

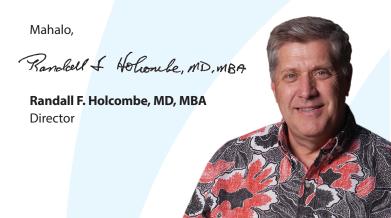
#### **DIRECTOR'S MESSAGE**

The mission of the University of Hawai'i Cancer Center is to reduce the burden of cancer through research, education, patient care and community outreach with an emphasis on the unique ethnic, cultural and environmental characteristics of Hawai'i and the Pacific. This issue of Innovations describes several areas where the Cancer Center excels in its mission to educate a new generation of cancer research scientists.

Our educational activities range from teaching undergraduates about research, and providing them with hands-on, real-life research experiences, to graduate and medical students, to post-doctoral fellow trainees to junior faculty. For undergraduates, the continuation of a phenomenally successful summer research program will be assured with the new NIH funding obtained by Drs. Joe W. Ramos, Gertraud Maskarinec and Joseph Kaholokula. With this funding and a competitive award from UH Mānoa, student interns will be able to expand their opportunities beyond the summer months and continue their work under the mentorship of Cancer Center faculty. We hope this will provide incredibly enriching experiences for these students that will impact them throughout their lives.

The new Clinical Research Professional Certificate Program is a new educational initiative established in collaboration with the UH Outreach College. Students are from varied backgrounds—some are still in college, others are in the workforce and exploring new career opportunities. With a foundation in clinical research and the conduct of clinical trials, graduates will have a myriad of professional opportunities at the Cancer Center, within the Hawai'i Cancer Consortium, and at numerous other agencies engaged in patient-oriented research.

As an organized research unit at UH Mānoa, the Cancer Center's educational initiatives are often overshadowed by the world-class studies driving advances in cancer knowledge and cancer care. However, education remains a core tenet of our work, a key component of our mission, and one for which we continuously strive for excellence.





We are extremely pleased that Adventist Health Castle has joined the Hawai'i Cancer Consortium," said UH Cancer Center Director Randall Holcombe, MD, MBA. Adventist Health Castle, is a full-service medical center located in Kailua, Oʻahu that offers inpatient, outpatient, and home-based services.

This partnership with Adventist Health Castle will provide access to cutting-edge cancer therapies for all residents on the windward side of the island and allow research to expand on cancer participation opportunities for individuals who experience a high incidence and mortality rates in certain cancers.

"It is a privilege to partner with the Hawai'i Cancer Consortium," said Alan Cheung, MD, MBA, Vice President of Medical Affairs at Adventist Health Castle. "As a strong organization with similar goals, we are committed to increasing access to our windward community for generations to come. Working together, we can do much more than we ever could on our own."

#### Welcome to Dr. Stephanie Si Lim

**STEPHANIE SI LIM, MD, MS**, received her medical degree from Georgetown University and is a pediatric hematologist/oncologist, who trained at Children's Hospital of Philadelphia. Lim is currently an associate researcher at the UH Cancer Center and does clinical practice at Kapi'olani Medical Center for Women and Children.



Stephanie Si Lim, MD, MS

Lim and her research team have discovered that one of the T cell markers, TIM-3, is uniformly expressed in biopsy samples of patients diagnosed with Ewing's sarcoma. They are in the process of reviewing selective antigens within the tissue samples to confirm this finding. This could potentially serve as a platform for clinical trials using anti-TIM 3 in pediatric solid tumors.

Lim hopes to bring novel immunotherapies such as CART cell therapy to our community, and through her research here at the Cancer

Center, provide insight on ways to overcome current barriers in immunotherapies in order to continue improving patient outcomes. She hopes to build upon the Cancer Center's future Early Phase Clinical Research Center and continue to offer cutting-edge cancer treatments to children and young adults in Hawai'i.

#### In Alemoriam:

The COVID-19 pandemic changed our lives forever, catching us unprepared, especially for the untimely deaths of two of the most senior members of the UH Cancer Center 'ohana. *Dorothy Ann Coleman* passed away on May 22, and *Clara Shizuko Kaimi Richards* on August 25, both unrelated to COVID-19. Collectively, both women served the UH Cancer Center for over 73 years! We were privileged to share so many wonderful stories by which to remember them!

