

HO'ŌLA MANAMANANA

DIVERSITY HEALTH KNOWLEDGE



UNIVERSITY OF HAWAII
CANCER CENTER

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HO'ŌLA MANAMANA

The University of Hawai'i Cancer Center fosters diversity, health and knowledge through our mission 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.

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UNIVERSITY OF HAWAI'I CANCER CENTER

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Clinical Research Center

DIRECTOR'S MESSAGE

IT HAS BEEN AN EXCITING YEAR for the University of Hawai'i Cancer Center. Our 'ohana continues to grow with the addition of three talented faculty members to our Population Sciences in the Pacific Program. They will bring new approaches to studying the causes for disparities in cancer incidence in Hawai'i and the Pacific, and they have already had a great positive impact on our Center. We were also successful in securing a grant from the National Institutes of Health to build a cutting edge Early Phase Clinical Research Center at the UH Cancer Center. This grant will match funding provided from the State of Hawai'i in the last legislative session. With the creation of an early phase program, cancer patients in Hawai'i will for the first time have access to novel phase I clinical trials without having to leave the islands.

The clinical trials activities continue to expand, supported by renewal of the National Community Oncology Research Program (NCORP) grant headed by Drs. Jeffrey Berenberg and Jared Acoba. Under this program, we were successful in establishing a new site for cancer clinical trials in Guam - by far the Western-most location in the entire national network! Also, under the leadership of Dr. Jessica Rhee, and working closely with the Hawai'i Medicaid/Med-QUEST leadership, we were able to facilitate issuance of a policy statement that ensures coverage of routine care costs for Medicaid/Med-QUEST patients enrolled on clinical trials.

Scientific discovery continues as a core activity to support our mission of reducing the burden of cancer, and we continue to have an incredible record of highly impactful research studies. These include population-based studies that explored the reasons for disparities across different racial and ethnic groups in the development of lung and pancreatic cancers, basic studies defining gene-environment interactions that contribute to the development of mesothelioma and other cancers, investigations into measuring body composition of astronauts with direct applications to cancer patients who may suffer from cancer cachexia, among others.

Our education and career enhancement activities, led by Drs. Joe W. Ramos and Gertraud Maskarinec, continue to provide cancer research experiences to undergraduates, graduate students, post-doctoral fellows and junior faculty. These activities complement incredible community outreach and engagement efforts to ensure that the research done here has the greatest impact for the population we serve.

It's truly an honor to work with the faculty and staff at the UH Cancer Center, and all of our community partners, to reduce the burden of cancer and move us *One Step Closer* to cure.

Mahalo!

Randall F. Holcombe, MD, MBA

Randall F. Holcombe, MD, MBA

DIRECTOR





UH CANCER CENTER RECEIVES \$6.5M FOR STATE'S FIRST CUTTING EDGE RESEARCH CLINIC

THE UH CANCER CENTER RECEIVED A \$6.5 MILLION GRANT FROM THE NATIONAL INSTITUTES OF HEALTH TO BUILD A CLINICAL RESEARCH CENTER THAT WILL SIGNIFICANTLY IMPROVE ACCESS TO EXPERIMENTAL TREATMENTS FOR CANCER PATIENTS IN HAWAII. THE CLINIC WILL FOCUS ON EARLY PHASE CLINICAL TRIALS AND BE THE FIRST OF ITS KIND IN THE STATE.

The Early Phase Clinical Research Center will provide access to phase 1 trials for cancer patients in Hawai'i so they do not have to travel to the continental U.S. for specialized treatments. Phase 1 trials represent the cutting edge of cancer treatments and are often considered when patients have a particularly challenging form of cancer or when standard treatments have been unsuccessful.

The federal funds match the \$6.5 million approved by the state Legislature. The \$13 million total will be used to construct the Clinical Research Center, in 36,000 square feet of existing shell space at the UH Cancer Center in Kaka'ako.



“ AS THE FIRST FACILITY OF ITS KIND IN HAWAI’I, THE CENTER WILL OFFER HOPE FOR HAWAI’I RESIDENTS BATTLING ADVANCED CANCERS

BY PROVIDING THEM WITH THE OPPORTUNITY TO PARTICIPATE IN EARLY PHASE CLINICAL TRIALS WITHOUT HAVING TO LEAVE THE STATE. THIS GREATLY REDUCES THE FINANCIAL, PHYSICAL AND EMOTIONAL HARDSHIPS OF HAVING TO TRAVEL TO THE MAINLAND FOR TREATMENT THAT MAY BE THEIR LAST HOPE.”

– HAWAI’I STATE SENATOR, BREENE HARIMOTO

“We are extremely grateful to the state Legislature and the National Institutes of Health for recognizing the need of this program and the exceptional value it will provide for the people of Hawai’i,” said UH Cancer Center Director Randall Holcombe, MD, MBA. “It will be a statewide resource to enable advances in cancer treatment that are of particular importance to our diverse population.”

Approximately 6,700 people are diagnosed with cancer each year in Hawai’i. The research center will serve an estimated 100 to 200 patients annually who would have otherwise had to travel out of state for treatment.

The development of a program, and recruitment of the faculty physicians, nurses and pharmacists, is a joint venture of the UH Cancer Center, the University of Hawai’i and clinical partners in the Hawai’i Cancer Consortium—Hawai’i Pacific Health, Kuakini Medical Center and The Queen’s Medical Center.





