

Message from the Director



When I walk through the doors of USC Norris and see our patients and families, I'm reminded of how critical every day—and every moment—is. Through the groundbreaking work performed in our laboratories and clinics, we have given so many of our cancer patients more days and more moments to cherish with their friends and families. Our renowned physicians and scientists have contributed to cutting-edge technologies and pioneering therapies that now are considered standards of care throughout the world. This commitment to innovation in cancer treatment and personalized cancer care is what drives me, and what drives our faculty, staff, nurses, and physicians who have dedicated their careers to combatting cancer.

In 2023, we will continue to leverage our strengths and advance our strategic priorities by enhancing our ability to offer patients the most advanced cancer diagnostics and therapies across the cancer continuum from risk assessment and prevention to therapy and survivorship. In parallel, we will continue to be leaders in reducing cancer health disparities by identifying key biological, genomic, environmental, lifestyle, and social contributors to cancer disparities and increasing access to lifesaving clinical trials.

By enhancing our impact, we will further solidify USC Norris as a destination cancer center that serves patients across our region and nation and attracts a diverse pipeline of the best and brightest clinicians and scientists who are the future of cancer science and care.

Cauge Leman

Caryn Lerman, PhD Director, USC Norris Comprehensive Cancer Center Associate Dean for Cancer Programs H. Leslie and Elaine S. Hoffman Cancer Research Chair Provost Distinguished Professor



Honors and Recognitions



Director for Cancer Care Delivery Research and Implementation Science at USC Norris. In this role, Dr. Tsui will be responsible for fostering research to understand and address patient, clinician, and organizational factors that influence the process and outcomes of cancer care delivery. She will also work with leaders across USC Norris to expand our outreach to Federally Qualified Health Centers and other community organizations throughout our catchment area and develop innovative training programs.

We are pleased to announce the appointment of Dr. Jennifer Tsui as the inaugural



Congratulations to Dr. Wendy Setiawan, co-leader of the USC Norris Cancer Epidemiology Program, and Dr. David Conti, Associate Director for Data Science at USC Norris, whose paper was selected as one of the papers of the year in 2022 by the National Institute of Environmental Health Sciences. Their research revealed that exposure to high levels of an environmental contaminant called perfluorooctane sulfonic acid (PFOS) may increase risk of nonviral liver cancer in humans. Read the full publication here: <u>https://pubmed.ncbi.nlm.nih.</u>



USC Norris members Drs. Heinz-Josef Lenz and Steve Kay, were included in the Highly Cited Researchers list from Clarivate. The list identifies scientists who have demonstrated significant influence through the publication of multiple highly cited papers during the last decade. Great job!



Congratulations to Julie Culver who has been awarded the Diane Baker Alumni Lecture and Award in Genetic Counseling. This award recognizes her accomplishments in the field of genetic counseling in areas such as research, mentorship, education, and clinical care.



Dr. Wendy Setiawan has been appointed to the National Cancer Institute's Cohort Consortium Steering Committee. The consortium provides a coordinated, interdisciplinary approach to tackling important scientific questions, economies of scale, and opportunities to quicken the pace of research.

New Grants



USC Norris members Drs. James Gauderman and Kimberly Siegmund will co-lead a \$10.5 million NCI-funded program project (P01) to develop cutting edge machine learning approaches in cancer research. Additional USC Norris collaborators on this project include David Conti, PhD, Juan Pablo Lewinger, PhD, and Paul Marjoram, PhD.



Scientific Advances



Drs. Anthony El-Khoueiry and Chanita Hughes-Halbert received a major Stand Up to Cancer (SU2C) grant to eliminate barriers and facilitate access to early phase clinical trials in traditionally underserved communities in Los Angeles County. Additional USC Norris contributors include Jacob Thomas, MD Jorge Nieva, MD, Lourdes Baezconde-Garbanati, PhD, Myles Cockburn, PhD, and Jennifer Tsui, PhD. Learn more here: <u>https://uscnorriscancer.usc.edu/2023/02/08/</u> stand-up-to-cancer-has-awarded-usc-norris-a-550000-grant-to-helpdiverse-populations-access-cancer-clinical-trials/.