#### DOROTHY ANN COLEMAN

orothy Coleman joined the Cancer Center in August 1981 as a research nurse coordinator and was elevated to Clinical Trials Office (CTO) manager, retiring in 2014. As CTO manager, she was successful in competing for and holding the Center's Minority Based Community Clinical Oncology Program (MB-CCOP) U10 grant for 20 years. Her contributions were critical to the subsequent and successful Minority/ Underserved National Cancer Institute Community Oncology Research Program (NCORP) grant submission, allowing the enrollment of cancer patients onto hundreds of national clinical trials in the absence of a centralized cancer treatment facility.

#### CLARA SHIZUKO KAIMI RICHARDS

lara Richards began working at the UH Cancer Center in the Cancer Epidemiology Program on July 1985 as a Research Interviewer. Her main scope of work was to elicit participation of community members and obtain accurate information for the program's cancer research studies. This was not a task meant for just anyone. Clara's warm, sincere, and gentle nature spoke for itself, and she never stopped short of being an outstanding research interviewer. Her valuable contribution over the many years helped to make the Cancer Center's research recognized internationally. She leaves behind a lasting legacy in contributing to a better understanding of cancer in diverse populations that will benefit future generations.

#### **PHILANTHROPY**

#### You do not have to be wealthy to support the UH Cancer Center!

The most popular and simplest gifts to support Hawai'i's cancer research center are cash and checks, but you have many options.

**Gifts of Stocks and Bonds:** Donating appreciated securities, including mutual funds, is an easy and tax-smart way to make a gift to UH Cancer Center. Gifting appreciated stock to UH Cancer Center provides you a fair market value charitable deduction, and avoids all capital gains on liquidation by gift.

**Gifts of Real Estate:** Donating appreciated real estate, such as a second home, rental property, undeveloped land, or commercial property is another tax-smart way to enjoy a fair market value tax deduction while avoiding capital gains on liquidation by gift.

**IRA Charitable Rollover:** If you are 70 ½ or older, an IRA charitable rollover is a great way you can help continue our mission. Such a "Qualified Charitable Distribution" can be applied toward your "Required Minimum Distribution" up to \$100,000 per year.

**Bequest Gifts:** Include a bequest to University of Hawai'i Foundation for the benefit of UH Cancer Center in your will or revocable trust.

For more information on any of these gift options, please contact Lynne Wooddell, Director of Development at lynne.wooddell@uhfoundation.org or 808.356.5757.

**Charitable Remainder Trust:** Contribute assets and, in return, you will receive lifetime income, income tax deductions, and capital gains tax avoidance on a gift of appreciated assets.

**Charitable Lead Trust:** When you transfer your cash or property to fund a trust making lead gifts to UH Cancer Center for a number of years, you receive a charitable estate and gift tax deduction for the trust's remainder gift to your family, a substantial tax saving if you are subject to estate and gift taxation.

**Gifts of Retirement Assets:** Designate University of Hawai'i Foundation for the benefit of UH Cancer Center as a full, part or contingent beneficiary of your retirement accounts.

**Gifts of Insurance:** Name University of Hawai'i Foundation for the benefit of UH Cancer Center as a beneficiary of your life insurance policy.



# TTO SOLO, WORKING TO FIND THE CURE

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#### **President's Message**

Aloha, friends and supporters of the UH Cancer Center!

These are unprecedented and sometimes quite stressful times. Positive thoughts and actions are important for us all to maintain our physical, mental and emotional health.

The outpouring of community support for each other has been amazing. Food distributions to thousands of local families are just one example of how we can organize, volunteer, and donate to help one another through these challenging times.

One of the fulfilling aspects of the Friends' efforts is generating support that leads to community benefits. While the work of the UH Cancer Center and the Friends may not have as immediate an effect as those of food drives, we know that eventually it will significantly affect the quality of life for many in Hawai'i and beyond.

And while we are not a well-endowed organization, we work very hard and closely with the UH Cancer Center to raise funds to support meaningful programs that otherwise might not be possible without our support. One great example is the Friends' support for the UH Cancer Center's summer internship program. For several years the Friends have hosted an annual event to raise funds to support local undergraduate and high school students to work at the UH Cancer Center, while being mentored by cancer researchers. The program's goal is to inspire the interns to further their science and medical education.

Due to years of meaningful internship experiences, the UH Cancer Center received a \$1.36 million five-year grant from the National Institutes of Health to continue this and other mentorship programs. The Friends are proud to have helped support a program that is now flourishing on its own.