ALEXANDRA M. BINDER

Welcome new assistant researcher
Population Sciences in the Pacific Program,
Cancer Epidemiology



“OUR GENES SHAPE OUR HEALTH.

WE MAY NOT GET TO CHOOSE
THE GENES WE INHERIT, BUT BY
MODIFYING OUR EXPOSURES
AND BEHAVIORS, WE MAY
BE ABLE TO INFLUENCE THE
REGULATION OF OUR GENES
TO ALTER OUR RISK OF
CERTAIN CANCERS.”

- ALEXANDRA M. BINDER

Alexandra M. Binder, ScD, investigates the relationships between epigenetic patterns and cancer risk. Epigenetic patterns control which genes are active in cells, and can be altered by the environment, nutrition and behaviors. Modifications to epigenetic patterns can have lasting impacts on gene regulation, shaping long-term health.

Part of Binder’s research explores how epigenetic modifications may mediate associations between early life conditions and adult cancer risks. She is involved in several National Institutes of Health-funded projects investigating the relationships between epigenetic variation and pubertal predictors of breast cancer risk.

Binder is also a recipient of a National Cancer Institute Career Development Award, which has extended her work to examine epigenetic estimates of biological aging. These “epigenetic clocks” capture the influence of an individual’s exposures and behaviors on cellular function, and have been consistently associated with mortality rates. Her aims for this project focus on the relationship between reproductive and epigenetic aging, as well as their potential shared impact on breast cancer risk among postmenopausal women.

LANG WU

Welcome new assistant researcher
Population Sciences in the Pacific Program,
Cancer Epidemiology

Lang Wu, PhD, focuses his research on the epidemiologic investigation of genetic, molecular, nutritional and lifestyle factors in cancer risk and prognosis. He utilizes an integrative multi-omics (e.g. genomics, transcriptomics, methylomics, proteomics and metabolomics) research approach to identify novel susceptibility genes and biomarker candidates for prostate, breast and pancreatic cancers.

Wu has led two large studies evaluating associations of genetically-predicted gene expression levels with risks of breast and prostate cancers. In his recent studies, Wu and collaborators identified potential new susceptibility genes, DNA methylation and protein biomarkers for prostate and pancreatic cancers. These research findings have built a strong foundation for further investigation of their potential in improving risk assessment and early detection of these cancers.

Wu's long-term research goal is to translate the gained knowledge on risk assessment and early detection of human malignancies into clinical practice.

**“ I WAS ATTRACTED
TO HAWAI'I BECAUSE
OF ITS UNIQUE
ETHNIC DIVERSITY,
WHICH PROVIDES
EXCELLENT RESOURCES
AND OPPORTUNITIES
FOR MY RESEARCH IN
UNDERSTUDIED POPULATIONS.”**

- LANG WU



S. LANI PARK

Welcome new associate researcher
Population Sciences in the Pacific Program,
Cancer Epidemiology

“IDENTIFYING POPULATIONS
AT GREATEST RISK OF
LUNG CANCER WILL
**HELP TO REDUCE THE
UNEQUAL BURDEN OF
TOBACCO USE AND
LUNG CANCER**
INCIDENCE AND MORTALITY IN
MINORITY POPULATIONS.”

- S. LANI PARK



S. Lani Park, PhD, focuses her research on identifying genetic, health behavioral, and environmental risk factors for cancer. She has been contributing to and working with the Multiethnic Cohort (MEC) study for more than ten years.

Park and collaborators developed the MEC substudy of current smokers (>100 cigarettes over a lifetime), which compiles a comprehensive panel of urinary tobacco smoking-related biomarkers and data. This substudy is a resource that aims to expand the understanding of biological mechanisms that drive the population differences in smoking-related lung cancer risk.

Park and her team were awarded a grant from the National Institute on Minority Health and Health Disparities of the National Institutes of Health to evaluate whether there are molecular differences in lung tumor tissue across racial/ethnic populations in the MEC. The research may help to identify whether there are underlying differences in lung tumor biology.