USC Norris member Dr. Gary Ulaner shares data from a prospective clinical trial

Published in *Radiology*, Dr. Ulaner conducted a clinical trial to evaluate prostate specific membrane antigen (PSMA)-targeted PET imaging to guide treatment selection. To read the full publication, click <u>HERE</u>.

PSMA PET has become the new standard of care for patients with prostate cancer with high risk for metastases at initial diagnosis and at biochemical recurrence."

-Gary Ulaner, MD, PhD



Drs. Fei Chen and Chris Haiman identified genetic variants that increase susceptibility to developing a second primary cancer in breast cancer survivors

Published in the journal *Cancer Research*, Dr. Chen, member of the USC Norris Cancer Epidemiology Program, and Dr. Haiman, co-leader of the USC Norris Cancer Epidemiology Program, discovered an association between germline pathogenic variants in BRCA1, BRCA2, and ERCC2 and

risk for developing second primary cancers in breast cancer survivors. Other USC Norris contributors include Drs. Adam de Smith and David Conti. To read the full publication, click <u>HERE</u>.

The long-term goal of our research is to identify genetic factors, in combination with environmental, lifestyle, and other non-genetic risk factors, that can help characterize the subset of patients who are at risk for multiple malignancies and would benefit from targeted screening." – Fei Chen, PhD



Study shows how liver cancer hijacks circadian clock machinery inside cells

Published in the journal *Proceedings of the National Academy of Sciences*, Drs. Steve Kay and Heinz-Josef Lenz, co-directors of the USC Norris Center for Cancer Drug Development, discovered how clock proteins play a vital role in maintaining cell proliferation and tumor growth in hepatocellular carcinoma (HCC). Their findings highlight the targeting of clock proteins

for maintaining HCC oncogenesis, providing a new pathway to develop novel cancer therapies for this devastating disease. To read the full publication, click <u>HERE</u>.

We are demonstrating how liver cancer hijacks circadian clock machinery inside cells and discovering that inhibiting key clock proteins can prevent cancer cells from multiplying." -Dr. Steve Kay, PhD



USC Norris members highlight significant advancements made using organoid modeling

Published in the journal *Computational and Structural Biotechnology*, USC Norris members Drs. De-Chen Lin and Uttam Sinha highlight significant advancements made in the functional characterization of early genomic and epigenomic events during neoplastic evolution using cancer organoid modeling. They also discuss the application of the lineage-tracing

methodology in organoids to study cancer cells-of-origin and review future opportunities for further development and improvement of organoid modeling of cancer precursors. To read the full publication, click <u>HERE</u>.

I believe human organoid modeling represents the most powerful and versatile tool to help us unravel the mysteries during early steps of cancer development, which has historically been difficult to study. These discoveries may have immediate impact on early tumor detection and clinical management of cancer patients"

-De-Chen Lin, PhD

Community Outreach and Engagement:



4th Annual Cancer in the Community Virtual Conference

Hosted by the USC Norris Office of Community Outreach and Engagement, the 4th annual Cancer in the Community Virtual Conference took place on Saturday, December 10th, 2022. The conference featured presentations on diversity beyond racial/ethnic factors and the impact of modern technology on the manner we conduct clinical trials, featuring

Drs. Chanita Hughes Halbert and Jorge Nieva. In addition, the event featured a community panel for clinical trials with cancer survivors.



Faculty Spotlight



Congratulations to Dr. Lourdes Baezconde-Garbanati, Associate Director for Community Outreach and Engagement at USC Norris, who has been awarded the Humanitarian of Hope award by the Celebrate Life Cancer Ministry at its 20th Jubilee recognizing her community work in the fight against cancer. The Humanitarian of Hope award is special because it pays tribute to exemplary leadership in the prevention, treatment, support, and research of cancer in hopes of a brighter, healthier future for all.