We see our role as just that–providing support for valuable programs and helping them flourish and grow. We are hopeful that we can do the same for Tickets for the Cure program, which we share about on the next page.

Please keep yourself safe, and let's work together to take care of each other!

Mahalo,

Monica McLaren

MONICA MCLAREN

President, Friends of the UH Cancer Center



#### A Closer Look at Tickets for the Cure Program

Last fall we introduced Tickets for the Cure to you, our program that assists cancer patients with travel to and from the neighbor islands when participating on a clinical treatment trial. Fast-forward a year, and our everyday life has changed incredibly due to COVID-19. What HASN'T changed is the need for neighbor island clinical trial patients to be offered cutting edge clinical trials and to continue their study treatments, both for their health and for the important research that will benefit us all.

Tim Kelleher, one of the Research Nurses at The Queen's Medical Center, oversees clinical trial treatments there. He recently spoke to the Friends about his experience with neighbor island clinical trial patients and the crucial need for Tickets for the Cure. Here are some interesting insights that he shared:

- The Hawaii Cancer Consortium/Network currently does not have any sites on the neighbor islands for clinical trials, so these patients must come to O'ahu for their trial treatments. UH Cancer Center coordinates trials that are offered at the various hospitals and clinics where the trial treatments are administered.
- An important consideration in the field of cancer treatment is "financial toxicity," which is the financial burden that treatment and travel has on patients. Tickets for the Cure helps alleviate that financial burden, permitting neighbor island patients to participate in trials that may improve the quality of their lives as well as help new treatments be approved in the future.
- To participate in a trial, a patient may have to fly to O'ahu as much as once a week for months. Once on maintenance, they may need to return regularly throughout the year. Patient treatments may involve years of flying back and forth to O'ahu.

- While some studies show that the drugs being tested turn out to have no benefit, every patient in the study receives, at minimum, the current standard of care, which in some cases may not be available on their home island. Research Nurses like Tim and UH Cancer Center's Research Associates ensure patients receive treatments on time. This can make a huge difference in treatment and the overall quality of care.
- Enrollment in clinical trials is only around three percent for adults. It is higher for children, more than 75 percent. This is why progress in this field is achieved at a much more accelerated rate. Encouraging and supporting adults to participate in clinical trials is vital to finding better treatments and cures.

The Friends is presently the only source of support for this crucial program, so your donations are vital and so appreciated!



Winners of the 2020 UH Cancer Center Science Fair Awards

Three high school students received the UH Cancer Center awards for their winning projects at this year's virtual Hawai'i State Science and Engineering Fair. These awards were made possible through the generous support of the Friends.

#### THE WINNERS WERE:

First place (\$300 award) - Mary Winnicki, a senior at Punahou School, for her project titled, "Machine-Learning Driven Detection of Metastatic Cancer (Year Two). Her mother was the inspiration for this project when she was diagnosed with breast cancer. Winnicki's project focused on developing an affordable computer-based function and web app to improve patients' chances of survival through early detection of metastasis (spread of disease).

Second place (\$200 award) - Annabelle Ink, a sophomore from Mililani High School for her project titled, "Smoke Screen: The Effect of Social Media on Teenage Vaping." She created a survey, distributed to over 1,000 participants, to determine if there was a correlation between social media usage and teenage vaping. Ink's concern was "preventing more students from vaping, which is important because it has many dangerous side effects."

Third place (\$100 award) - Taylor Moniz, a junior at Kamehameha Schools, Kapālama Campus. Her project was titled,"Ivermectin Induces Apoptosis, Cell Cycle Arrest, and Senescence in C4-2 Prostate Cancer Cells." No further information was available on Moniz's project.

#### **UH CANCER CENTER**

### CANCER RESEARCH EDUCATION HUB for Hawai'i and the Pacific

his issue of Innovations highlights two new education initiatives: the Clinical Research Professional (CRP) Certificate Program and all-year Cancer Research Internship Program and the long-term Pacific Island Partnership for Cancer Health Equity (PIPCHE) partnership between the University of Guam (UOG) and UH Cancer Center.

As the only National Cancer Institute-designated cancer center serving Hawai'i and the Pacific, and as an independent research institution of the University of Hawai'i at Mānoa, the UH Cancer Center strives for excellence in its research and education efforts. The Cancer Center is committed to educating and training the next generation of cancer research scientists to reduce the burden of cancer.