24

**YEARS OF CONTINUED
NATIONAL CANCER
INSTITUTE DESIGNATION**

68

**PRINCIPAL
INVESTIGATORS**

126

**RESEARCH
PROJECTS**

\$48M

**AWARDED
RESEARCH FUNDS**

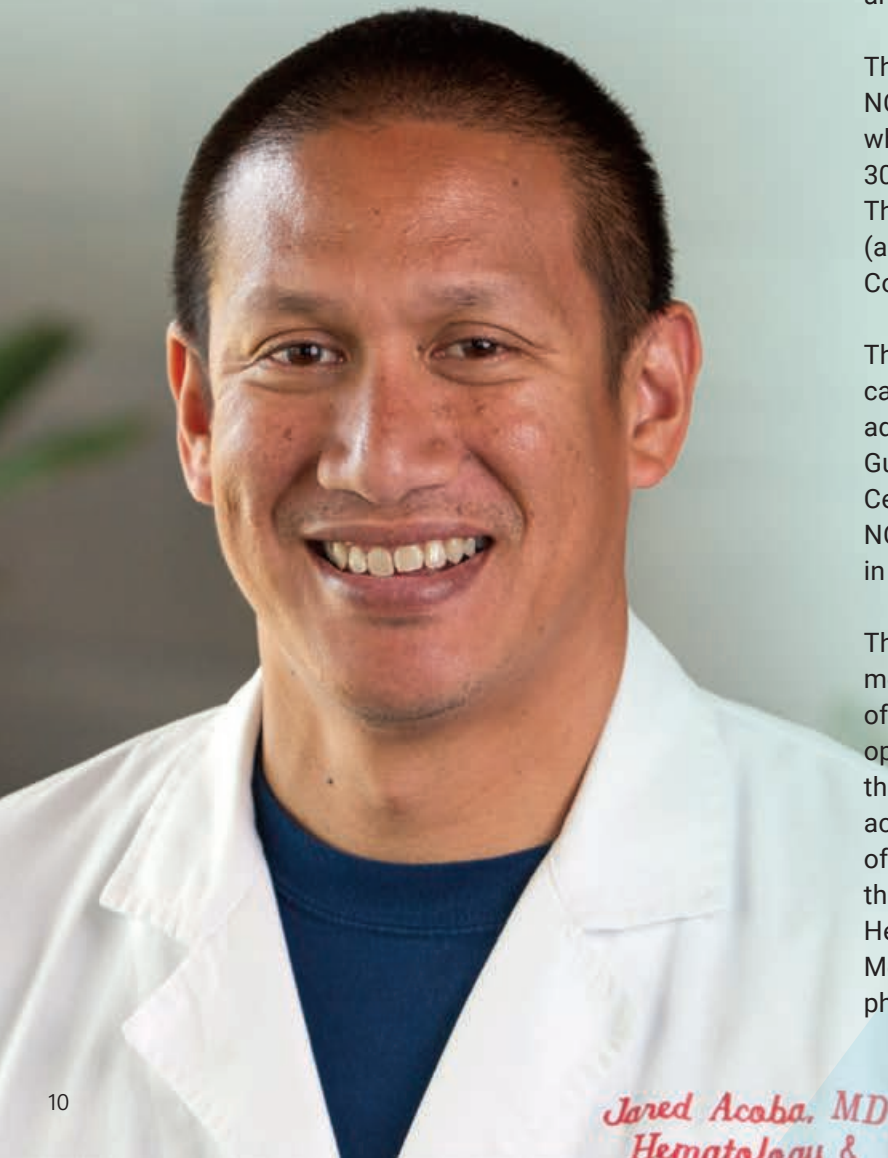
(INCREASE OF \$6M FROM 2018)

GRANTS

CLINICAL TRIALS

“ NATIVE HAWAIIANS, PACIFIC ISLANDERS AND ASIANS REPRESENT A SMALL FRACTION OF PATIENTS ENROLLED IN CANCER CLINICAL TRIALS NATIONWIDE. **IT IS CRITICAL TO ENHANCE ACCESS TO THE HIGHEST LEVEL OF QUALITY CANCER CARE TO THESE UNDERREPRESENTED PATIENTS.**”

- JARED ACOPA, MD,
NCORP STUDY CO-PRINCIPAL INVESTIGATOR AND
UH CANCER CENTER ASSISTANT RESEARCHER



The National Cancer Institute (NCI) awarded an \$8 million six-year grant to continue the NCI Community Oncology Research Program (NCORP) at the UH Cancer Center designed to provide the best cancer clinical trials to and increase participation of Hawai'i's minority, rural and underserved patient populations.

“The UH Cancer Center, by providing these cancer clinical trials and cancer patient care for both adults and children, gives Hawai'i residents the opportunity for the most effective treatments without having to leave the islands,” said Jeffrey Berenberg, MD, NCORP study co-principal investigator and UH Cancer Center co-medical director of translational and clinical research.

The UH Cancer Center is one of only 14 designated NCORP Minority/Underserved Community Sites where the patient population is comprised of at least 30 percent racial/ethnic minorities or rural residents. The Center has been a member of this program (and its earlier version called the Minority-Based Community Clinical Oncology Program) since 1994.

The UH Cancer Center expanded its geographic cancer coverage with the NCI's approval of the addition of Family Health Plan (FHP) Health Center, Guam, in January 2019. Through the Cancer Center's affiliation with Minority/Underserved NCORP, Guam patients are able to now participate in NCI-sponsored cancer clinical trials.

The Hawai'i Minority/Underserved NCORP provides more than 100 clinical trials, a significant component of the more than 200 cancer research trials open to both children and adults coordinated by the UH Cancer Center. Most of the NCORP trial activity is conducted in collaboration with members of the UH Cancer Center clinical trials network that includes Hawai'i Pacific Health, The Queen's Health Systems, Kuakini Medical Center, Tripler Army Medical Center, and private practice oncology physician offices.

*Jared Acoba, MD
Hematologist & Oncologist*

COLLABORATION

The State of Hawai'i Department of Human Services Med-QUEST

Division, a patient-centric Medicaid program, worked with the UH Cancer Center to ensure access to clinical trials for cancer patients in Hawai'i. Med-QUEST issued a memorandum "to provide guidance regarding the coverage of routine costs associated with qualifying clinical trials" for the prevention, diagnosis, treatment or supportive care of cancer.



"Hawai'i was one of only a dozen states without legislation or a formal policy to provide coverage of routine care costs associated with cancer clinical trial participation for Medicaid beneficiaries, who make up about one quarter of the state's population and over 40 percent of all of the children. The guidance clarified that Medicaid patients can participate in clinical trials which, offer the best treatment options and highest quality of care for cancer patients," said Jessica Rhee, MD, MS, UH Cancer Center's Clinical Trials Office medical director.