Fumito Ito, MD, PhD, leader of the USC Norris Translational and Clinical Sciences Program

Dr. Ito is a nationally recognized surgical oncologist and cancer researcher who has a significant clinical interest in melanoma, sarcoma, and breast cancer. He joined USC Norris in 2021 as Associate Professor in the Department of Surgery at the Keck School of Medicine and leader of the USC Norris Translational and Clinical Sciences (TACS) research program. The TACS program brings together over 60

scientists and clinicians who discover and develop innovative treatments and biomarkers to improve clinical outcomes for cancer patients.

Dr. Ito received his MD and a PhD in tumor immunology from the Shiga University of Medical Science in Japan, where he also completed his first surgical training. After spending two and a half years studying immunotherapy in a lab setting at the University of Michigan, he completed a second surgical residency at the University of Wisconsin and a fellowship in surgical oncology at the Roswell Park Comprehensive Cancer Center in Buffalo, NY.

"Surgery attracted me because it offers so many diverse opportunities to help patients, and can tangibly fix the problem," said Dr. Ito. "Being a surgeon not only helps me focus on basic research which can be translated to clinical practice, but also keeps my interests in developing potentially curative treatments."

Dr. Ito is fascinated by the potential of immunotherapy and uses his combined expertise in immunology and surgery to offer a range of options and design a unique plan of care for each patient. Dr. Ito's research interests include the development of novel cancer immunotherapy using pluripotent stem cells, the use of genomeengineering technology to augment anti-cancer responses, and the discovery of blood-based biomarkers to predict response and toxicity to immunotherapy.

"Patient care is my number-one priority," said Dr. Ito. "Through my clinical work and research, I would like to make an impact in the field of oncology by developing more effective immunotherapies that lead to curative treatments for cancer."

The Patient Voice: Tim Dreier



In 2014, Tim Dreier developed a small bump on his neck. Thinking it was a pimple, he didn't give it much thought until it turned into a sore that never fully healed. After receiving advice from his mother, Tim made an appointment with a dermatologist. The dermatologist removed the sore from his neck as well as some additional tissue and sent it to the lab for analysis. The results that came back were gut wrenching. Tim had stage 2B melanoma.

Surgery was performed to remove the cancerous tissue. The surgery was successful, his lymph nodes were clear, and his PET scan came back clean. He was cancer free. Tim remained cancer free for three years until he felt a bump on his neck reemerge in 2018. Not only was the melanoma back, but also a PET scan revealed that it had metastasized throughout his body. After seeing the results of the PET scan, his oncologist in Las Vegas recommended going to a comprehensive cancer center for more effective treatment.

This search led him to the USC Norris Comprehensive Cancer Center, where he was treated by his oncologist Dr. Gino In and received immunotherapy infusions for a total of two years. In addition to the infusions, Tim would get regular CT scans as well as an occasional MRI of the brain or PET scan to monitor the size of the tumors and whether his cancer was responding to the treatment. Fortunately, the treatment plan was effective right from the start. Shortly after beginning his treatment, his scans revealed that the tumors were shrinking.

Thanks to Dr. In, the phenomenal nurse navigators, nurses, and staff at USC Norris, and two years of immunotherapy infusions, Tim was deemed cancer free once again. He still travels from Las Vegas to USC Norris for his scheduled scans, which continue to show no signs of cancer.

"I can't count the number of times Dr. In has gone out of his way to make my life easier," said Tim. "Because I travel from Las Vegas for my appointments, he lets me pack everything into one day. He answers my questions thoroughly and thoughtfully. He always tells me what's new in the world of melanoma, whether it's promising new treatments that are in trials or have been approved, or trends they are seeing with people who received the same treatment I did. Dr. In, from the bottom of my heart, thank you for the wonderful care you have provided me."

