. There are also still no effective screening tools in asymptomatic women that we can use for general screening of women in the general population. Published in the journal *Clinical Cancer Research*, Dr. Bodour Salhia shows preclinical research that demonstrates that OvaPrint™, a tool she developed which uses a cell-free DNA methylation liquid biopsy approach, may determine whether a pelvic mass is benign or cancerous at a better rate than existing tests. Learn more [HERE](#).

“ **The test has the potential to improve treatment, because the surgical approach to removing a pelvic mass differs depending on whether it’s benign or not. Right now, doctors essentially have to take their best guess. Early detection saves lives. If we can accurately identify early-stage ovarian cancer, we can change the outcome of the disease and really crank up survival rates.**”

-Bodour Salhia, PhD

Community Outreach and Engagement:



In October, the Office of Community Outreach and Engagement (COE) at USC Norris actively participated in a variety of events, notably the Taste of Soul, the West Coast's largest one-day street festival, drawing an annual attendance of over 300,000 from across Southern California. Additionally, they joined the 51st Annual Buckboard Days Parade at Rowland Heights Park, a gathering of over 200 participants predominantly from AAPI and Hispanic/Latino communities, celebrating creativity, joy, and aspirations. Another event COE engaged in was the 7th Boyle Heights 5K and Munchkin Fun Run, promoting an active lifestyle for young kids and families, fostering a healthier community.

At these events, our team distributed cancer prevention materials in multiple languages, including English, Spanish, and Chinese, advocating for cancer screening to enhance early detection and diagnosis. Additionally, during the 7th Boyle Heights Munchkin Fun Run, we distributed a comprehensive package of resources, including cancer-related information, over 960 STEM-related kids' books in Spanish, goody tote bags, and pens. The collaborative efforts of the Office of Community Outreach and Engagement and USC Norris underscore our commitment to reducing the cancer burden within the community.



Patient Perspective Series Recap

This past November, the Patient Perspective Series presented a conversation on living fully with purpose, agency, and joy in the face of late-stage cancer. This event was open to the public. In this conversation, USC-trained attorney and survivor of Stage IV chronic lymphocytic leukemia, Julia R. Walsh, JD, and her spouse and caregiver, Assistant Dean of Education in the USC Davis School of Gerontology, John P. Walsh, PhD, shared their personal strategies for overcoming obstacles to timely, high-quality care while living the best possible life. In addition, 10 free copies of the international bestseller *Ikigai* by Héctor García and Francesc Miralles, were raffled off to the attendees. The Patient Perspective Series is a year-round program of lunchtime events featuring cancer survivors who are authors, artists, academics, and motivational speakers.

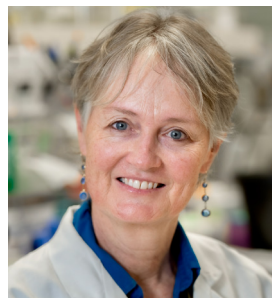
Tournament of Roses 2024 Royal Court visits USC Norris Comprehensive Cancer Center



On November 28, the Pasadena Tournament of Roses 2024 Royal Court made its annual visit to USC Norris, with the six princesses and Rose Queen. The visitors included Queen Naomi Stillitano, Arcadia High School, and princesses Trinity Dela Cruz, Marshall Fundamental School; Olivia Bohanec, La Salle College Preparatory; Emmerson Tucker, Blair High School; Jessica Powell, Flintridge Preparatory School; Mia Moore-Walker, Flintridge Preparatory School; and Phoebe Ho, South Pasadena High School.

The Tournament of Roses Royal Courts have visited USC Norris for more than 20 years, offering the young women the opportunity to tour the USC Norris Cancer Hospital and learn from the clinicians and researchers at the USC Norris Comprehensive Cancer Center.

Faculty Spotlight



Ite Offringa, PhD, member of the Epigenetic Regulation in Cancer Program

Dr. Offringa is an Associate Professor of Surgery and of Biochemistry & Molecular Medicine at the Keck School of Medicine of USC. She received her Ph.D. in 1991 from the University of Leiden, and she undertook a postdoctoral research fellowship from 1991–1996 at Harvard Medical School. She joined the USC faculty in 1996.