"I'm very appreciative to Dr. Judy Mohr Peterson, Med-QUEST division administrator, Dr. Curtis Toma, Med-QUEST medical director and Dr. Jessica Rhee for working so diligently and collaboratively to create a policy that addresses the needs of some of the most vulnerable cancer patients in Hawai'i," said Randall Holcombe, MD, MBA, UH Cancer Center director. "This is an effort supported by multiple state legislators and healthcare organizations, Hawai'i Society of Clinical Oncology, and the Hawai'i chapters of American Cancer Society and Susan G. Komen."

Med-QUEST cancer patients in Hawai'i receive coverage for routine care costs such as doctors'



JESSICA RHEE

visits and laboratory tests. Med-QUEST, unlike Medicare and private insurance, is not federally required to cover these routine care costs for patients participating in clinical trials. This policy guidance will ensure equal access to the best treatments available on clinical trials for Med-QUEST cancer patients.

"I believe clinical trials coverage should be available to all cancer patients. I am proud of the work we have done to ensure Hawai'i's Medicaid enrollees have access to the most novel and potentially lifesaving treatments through clinical trials," said Judy Mohr Peterson, PhD, Medicaid director and administrator for Med-QUEST.

"This is a major step forward and something that we have been discussing with Dr. Rhee for many months. As a lung cancer survivor who was told I had six to 12 months, I know the importance of having access to and coverage for any and all cancer treatment options," said Grace Lee, a member of the community-based Patient Advocacy Committee (PAC) that provides input to the UH Cancer Center about community needs and concerns.

EFFECTS OF SPACE TRAVEL FOCUS OF UH CANCER CENTER GRANT

UH Cancer Center researcher, John Shepherd, PhD, was awarded more than \$330,000 from one of NASA's Human Resource Program partners, The Translational Research Institute for Space Health, to study ways to measure body composition on long-duration space flights. The results of the ASTRO3DO study on muscle loss and loss of function will be directly applicable to cancer cachexia research.

3D optical models accurately estimate bone and body composition, but lack space acclimation experience. A research team led by Shepherd, will monitor frailty risk using 3D optical whole body scans, and create a space-feasible prototype for microgravity testing.

"Astronauts lose muscle mass from the effects of microgravity. When they finish a long-duration flight, many times they can't even walk when they return to earth. While they are on the flight they need to be able to have direct feedback on the quality of

their muscles and bones," said Shepherd. "With the technology we develop we hope the astronauts can modify their nutrition and adjust training to minimize muscle loss while on long-duration flights, such as missions to Mars. We will mount several small cameras inside the space capsule to collect data. The astronauts will spin while they are floating in space, so we can capture their entire body."

Measurement of body composition is a relatively new area for cancer research that has direct implications for understanding how obesity and body shape contribute to the development of, and outcomes from, cancer. Shepherd's team aims to do follow up studies with cachexia patients in Hawai'i.



MESOTHELIOMA



The National Institutes of Health (NIH)

awarded a five-year \$2.6 million grant to a team of UH Cancer Center researchers led by Michele Carbone, MD, PhD, and Haining Yang, MD, PhD, to study the role of the BAP1 gene in human cancer development and cell metabolism.

“This grant adds to our two already funded NIH grants and to one grant from the Department of Defense confirming the leadership of the Hawai‘i team as the top federally funded research team in the U.S. to conduct research on mesothelioma, a cancer developed frequently in those exposed to asbestos,” said Carbone.

Carbone discovered the role of genetics in mesothelioma while studying a cancer epidemic in remote villages in Turkey. Carbone, Yang and collaborators continued studying genetics in mesothelioma by conducting molecular genetic studies of U.S. families with high incidence rates of cancer and discovered a condition they named “BAP1 cancer syndrome”.

Individuals with BAP1 cancer syndrome inherit a BAP1 gene mutation, leading to at least one and often several cancers in their lifetime. The BAP1 mutation greatly increases an individual’s susceptibility to environmental carcinogens such as asbestos, ultraviolet light and ionizing radiations, and thus increases the risk of the individual from developing mesothelioma, melanoma and other cancers.