Serving as the central cancer research education hub within Hawai'i, the UH Cancer Center's goal is to provide innovative training and mentorship experiences for individuals at every stage of their career development. The Cancer Center provides research internships, graduate assistantships, postdoctoral fellowships and other educational opportunities.

#### **Clinical Research Professional (CRP) Certificate Program**

One of the Cancer Center's most important responsibilities to the people of Hawai'i is providing access to cutting-edge treatments for cancer through clinical trials. In recent years the pace of producing new investigational therapies has been accelerating. Clinical Research Professionals (CRPs) play an important role in coordinating and facilitating the care of cancer patients throughout the duration of their participation in clinical trials and beyond.

The work of CRPs is challenging and requires an inquisitive mind and being detail oriented. CRPs are always in demand, but in short supply in Hawai'i's job market. This fall, the Cancer Center, in collaboration with the UH Outreach College, launched its inaugural Clinical Research Professional Certificate Program. The program is designed to train students to work as CRPs at the UH Cancer Center, its affiliated hospitals, or at other academic centers in support of clinical trials. The class was quickly filled with 31 students from a wide range of backgrounds.

The accelerated 14-week curriculum is comprehensive and includes topics about the coordination of oncology clinical trials, basic statistical and epidemiological methods, ethical and regulatory aspects of human subjects research, protocol development, and much more. A blended learning model was used including foundational knowledge via online materials and Zoom-based training sessions. Participants receive a Clinical Research Professional Certificate at successful completion of the program.

#### **University of Guam/UH Cancer Center** Partnership cultivates research education and training

The University of Guam (UOG)/UH Cancer Center collaboration, known as the Pacific Island Partnership for Cancer Health Equity (PIPCHE), has been ongoing for 17 years. PIPCHE is the only NCI-funded Pacific-based research infrastructure and partnership that addresses cancer health disparities in the peoples of Hawai'i, Guam, and the U.S. Affiliated Pacific Islands that include the Commonwealth of the Northern Marianas, American Samoa, Federated States of Micronesia, Republic of the Marshall Islands, and Republic of Palau.

Since 2003 over 100 underrepresented students and early career scientists (ECS) have received cancer research education and training support through PIPCHE. Two previous trainees have become faculty at UOG, two graduates supported in cycle one are now faculty on the U.S. mainland, and one trainee is now employed at the National Institute of Minority Health Disparities. Ten trainees have entered doctoral programs in different locations. Of the 45 PIPCHE research assistants, at least nine went on to graduate and professional degree programs.

The recent five-year NCI grant renewals for PIPCHE ensure continued support for cancer research education and training of students and ECS in the Pacific and Hawai'i.

Read the related story on the Cancer Research Internship Program on page 5.

**Photo caption for cover:** Graduate, doctoral, and postdoctoral research students and trainees, starting at 1 pm: Lambert Leong (Hawai'i), Kathleen Plaza (Guam), Maisel Caliva (Hawai'i), Jiaming Xue (China), Chloe Panizza (Australia), Angela Bononi (Italy), Izumi Okado (Hawai'i), Michael Wong (Hawai'i), Natalija Glibetic (Canada), Rica Dela Cruz (Saipan).



This summer, the UH Cancer Center embarked on a year-long research education and training initiative. Eight University of Hawai'i undergraduate students were selected to participate in the Cancer Center's Cancer Research Internship Program.

## TO REINFORCE THE STUDENTS' INTENT TO GRADUATE WITH A SCIENCE DEGREE AND TO CONSIDER A CAREER TO ADDRESS THE BURDEN OF CANCER IN HAWAI'I

This program provided hands-on summer research experiences mentored by Cancer Center faculty members and provided a multidisciplinary curriculum to reinforce the students' intent to graduate with a science degree and to consider a career to address the burden of cancer in Hawai'i. All eight students have committed to continuing their internships through the 2020 fall and 2021 spring semesters.

Each student was paired with a faculty mentor to work in either the Population Sciences in the Pacific Program in cancer epidemiology or cancer prevention or the Cancer Biology Program. The Cancer Research Internship Program is supported by funds awarded to the Cancer Center from the UH Mānoa Provost Strategic Investment Competition.