“I had always been interested in cancer research, but my master’s thesis research in the lab of Prof. Alex van der Eb at the University of Leiden in the Netherlands solidified that. During that time, scientists were just discovering oncogenes, the normal human genes that get mutated or hijacked and then cause normal human cells to turn into cancer cells. The fact that normal human genes can become mis-activated and cause cancer was a huge breakthrough and caused enormous excitement. That excitement was addictive, and I wanted to be part of molecular cancer research.”

One area of focus of the Offringa lab is small cell lung cancer (SCLC), the most aggressive type of lung cancer. SCLC rapidly metastasizes and patients have an average 5-year survival of just 8%. Dr. Offringa and her team are analyzing patients’ anti-cancer immune responses to see how these could be leveraged for targeted immunotherapy. The team is developing a monoclonal antibody against a cancer-specific SCLC target, as a new treatment option. Another area of focus of the Offringa lab is lung adenocarcinoma, the most common histological type of lung cancer. It arises in the alveoli or air sacs, which make up 90% of the lung surface and, for one adult, constitute a surface the size of half a tennis court. The alveolar cells are thus inordinately exposed to airborne environmental carcinogens, highlighting why it is so harmful to smoke.

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Tobacco smoke not only causes mutations, but also changes the information layer on top of the DNA, called the “epigenome.”

“Once I started working on SCLC, the most aggressive type of lung cancer, I realized that more work was needed for all types of lung cancer, and so we expanded our work to study the most common type of lung cancer, lung adenocarcinoma, as well.”



Dr. Offringa is also involved in CaRE2, an NIH/NCI-funded Cancer Research Education and Engagement Health Equity Center, which was just renewed for another 5 years. It is a tri-university collaboration between USC, Florida Agricultural and Mechanical University, and the University of Florida. As a part of the renewal, CaRE2 will be developing cell line models of air sac cells and lung adenocarcinomas from Black individuals, because such tools for the study of lung cancer in Black individuals are lacking.

“While participating in CaRE2 I learned more about cancer health disparities and I found out that though Black men do not smoke more than other groups, they show a higher lung cancer incidence than any other group and a higher lung cancer mortality than most other groups. Yet lung cancer in Black individuals is understudied. We were delighted that in the recent renewal of the CaRE2 grant, the lung project was chosen as one of the main projects. We are very grateful to the CaRE2 leaders at all three universities for their support of lung cancer research.”

Genetic background can affect whether and how drugs work, so when new drugs are developed, researchers need to make sure the drugs work on all people, no matter their race. Cancer health disparities work in the Offringa lab is now expanding to studying how genetic differences can affect the metabolism of tobacco smoke and might thereby affect lung cancer risk. Besides carrying out exciting research, the CaRE2 lung cancer team has also participated in training numerous postbaccalaureate trainees, who have spent a year in the lung cancer labs and have made great strides to advance the research in the field.

The Patient Voice: Freddie Muse Jr.



KNOWLEDGE IS POWER

Freddie Muse Jr. wears many hats – he’s Chief Executive Officer and President of the Men’s Cancer Network, chair of the Community Advisory Board at USC Norris, and a resilient prostate cancer survivor. In 2007, during a routine physical for a new position, Freddie’s doctor suggested a prostate-specific antigen (PSA) screening. Elevated PSA levels can serve as an early indicator of prostate cancer. Being asymptomatic, Freddie was not expecting the tests results to reveal anything troubling. However, his results indicated elevated levels of PSA, and further testing revealed that Freddie had stage two prostate cancer.

He received treatment and went into remission, but 10 years later, his PSA levels began rising again, indicating that the cancer had returned. At this point, he was referred to the USC Norris

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Comprehensive Cancer Center at Keck Medicine of USC where he underwent surgery to remove his prostate. Thanks to the care he received here, Freddie is now once again cancer-free.