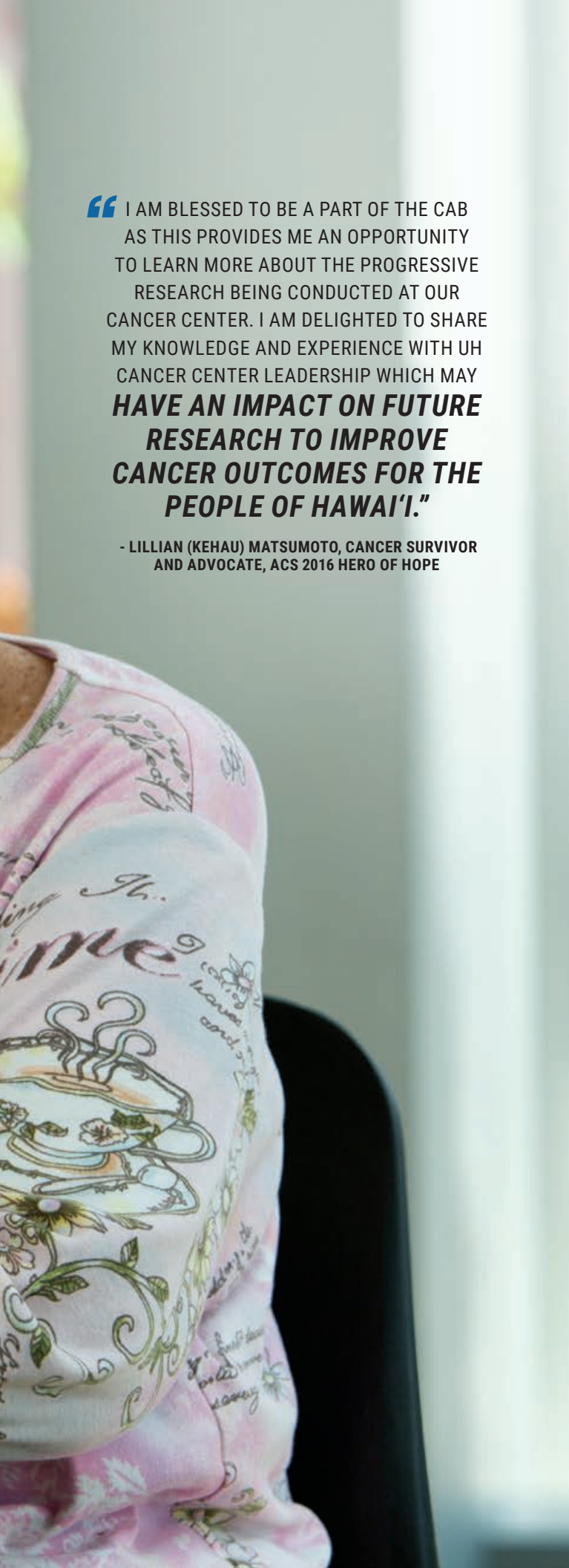
Carbone and Yang were also awarded a \$2 million grant over a three-year period from the National Institute of Environmental Health Sciences to study the influence of genetics on an individual’s susceptibility to environmental toxins and carcinogens. The study is in collaboration with Joe Grzymalski, PhD, of the Desert Research Institute in Reno, Nevada.

COMMUNITY ADVISORY BOARD

The Community Advisory Board (CAB)

provides valuable guidance, feedback and support of activities and research conducted at the UH Cancer Center to ensure that the needs of the community are addressed. The diverse geographic areas, ethnicities and lifestyles of Hawai'i are represented on the CAB. Members include representatives of community-based organizations, medical centers and community hospitals, and cancer survivors and advocates. The board advises the UH Cancer Center Director and senior leadership on strategies to reduce cancer disparities in Hawai'i through partnerships with individuals and organizations who are committed to improving health and well-being in underserved communities.





**“ I AM BLESSED TO BE A PART OF THE CAB
AS THIS PROVIDES ME AN OPPORTUNITY
TO LEARN MORE ABOUT THE PROGRESSIVE
RESEARCH BEING CONDUCTED AT OUR
CANCER CENTER. I AM DELIGHTED TO SHARE
MY KNOWLEDGE AND EXPERIENCE WITH UH
CANCER CENTER LEADERSHIP WHICH MAY
**HAVE AN IMPACT ON FUTURE
RESEARCH TO IMPROVE
CANCER OUTCOMES FOR THE
PEOPLE OF HAWAII’I.”****

- LILLIAN (KEHAU) MATSUMOTO, CANCER SURVIVOR
AND ADVOCATE, ACS 2016 HERO OF HOPE

UH CANCER CENTER COMMUNITY ADVISORY BOARD MEMBERS

Lani Almanza, American Cancer Society

Cathy Alsup, American Cancer Society

Ronald Balajadia, State of Hawai’i,
Department of Health

Darlana Chadwick, The Queen’s Medical Center

Alan Cheung, Adventist Health Castle

Mariana Gerschenson, John A. Burns School
of Medicine

Robert Hirokawa, Hawai’i Primary
Care Association

Randall Holcombe, UH Cancer Center

Daryl Kurozawa, Hawaii Permanente
Medical Group

Wade Kyono, Hawai’i Pacific Health

Loic Le Marchand, UH Cancer Center

Julie Leach, Hawaii Pacific Oncology Center,
Hilo Medical Center

Sheree Loui, Susan G. Komen Hawaii

Lillian (Kehau) Matsumoto, Cancer survivor and
advocate, ACS 2016 Hero of Hope

Monica McLaren, Friends of the
UH Cancer Center

Rolanda Morgan, Susan G. Komen Hawaii

Michael Morimoto, The Queen’s Medical Center

Paul Morris, The Queen’s Medical Center

Nana Ohkawa, UH Cancer Center

Diane Ono, Friends of the UH Cancer Center

Malulani Orton, Hawai’i Health & Harm
Reduction Center

Joe W. Ramos, UH Cancer Center

Jessica Rhee, UH Cancer Center

George Steward, Compassion for
Cancer Caregivers

Jannie Steward, Compassion for
Cancer Caregivers

Marcus A. Tius, UH Mānoa

Nathan Wong, UH Cancer Center Native Hawaiian
Community Advisory Board

Lynne Wooddell, UH Foundation

Elizabeth Wright, Hawai’i Pacific Health

MICHAEL WONG

Graduate Student
UH Cancer Center research lab of John Shepherd

A 3D optical scan study by Michael Wong, a University of Hawai'i at Mānoa graduate student in the UH Cancer Center's research lab of John Shepherd, PhD, was selected by Obesity as one of the top five entries for research that significantly furthers scientific understanding of obesity. The study, "Children and Adolescents' Anthropometrics Body Composition from 3D Optical Surface Scans", was featured in the November 2019 issue of the publication and presented at Obesity Week 2019 in Las Vegas, Nevada.

Wong used 3D optical technology, Fit 3D, to make body composition equations for children and teenagers ages five to 17 years. The equations Wong created for 3D optical scanners provide easy-to-use and accurate body composition models that can track body changes over time. The 3D optical technology is not only safe to use on children, but also gives accurate health assessments.