#### - THE INTERNS -



**Celine Isabelle Arnobit**, *Junior* Psychology & Spanish, minor in Public Health Mentors: Erin Bantum, PhD & Jami Fukui, MD



**Hope Dang**, Incoming Senior Biology Mentor: Muller Fabbri, MD, PhD



**Lauryn Liao**, *Junior*Molecular Biosciences & Biotechnology (MBB)
Mentor: Joe Ramos. PhD



**Erica Ma**, *Junior*Biology
Mentor: Gertraud Maskarinec, MD, PhD



Meldrik (Mel) Ventura Ravida, Senior Public Health; Philippine Language & Literature Mentors: Kevin Cassel, DrPH & Pallav Pokhrel, PhD, MPH



**Nicole Takahashi**, *Senior* Kinesiology & Rehabilitation Science Mentors: John Shepherd, PhD, Leila Kazemi, & Nisa Kelly



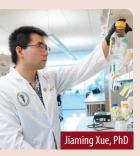
**Kirra Borrello**, *Junior* Cell and Molecular Biology-Public Health Mentors: Lani Park, PhD & Unhee Lim, PhD



Nicholas (Nick) Van, Junior
Molecular Cell Biology with Public Health minor
Mentors: Lenora Loo, PhD & Brenda Hernandez, PhD, MPH

### FORMER UH CANCER CENTER MD/PHD STUDENT'S RESEARCH REVEALS HOW ASBESTOS FIBERS CAUSE CANCER

The research of **Jiaming Xue**, a former UH Cancer Center graduate research assistant pursuing dual MD and PhD degrees, was featured in a national journal. His study published in Proceedings of the National Academy of Sciences, discovered important mechanisms regarding how asbestos fibers cause cancer.



Xue conducted his research over the past five years in the laboratory of his mentor, Haining Yang, MD, PhD.
Xue's work revealed that upon exposure to asbestos, human cells that survive, continue to live with mutations caused by asbestos and later become cancerous.

The study also showed that commonly used antidepressant drugs have a secondary effect of inhibiting autophagy, a process that allows some cells to survive, and could reduce asbestos carcinogenesis. Future studies will be planned to test whether anti-depressive therapy may reduce cancer risk among individuals exposed to asbestos.

Xue successfully defended his doctoral research thesis and was awarded his PhD degree. "Jiaming represents the high standard of students at UH with dedication and perseverance. I hope his success will inspire the future students to pursue a career of MD/PhD," said Yang. Xue plans to continue his medical studies at the John A. Burns School of Medicine and work to become a physician/scientist. "I want to be an oncologist. Hopefully, after my training, I can come back and practice in Hawai'i," he said.

Xue's study was part of a larger study supported by a \$2.5 million grant from the U.S. Department of Defense.



The National Institutes of Health awarded a \$3.5M grant over a five-year period to the University of Hawai'i Cancer Center, the University of Pittsburgh, Massachusetts General Hospital and Aethlon Medical, Inc., for a joint study on new strategies to improve immunotherapy responses in patients affected with Head and Neck Squamous Cell Carcinoma (HNSCC).

Each year in Hawai'i, approximately 250 people are diagnosed with HNSCC with Whites, Chinese, and Native Hawaiians having higher incidence rates amongst other ethnic groups. This grant will allow researchers to develop new strategies and approaches to improve the outcome of HNSCC.

"We look forward to identifying new molecular targets and new clinical approaches to improve the efficacy of immunotherapy and save lives," said Muller Fabbri, MD, PhD, associate researcher and scientific lead of the Micro- and Nano-Scale Cancer Therapeutics Initiative at the UH Cancer Center, co-leader of the Cancer Biology Program, and study co-investigator.

#### IMPROVING HEALTHCARE FOR HAWAI'I ISLAND PATIENTS

BIG ISLANI

Studies show that cancer patients who reside in rural areas have higher mortality rates, are more likely to be diagnosed with advanced-staged cancers, have coexisting but unrelated disease conditions, and experience delays in receiving diagnoses and treatments in comparison to those in urban areas. Patients residing on the Island of Hawai'i struggle with traveling long distances, which takes a significant amount of time, money and effort to seek and receive cancer treatment.

UH Cancer Center postdoctoral researcher, Izumi Okado, PhD, received a grant from the Agency for Healthcare Research and Quality to conduct care coordination research on Hawai'i Island. Conducting this research will give Okado the opportunity to understand and identify strategies to improve healthcare delivery for cancer patients in rural areas.

