BRINGING YOU RESEARCH NEWS FROM THE UNIVERSITY OF HAWAI'I CANCER CENTER

SUMMER 2023

DIRECTOR'S MESSAGE

peflecting on my initial months as director, I find myself Ninspired by our community's passion, creativity, and resilience. This journey has been both exhilarating and challenging, fostering my growth as a leader and reinforcing my belief in the power of collective effort.

We are focusing on key initiatives to enhance innovation and foster inclusivity within the University of Hawai'i Cancer Center, including refining our core values and setting aspirations to propel us to new heights. We firmly believe that nurturing a diverse and dynamic environment can ignite groundbreaking ideas and drive substantial progress.

One of our crucial efforts is the Cancer Center Support Grant resubmission in September 2023, which will shape our direction for the next five years. We will foster more interactive Population Sciences in the Pacific and Cancer Biology programs to address health disparities and unique challenges within the areas that we serve, Hawai'i and the U.S.-Affiliated Pacific Islands. This will be intricately woven with the Office of Community Outreach and Engagement (COE) with a concerted focus on Diversity, Equity, and Inclusion (DEI).

Furthermore, we are enhancing the translational component of our discoveries in cancer prevention and therapeutics/diagnostics by developing robust clinical research operations and clinical oncology activities.

Looking ahead, we are dedicated to catalyzing change and sculpting a future where everyone has an equal opportunity to contribute and benefit from the fruits of innovation.

Stay tuned for more updates, and as always, thank you for your unwavering support.

Mahalo,

NAOTO T. UENO, MD, PhD

Director



UH Cancer Center Director, Naoto T. Ueno, MD, PhD is a two-time cancer survivor who possesses a unique comprehensive view of healthcare as a physician, researcher, and patient which has nurtured his passion for patient-centered research-driven clinical care. The Innovations staff invited our new director to "talk story" about his cancer journey and how clinical trials have played a vital role.



Q&A WITH DR. UENO

WHAT KIND OF CANCERS DID YOU HAVE?

I was first diagnosed in my thigh with sarcoma, a type of cancer that starts in the soft tissues, like muscles, nerves, tendons, fat, and blood vessels. They're everywhere in your body so sarcoma can appear almost anywhere.

I was later diagnosed with myelodysplastic syndrome (MDS), which is related to how your body makes blood cells, leading to leukemia. In a healthy body, your bone marrow (like a blood cell factory inside your bones) produces new blood cells every day. My body struggles to make enough healthy blood cells.

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NEW CANCER VACCINES TO TREAT AGGRESSIVE LIVER CANCER

iver cancer is the fourth deadliest cancer in Hawai'i, particularly affecting Native Hawaiian, Filipino, and Japanese men. Currently, immunotherapy, a treatment that uses a person's immune system to fight cancer, is standard of care for liver cancer. However, immunotherapy is not a cure for liver cancer, as many patients continue to relapse or have minimal effects after receiving treatment.

Cancer vaccines are a promising treatment option that can stimulate the body's natural anti-cancer immune system. However, previous clinical trials using vaccines to treat liver cancer have been unsuccessful. Benjamin Green, MD, liver cancer research specialist at the UH Cancer Center and under the mentorship of Xin Chen, PhD, published a study which found that the combination of vaccine and immunotherapy caused the immune system to kill tumors in mice with liver cancer. While this study was only in mice, the results provided a solid base for initiating a clinical trial of this anti-cancer vaccine in human patients in the future.

Additionally, Dr. Green received funding from the Cholangiocarcinoma Foundation to develop a new cancer vaccine concept for treating cholangiocarcinoma, a rare but highly aggressive type of liver cancer in which standard treatments are ineffective. "I am very excited to apply lessons from our recent publication toward developing another cancer vaccine for this deadly type of liver cancer," said Dr. Green.



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HOW HAVE CLINICAL TRIALS IMPACTED YOUR JOURNEY WITH CANCER?

It has played a significant role in my treatment because the medication I received came directly from a clinical trial that I conducted. I might have had more severe side effects from other treatment options without this medication. What was particularly beneficial for me was that these trials offered treatments suited to my specific condition—my MDS was linked to unique genetic changes. The clinical trial gave me hope and the possibility of controlling my cancer for a longer period of time with fewer harmful side effects.