The research from this study will be used to track changes in health over time, in order to reduce the prevalence of obesity and its effects. Since 3D optical technology has been found to be an effective tool for studying a number of populations at every stage of life, Wong and his team will begin developing models to study the body composition of astronauts and kids who are ages zero to five years.



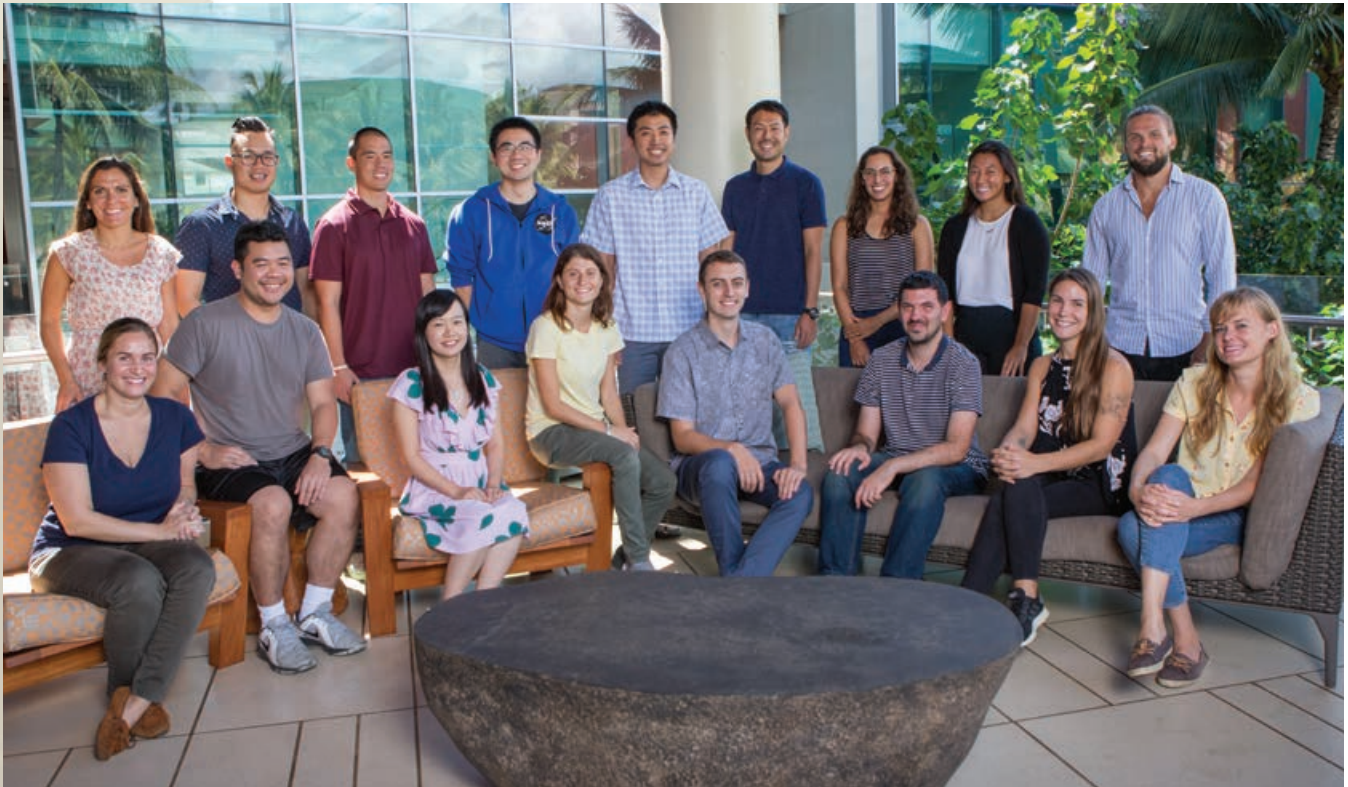
“CHILDHOOD OBESITY RATES IN HAWAII HAVE BEEN STEADILY INCREASING OVER THE LAST COUPLE OF DECADES, AS IT HAS BEEN IN STATES ACROSS THE NATION. OBESITY IS A RISK FACTOR FOR SOME CANCERS AND METABOLIC SYNDROME.

3D TECHNOLOGY COULD BE A CRUCIAL TOOL IN IDENTIFYING OBESITY EARLY DURING CHILDHOOD

IN ORDER TO PREVENT OBESITY AND METABOLIC SYNDROME IN ADULTHOOD.”

– MICHAEL WONG

EDUCATION



The UH Cancer Center is committed to provide cancer research programs and opportunities for graduate students and postdoctoral associates, and many hold appointments as graduate faculty in UH Departments. UH Cancer Center faculty offer the opportunity of hands-on research experience

in cancer biology and population sciences to graduate students and postdoctoral associates. This is accompanied by focused journal clubs, seminars, symposia and data clubs to enhance their career training and create a community of young scientists in which ideas can be readily shared.



A portrait of Carol Boushey, a woman with short, wavy grey hair, smiling warmly at the camera. She is wearing a dark blue and red patterned top and a long necklace with white and black beads. She is holding a white plate with a variety of food items, including a baked fish fillet, broccoli, diced orange carrots, brown beans, and yellow corn. The background is a soft-focus indoor setting.