#### Liver fat genetic risk variants identified by UH Cancer Center researchers and collaborators

esearchers S. Lani Park, PhD, MPH, from the TUH Cancer Center, and Iona Cheng, PhD, MPH, from the University of California, San Francisco, were members of a collaborative study between their institutions and the University of Southern California that identified genetic risk variants associated with the amount of fat present in the liver. The study was recently published in Hepatology Communications.

Scientists analyzed data from 1,709 participants of the Multiethnic Cohort (MEC) Study, which follows over 215,000 residents of Hawai'i and Los Angeles for the development of cancer and other chronic diseases. They discovered an association between liver fat and a genetic variant on chromosome six, which is found in Japanese Americans and Native Hawaiians, and confirmed a known association with a genetic variant previously reported to affect liver fat.

Fatty liver is a major public health problem related to obesity. High levels of liver fat are associated with metabolic syndrome



S. Lani Park, PhD, MPH



(a group of health conditions occurring together and increase the risk of heart disease, stroke and type 2 diabetes-increased blood pressure, high blood sugar, excess body fat around the waist, and abnormal cholesterol or triglyceride levels), insulin resistance, chronic liver diseases and liver cancer. "Our discovery of genes associated with liver fat will allow us to better understand the biology of fatty liver and help us to identify individuals at risk for this condition," said Park.

Native Hawaiians and Japanese Americans comprise a large proportion of Hawai'i's population, and previous MEC studies have shown that they are at greater risk for liver fat and conditions associated with it. Identifying genetic variants for liver fat will help in the development of new strategies for the

prevention and early detection of various liver diseases and other related health conditions.

#### Astro-3DO: an Innovative project to help astronauts with muscle and bone mass loss

ero gravity restricts astronauts from being able to use their muscles and bones for long periods of time, resulting in major deterioration of their bodies, similar to patients who undergo surgery and are bedridden for weeks. The National Aeronautics and Space Administration plans to send astronauts on a three-year round trip to Mars, the longest manned space mission in history. Astronauts on this mission are anticipated to lose a significant amount of muscle and bone mass, possibly over 30 percent of muscle mass in less than six months as reported by previous research.

With support of the Translational Research Institute for Space Health, John Shepherd, PhD, and his research team at the UH Cancer Center are working on Astro-3DO, a project that will help astronauts to lessen the debilitating loss of muscle and bone mass during long-duration space flights. This project utilizes 3D optical cameras to measure the body shape, mass composition, fat and lean mass of astronauts in space. Imaging the body will provide an accurate assessment of fat and muscle in their arms, legs and trunk. Study findings will

allow researchers to gain a better understanding of how muscle deterioration can impact human longevity and also be used to further research on cancer cachexia, a "wasting" disorder that occurs in late stages of cancer, resulting in extreme weight loss and muscle wasting, and can include





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#### Helping Micronesian women care for themselves for their families

Srue Wakuk is from a community in Micronesia where women were considered the caretakers of their families. Many could not afford insurance or medical assistance and would put their families' needs before their own, causing them to neglect their own health screenings, contributing to an increase in breast cancers.

While pursuing her undergraduate degree at the University of Hawai'i at Mānoa, Wakuk knew she wanted to use her knowledge to help the local Micronesian community. She is currently pursuing her Masters in Public Health and is focusing on indigenous health.

As a Community Health Educator at the UH Cancer Center, working with Kevin Cassel, DrPH, Wakuk developed an outreach program for Micronesian women on O'ahu to educate and help them participate in early breast and cervical cancer screenings. She also informs and recruits interested women to participate in the Tomosynthesis Mammographic Imaging Screening Trial (TMIST), an early breast cancer screening clinical trial that focuses on Native Hawaiian and Pacific Island women.

Wakuk partnered with federally funded clinics across the island that participate in the Breast and Cervical Cancer



MY GOAL IS TO RECRUIT AT LEAST 25 TO 30 WOMEN TO THE TMIST STUDY."

Srue Wakuk

Control Program (BCCCP) to dispense health services to women with low income or are uninsured or underinsured. She engaged Micronesian women at food bank sites, public housing, and churches, but the COVID-19 pandemic required a switch to Zoom and Facebook to help these women schedule their screenings.

Wakuk has met with 50 women, some who did not have a mammogram for over 20 years. A number of them did not qualify for screenings due to insurance issues and others did not keep their appointments. Recruitment was impacted by the pandemic as many feared contracting COVID in public. So far 11women have become TMIST participants and a few are still pending recruitment. Wakuk states, "My goal is to recruit at least 25 to 30 women to the TMIST study."