WHY SHOULD CANCER PATIENTS CONSIDER CLINICAL TRIALS?

Clinical trials are essential in the fight against cancer. First, they present an opportunity to access newer and potentially more effective treatment options that aren't yet available in routine medical practice. These could be innovative drugs or treatment techniques that are still under investigation but shows promise. Second, clinical trials contribute to our overall understanding of cancer. By participating, you're not just potentially helping yourself, but also contributing to research that might help future patients.

HOW DID CANCER AFFECT YOU AS A PERSON?

I get asked this a lot. I don't think I changed too much in terms of my personality, but one thing I try to do is to live my life to its fullest. It's easy to say, but when you face a fatal situation, you truly understand what that means. You don't want to waste time doing things that aren't important. I recognize that on a daily basis.



YOUNG NATIVE HAWAIIANS AND PACIFIC ISLANDERS FACE HIGHEST CANCER DEATH RATES

Intil the 2000 U.S. Census, race reporting at the federal level consolidated those of Asian, Native Hawaiian, and Pacific Islander ancestry into a single category. It wasn't until 2018 that this racial breakdown was finally uniformly reflected on death certificates nationwide, which made it possible for researchers to take a closer look at U.S. cancer death rates. Researchers at the National Cancer Institute found that Native Hawaiians and Pacific Islanders (NHPI), between the ages of 20 and 49, experience the highest rates of cancer death among people their age, more than any other racial group in the U.S. The findings were recently published in the *Journal of the National Cancer Institute*.

These findings nationally validate the work of University of Hawai'i Cancer Center researchers who have reported for decades on the high cancer risk of Native Hawaiians and other ethnicities living in Hawai'i. The Hawai'i Tumor Registry (HTR), a part of the National Cancer Institute Surveillance, Epidemiology, and End Results (SEER) program, is responsible for cancer surveillance in Hawai'i. Since 1973, the HTR has continuously collected, analyzed, and reported disaggregated race/ethnicity data of Hawai'i's unique multiethnic population.

"These disparities clearly demonstrate the importance of disaggregation of Asians and NHPIs

from one another as they experience dramatically different cancer burdens," said Brenda Hernandez, PhD, MPH, UH Cancer Center researcher and HTR Principal Investigator.

UH Cancer Center researchers have been at the forefront of seminal research on racial and ethnic disparities in cancer. The internationally-renowned Multiethnic Cohort (MEC) Study, initiated in the early 1990s, has generated a multitude of studies on racial/ethnic differences in cancer risk, progression, and outcomes. MEC researchers found that the high rates of cancer in Native Hawaiians were due, at least in part, to the stronger effect of smoking and excess weight compared to what was observed in other ethnic groups.

Results point to the need for culturally-based cancer prevention programs, especially among Native Hawaiians and Pacific Islanders. A UH Cancer Center-led project, Kū Ola (upstanding and principled healthy living), works to support culturally-grounded programs and services that promote the health and well-being of Native Hawaiian men. "Kū Ola focuses on the strengths of Hawaiian culture and communities. Our statewide hui kūkākūkā (discussion sessions) with Native Hawaiian men provide a vehicle for these men to gather among themselves to support their collective health and well-being," said Kevin Cassel, DrPH, UH Cancer Center researcher and Principal Investigator.





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SKIN FACTS

from the University of Hawaiʻi Cancer Center

- The skin is our largest organ and essential for protecting our bodies
- Skin cancer is the most common type of cancer in the U.S., and affects one out of every five adults
- 10,000 people in Hawaiʻi will be diagnosed with a skin cancer, every year
- Skin cancer is the most preventable type of cancer

Be a Part of Promoting **SKIN HEALTH**in our community

THE SKION INITIATIVE INCLUDES:

- SKI∩√ van staffed by a wellness team to dispense educational materials and sunscreen.
- The van will visit beaches, golf courses, parks, pickleball courts and other outdoor venues.
- Media campaign announcing the initiative and van locations, include public service announcements, social media and public relations.

Please support the SKI∩√ initiative. Donate today at friendsofuhcc.org.







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