CAROL BOUSHEY

UH Cancer Center epidemiologist

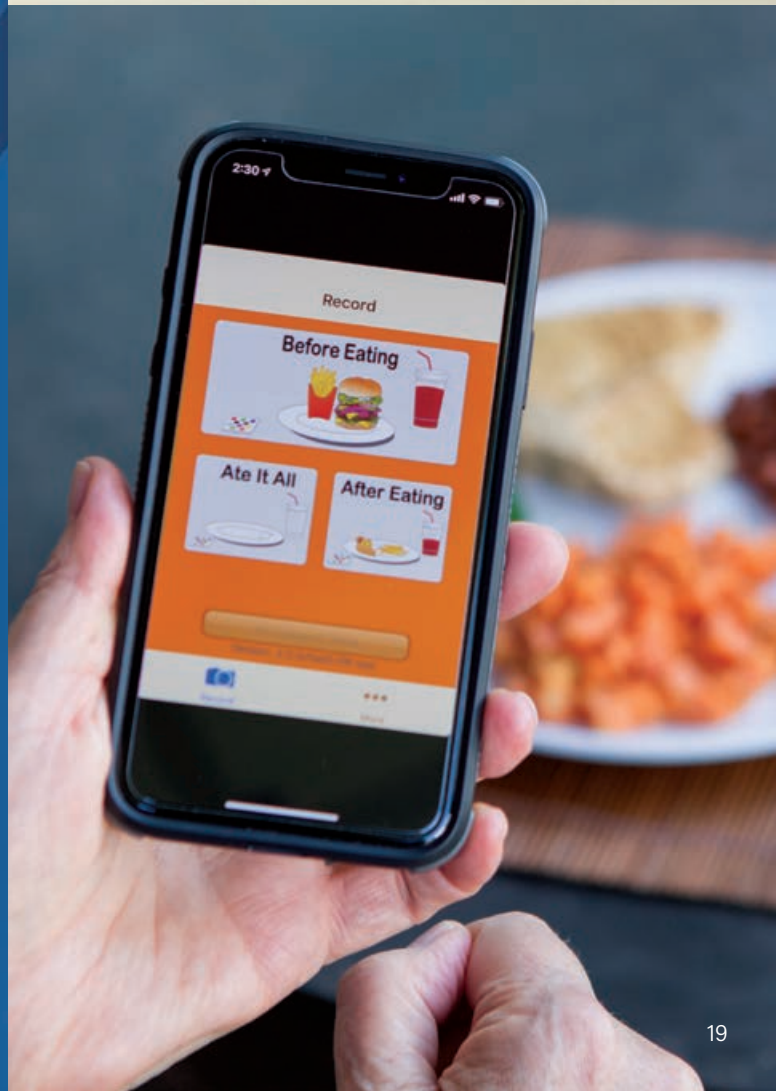
The nutritional health of all Americans

is guided by a federal Dietary Guidelines Advisory Committee, which now includes nutritional epidemiologists Carol Boushey, PhD, of the UH Cancer Center and Rachel Novotny, PhD, of the University of Hawai'i at Mānoa College of Tropical Agriculture and Human Resources. Novotny and Boushey will be joined by only 18 other nationally recognized scientists on the independent advisory committee. They will review scientific evidence on specific nutrition and health-related topics. Their recommendations, along with public and agency comments, will help inform U.S. Department of Agriculture and U.S. Department of Health and Human Services development of federal nutrition programs and policies through the 2020-2025 Dietary Guidelines for Americans.

"I am so honored to have the opportunity to participate in recommendations to positively influence the health of Americans," said Boushey, who is also a registered dietician. "The appointment also recognizes the value of the research we do at the UH Cancer Center, and UH as being important for people across the United States."

Boushey was also awarded, “most cited randomized controlled trial paper”, by The International Journal of Behavioral Nutrition and Physical Activity for, “The connecting health and technology study: a 6-month randomized controlled trial to improve nutrition behaviors using a mobile food record and text messaging support in young adults”. The lead author, Deb Kerr, PhD, at Curtin University in Australia, and co-investigator of the study, Boushey, worked closely together to incorporate technology into the study design. The goal of the study was to improve dietary intakes of fruits and vegetables, and reduce intakes of “junk” foods and sugar-sweetened beverages among young adults 18 to 30 years old.

One group received weekly messages, a second group received fewer messages which were tailored to the participants’ diets by using the information from the images captured with a mobile food record app. Among the group with the tailored messages, the men reduced their intakes of “junk” food and the women reduced their intakes of sugar-sweetened beverages. The group receiving weekly generic messages and the control group did not change their food group servings.



HONORS FOR ANNUAL REPORT 2019



JARED ACOBA, MD

Second term, National Cancer Institute Gastrointestinal Steering Committee



JEFFREY BERENBERG, MD

Board of directors, Alliance for Clinical Trials in Oncology



RANDALL HOLCOMBE, MD, MBA

Board of directors, Association of American Cancer Institutes



GERTRAUD MASKARINEC, MD, PHD

Editorial Board, British Journal of Nutrition



JESSICA RHEE, MD, MS

Steering committee, Association of American Cancer Institutes Clinical Research Innovation



CARL-WILHELM VOGEL, MD, PHD

Fellow, National Academy of Inventors



KEVIN CASSEL, DRPH

Health Disparities Committee, Alliance for Clinical Trials in Oncology

Outreach Evaluation Special Interest Group, National Cancer Institute's Center to Reduce Cancer Health Disparities



JAMI FUKUI, MD

Champion of the Year for outstanding contribution to cancer clinical trials accrual in Hawai'i, UH Cancer Center

Certificate of Excellence in conducting clinical research, Gold Award, National Cancer Institute Community Oncology Research Program

American Society of Clinical Oncology Clinical Practice Guidelines Committee Expert Panel, male breast cancer



MASAYOSHI YAMAGUCHI, PHD

Section editor, editorial board of Current Nutraceuticals

Editorial board member, Current Molecular Medicine

MULTIETHNIC COHORT STUDY DISCOVERIES

Native Hawaiians and Japanese Americans have a higher risk than other ethnic/racial groups of developing pancreatic cancer according to new Multiethnic Cohort (MEC) study findings by UH Cancer Center researchers published in Cancer Medicine.