This past November, Tim spoke as a cancer survivor at the 8th Annual Swing Against Cancer Golf Tournament. Recently renamed the Quinn Brady Memorial Swing Against Cancer Golf Tournament, this event brings people together every November to enjoy an afternoon of golfing, dining, and entertainment with all proceeds from the event benefitting lifesaving cancer research and the development of new cancer therapies at USC Norris. This year, the cumulative funds raised over the past eight years surpassed the \$1 million mark, a major milestone for the event and the Cancer Center.

"For all my fellow cancer survivors, anyone fighting this battle right now, and everyone else who may face this in the future...I know nothing can ever prepare you for hearing those words directed at you," said Tim. "What you can control is your attitude and your fight. Try to stay positive, fight like hell, and never give up! You never know when the next breakthrough will come that could save YOUR life."

Why Your Gift Matters



Dean Scalia is a Californian who enjoys the outdoors, a good baseball game, and has a background in economics. He received his undergraduate degree in economics from the University of California Los Angeles and his Master of Business Administration from the University of Southern California. Fight On! He joined his current company in 1991, where he met his wife of 17 years in 2003.

Dean first became connected with the USC Health Sciences Campus in 2008 after receiving a diagnosis of acute anemia.

It was at this time that he was referred to Dr. Casey O'Connell, a hematologist at the USC Norris Comprehensive Cancer Center and Keck Medicine of USC, for treatment. Dean was so grateful for his care that he wanted to find a way to support the critical work of Dr. O'Connell.

"My wife and I both adore Dr. O'Connell, and we are in a fortunate position to be able to give, so we are more than happy to support her and her research," said Dean. "If you have an interest in supporting the type of work that your doctor is doing, and you are in a financial position to do so, I would highly consider supporting their research as it allows them to make advancements in the medical field that will help countless patients in the future."

Dr. O'Connell is a clinical researcher with expertise in cancer-related blood clotting and in myelodysplastic syndrome and myeloproliferative neoplasms, which are pre-leukemic bone marrow cancers. Dr. O'Connell aims to optimize the role of epigenetic, anti-inflammatory, and immune therapies in enhancing patients' quality of life and preventing these disorders from evolving into acute myeloid leukemia.

More recently, Dean's connection to USC Norris became even more personal after his own life was impacted by cancer. He recently received a diagnosis of stage two prostate cancer for which he is currently being treated at the Cancer Center.

"What is it about USC Norris and Keck that makes them special? It's simple. I am not going to do better anywhere else," said Dean. "They are well-staffed, well-resourced, state-of-the-art facilities with capable and outstanding doctors. I can't put a price on good health, but it doesn't happen alone. The knowledge that Dr. O'Connell and her colleagues are here and that I have established a relationship with them is invaluable to me and provides me immense peace of mind."



Upcoming Events

NCCC Cancer Research Day

May 11, 2023, 9 am - 3 pm

Description: Open to all members of the Cancer Center community (faculty members, postdocs, trainees, staff, and students). The event will include a number of scientific talks in the morning followed by an interactive poster session in the afternoon. If you are interested in submitting a research poster, please send an email to Melba Ragasa at Melba.Ragasa@med.usc.edu providing the title of your research project and the author's name no later than March 15, 2023. Location: USC Catherine and Joseph Aresty Auditorium

Register Here: www.usc.edu/esvp Code: cancerresearchday2023

Cancer Center Grand Rounds

March 7, 2023, 12-1 pm Speaker: Mikhail G. Shapiro, PhD Zoom Link: https://usc.zoom.us/j/91003223249

Cancer Center Grand Rounds

March 21, 2023, 12-1 pm Speaker: Fumito Ito, MD, PhD, FACS Zoom Link: https://usc.zoom.us/j/94345261247

Cancer Center Grand Rounds

April 4, 2023, 12-1 pm Speaker: Yvonne Saenger, MD Zoom Link: https://usc.zoom.us/j/92000216454

Cancer Center Grand Rounds

April 11, 2023, 12-1 pm Speaker: Lu Wei, PhD

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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