“Though my quality of life has changed dramatically from the recurrence of prostate cancer, I am so thankful to be alive and cancer free.”

His personal experience with prostate cancer inspired him to create the Men’s Cancer Network, a vital community that is committed to delivering comprehensive educational support, and additional resources for men and their families aimed at raising awareness and preventing cancer. In addition, their dedicated cancer support group offers a range of services, activities, enlightenment sessions, and workshops tailored to men aged 35 and above.

Freddie also chairs the Community Advisory Board at USC Norris. The board was established to advise USC Norris and the leadership within the Office of Community Outreach and Engagement on catchment area needs and to foster bi-directional communication with community leaders.

Why Your Gift Matters



Chet Chelstowski is a semi-retired businessman who owned a demolition company for over 30 years, for which he now consults. In 2008, Chet’s PSA levels began steadily rising. Despite consistently receiving clean biopsy results, his PSA levels doubled two years later. It was at this point that his physician referred him to the oncologists at the USC Norris Comprehensive Cancer Center for additional care.

Upon reaching USC Norris, Drs. Monish Aron and Jacek Pinski meticulously examined Chet’s medical records and promptly advised him to undergo an MRI. To Chet’s dismay, the results of the MRI delivered a shocking blow – a detected lesion was observed to be developing on the

exterior of his prostate.

Following his diagnosis, Chet sought second opinions from various Cancer Centers and Oncologists. Yet, after meeting and discussing a variety of options with his oncologists at USC Norris, he felt assured that he was under the care of the most capable hands.

“After two hours discussing different options, a glimmer of possibility arose – ‘Let’s give it a shot.’ In that time, I sensed a genuine warmth, a care that reassured me I was more than just a number in their eyes,” said Chet.

In 2014, Chet underwent surgery to remove the lesion as well as 60 lymph nodes. Initially, they believed they had successfully treated it, but unfortunately, it resurfaced. Consequently, the next step was pelvic floor radiation, and thankfully, the cancer disappeared.

However, it made a comeback, and in the past few years, cancer has been detected in his back, scapula, and ribs. He currently continues his treatment at USC Norris under the capable hands of Dr. Pinski, with the latest cutting-edge therapies, such as spot radiation.

Expressing gratitude for the exceptional care provided by Dr. Pinski and the outstanding staff at USC Norris, Chet has recently made a generous donation to support Dr. Pinski’s efforts and contribute to the search for

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a cure for this disease. In recognition of his contribution, an examination room has been named in his honor.

“I tease my buddies that they’ve named a room after me here because I am here so often. But you know what? I’m more than happy to donate money to support USC Norris and Dr. Pinski’s phenomenal work. It’s a fantastic hospital, and I feel proud to be a part of it. I trust the care, appreciate what USC Norris does, and I’m all in to help Dr. Pinski. Let’s find that cure, help other patients going through a cancer diagnosis, and educate others about this disease!”



“I’ve got a lot to live for,” Chet remarked, talking about his incredible support crew of family and friends, who he refers to as his supporting cast. From the devoted support of his girlfriend and children, his ever-reliable contractor, who he nicknames Ms. Daisy, who helps drive him to his appointments, and his extraordinary circle of friends, to his older brother, who he considers his hero, and the loyal network of former employees and his entire family — they collectively provide him with unwavering strength and support, standing steadfastly by his side during his battle against cancer.

“Hang in there and stay positive. Every year new treatments and therapies come out and give you more of a fighting chance. I hope for the day where there is a cure for this disease.”

With your help, we can make cancer a disease of the past.

[GIVE NOW >>](#)

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Contact Us

Have something to contribute to Community for a Cure? Send it to Hinde.Kast@med.usc.edu

To learn more about giving to USC Norris, please contact Minhaal M. Nathani, Executive Director of Development, at Minhaal.Nathani@med.usc.edu

Learn more about the USC Norris Comprehensive Cancer Center on our website:
<https://uscnorriscancer.usc.edu>