Pancreatic cancer risk factors, such as family history of the disease, diabetes, obesity, smoking and red meat intake, did not explain the higher risk for Native Hawaiians and Japanese Americans. The study also confirmed previous studies that African Americans are known to be at increased risk for the disease as well.

“PANCREATIC CANCER IS ONE OF THE DEADLIEST CANCERS. IT ONLY HAS A FIVE-YEAR SURVIVAL RATE OF EIGHT PERCENT. THERE IS NO SCREENING TEST FOR DETECTING PANCREATIC CANCER EARLY, WHEN IT IS MOST CURABLE. **THUS, IT IS IMPORTANT TO IDENTIFY RISK FACTORS THAT ARE MODIFIABLE SUCH AS DIET AND LIFESTYLE TO PREVENT ITS OCCURRENCE.**”


– LOIC LE MARCHAND, MD, PHD,
UH CANCER CENTER EPIDEMIOLOGIST
AND STUDY CO-PRINCIPAL INVESTIGATOR



UH CANCER CENTER HAWAI'I TUMOR REGISTRY

The incidence of pancreatic cancer in Hawai'i is the **6th highest** among all U.S. states and has been increasing over the past decades.

The Multiethnic Cohort (MEC) study is a prospective study conducted by UH Cancer Center and University of Southern California epidemiologists that has followed 215,000 Japanese, Native Hawaiians and Whites in Hawai'i and African Americans and Latinos in Los Angeles since 1993-1996. The study's goals are to understand ethnic/racial differences in cancer risk and survival and to find ways to mitigate cancer disparities in these populations.



UH Cancer Center findings show Native Hawaiians and African American smokers have a higher risk of lung cancer than smokers of other ethnic/racial groups. The study published in the Journal of the National Cancer Institute found that for the same amount of smoking, Native Hawaiians and African Americans have twice the risk of lung cancer than Japanese Americans and Latinos. This new analysis with almost 5,000 cases in the Multiethnic Cohort study shows major differences in the risk of lung cancer among smokers from various ethnic/racial groups.

The findings also suggest that the higher risk of lung cancer for African American smokers and the lower risk for Japanese American smokers are due to differences in smoking intensity (the amount of nicotine and tobacco carcinogens inhaled from each cigarette). However, the increased risk for Native Hawaiian smokers remains unexplained.

In order to understand the ethnic/racial disparities linked to lung cancer, UH Cancer Center researchers initiated a study to identify biomarkers in blood and urine that are associated with lung cancer risk, and to improve our understanding of the mechanisms underlying the risk.

“ NATIVE HAWAIIANS SHOULD PARTICULARLY BE ADVISED TO NOT START SMOKING OR TO QUIT IF THEY ARE STILL SMOKING. WE KNOW THAT SMOKING IS A MAJOR CAUSE OF LUNG CANCER IN ALL POPULATIONS.

SMOKING CAUSES 90 PERCENT OF ALL LUNG CANCERS

AND INCREASES THE RISK OF MANY OTHER TYPES OF CANCER AND CHRONIC CONDITIONS.”

– LE MARCHAND

LYNNE WOODDELL

UH Cancer Center Director of Development

Lynne Wooddell joined the UH Cancer Center with the goal to ensure that cancer patients in Hawai'i have access to the most current treatments and clinical trials specific to their ethnicities and types of cancer.

Wooddell formerly managed a \$30 million multi-phase campaign for a local school and is eager to lead the major capital campaign for the UH Cancer Center's Early Phase Cancer Clinical Research Center. As an experienced major gifts professional, Wooddell also strives to inspire philanthropists to make transformational gifts that would help the Cancer Center attract and keep world-class quality research faculty and chief investigators who can best fight cancers that affect the people of Hawai'i and the Pacific.

If you are interested in learning more about supporting our work through cash or with appreciated assets, such as stocks or real estate, please contact Lynne Wooddell, director of development, at 808-356-5757 or lynne.wooddell@uhfoundation.org.

***“THE PEOPLE OF HAWAI'I
NEED AND DESERVE,
LEADING-EDGE CANCER
RESEARCH AND CARE***

***RIGHT HERE AT HOME. MY MISSION IS
TO HARNESS THE GENEROSITY OF OUR
COMMUNITY TO SUPPORT THE ONLY
NCI-DESIGNATED CANCER CENTER IN
THE PACIFIC—OUR CANCER CENTER.”***

- LYNNE WOODDELL



THE UNIVERSITY OF HAWAII CANCER CENTER is the only National Cancer Institute-designated cancer center in Hawai'i and the Pacific. The Center's mission 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. The UH Cancer Center is a research organization, affiliated with the University of Hawai'i at Mānoa, and located in Kaka'ako. The Cancer Center directly employs 300 faculty and staff, with another 200 affiliate members through the Hawai'i Cancer Consortium.



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