UNIVERSITY OF HAWAI'I CANCER CENTER CONNECTION

University of Hawai'i Cancer Center: Collaboration Through Partnerships in Hawai'i and the Pacific

Neal A. Palafox MD, MPH

The Cancer Center Connection is a standing column from the University of Hawai'i Cancer Center and is edited by HJM&PH Contributing Editor Shane Y. Morita MD, PhD.

The University of Hawai'i Cancer Center (UHCC) is the only National Cancer Institute-designated Cancer Center west of California. It serves Hawai'i and the Pacific through research, education, patient care and community outreach. To this end, the UHCC has developed partnerships in Hawai'i and throughout the Pacific to address relevant cancer issues amongst the island communities. Information shared about the Cancer Center's work in this region highlights the development of new life-saving therapies through cancer clinical trials and other research conducted such as epidemiological studies exploring the causes of cancer, investigation on new cancer screening and detection methods, intervention to reduce cancer risk (tobacco cessation, physical activity, nutrition), and scientific study in cancer biology and genomics.

Often not described or explained are the nature and types of UHCC collaborations which have evolved, and the key partnerships which facilitate appropriate and effective research in Hawai'i and the Pacific community. How does UHCC engage in partnerships to develop and conduct relevant community-based research? What has been the impact of these community partnerships with regard to cancer prevention and control?

In Hawai'i, community partnerships are reflected in the composition of UHCC faculty, staff and investigators. UHCC functions through a matrix comprised of full-time, part-time and affiliate faculty members, including community physicians. Hawai'i has numerous clinicians and researchers, such as physicians, pharmacists, biologists, social workers, and nurse practitioners who have concomitant professional priorities. These clinicians, scientists, and community members are dedicated to their daily work (eg. clinical practice of medicine, education) while also possessing an avid interest in novel scientific methods or relevant community interventions for cancer control. These individuals have the opportunity to develop and execute a research project individually or as part of a team, and are current and potential affiliate faculty members. The locus of work of 200 UHCC affiliate members may be found in UH institutions (the Office of Public Health Sciences, the Myron B. Thompson School of Social Work, the School of Nursing and Dental Hygiene, the Daniel K. Inouye School of Pharmacyand the John A. Burns School of Medicine), Hawai'i's healthcare institutions or community organizations.

The research and clinical assets of the affiliate members are accommodated through a structured faculty matrix which recognizes the value and necessity for full- and part-time investigators. The synergy between full-time UHCC and the affiliate researchers promotes more relevant study in Hawai'i's communities because many of the affiliate members work intimately within the community of interest on a daily basis. The Center's partnership with affiliate faculty also increases the total FTE of cancer researchers at UHCC.

Moving from the individual partnerships with affiliate members to the institutional and organizational level, UHCC collaborates with the major hospitals (The Queen's Medical Center, Hawai'i Pacific Health, Kuakini) and health insurance providers (HMSA) to provide cancer clinical trials via the Hawai'i Cancer Consortium, involving another 200 affiliate members. Other longstanding collaborations have been established with many community-based organizations, coalitions and associations such as Hawai'i's Skin Cancer and Prostate Cancer Coalitions, Hawai'i's Vaccine-Preventable Cancers Workgroup, the Hawai'i Chapter of the American Cancer Society, the Susan B Komen Foundation, and the Hawai'i Public Health Association.

An important institutional partnership is the UHCC's collaboration with the Hawai'i State Comprehensive Cancer Coalition (HCCC). HCCC is a multi–sector, multi-level coalition with member representation from all of Hawai'i's major health systems, health insurance providers, educational institutions/programs (UH JABSOM, School of Nursing, School of Social Work, Public Health Sciences, non-profit organizations including Papa Ola Lōkahi and the American Cancer Society, cancer survivors, communities with cancer health disparities, and the host agency, the Hawai'i State Department of Health. The HCCC is responsible for developing and implementing

evidence-based strategies to address Hawai'i's cancer burden, as described in Hawai'i's State Cancer Plan. The plan is supported by the Hawai'i State Department of Health with funding from the Centers for Disease Control and Prevention (CDC), and is revisited every 5 years. Currently the Hawai'i State Cancer Plan is in its third 5-year cycle (2016-2020).

Since the HCCC's inception in 2001, the sequence of HCCC chairpersons, each elected by the membership at large, has included Virginia Pressler MD, Carolyn Gotay PhD, Senator Roz Baker, Paula Higuchi MSW, Darlena Chadwick MSN, Neal Palafox MD, Shane Morita MD, and Brenda Hernandez PhD. Five of the HCCC Chair Persons are UHCC full-time faculty, staff or affiliate members. Furthermore, a majority of the cancer incidence and mortality surveillance data, which informs the coalition's planning process, is provided by the Hawai'i Tumor Registry, based at UHCC and supported by the NCI. UHCC's participation in the state's Cancer Control Plan, in lending its leadership and resources such as the cancer registry, demonstrates a significant level of dedication to community engagement in Hawai'i's cancer prevention and control environment.

What about outside of Hawai'i, ie, Pacific Community engagement? The UHCC Pacific mission refers to all of Oceania, but begins in the Western Pacific and with the United States Affiliated Pacific Island Jurisdictions (USAPIJ). The USAPIJ sustains a disparate medical and health environment, with poorer cancer health outcomes compared to Hawai'i. The USAPIJ are politically linked to the United States (US) as US Territories (Guam, American Samoa), a US Commonwealth (Commonwealth of the Northern Mariana Islands), and sovereign nations linked to the US through Compacts of Free Association [Federated States of Micronesia (FSM), Republic of the Marshall Islands (RMI), Republic of Palau (ROP)]. These island jurisdictions, according to World Health Organization Classifications, are classified as low, low-middle, and high-income countries. Cervical cancer incidence in the RMI is the highest in the world, mammography services are not available in the FSM and only Guam, and the CNMI only recently, beginning April 2019 secured on-island oncology services. Cancer risk factors such as obesity, tobacco, alcohol, and hepatitis B are prevalent. Twelve years of nuclear testing in the RMI leading to human exposure to radiation has added to the cancer burden, and the chewing of Areca nut (Betel nut) is a unique risk factor for oral cancer in the islands.

In the June 2019 issue of the HMJPH, the accomplishments of the University of Guam (UOG) and UHCC Partnership to Advance Cancer Health Equity (PACHE), a 15-year program funded by the NCI, was discussed and celebrated. Collaborative research projects have addressed cancer priorities germane to Guam; researchers at UHCC have expanded their portfolios

in cancer health disparities, and the partnership overall has established a sustainable infrastructure to support collaborative cancer research in the Hawai'i-Pacific region for many years to come. Other milestones of the partnership's accomplishments include significant contributions to tobacco control policies in Guam through community outreach and engagement, innovative mechanistic and epidemiologic research regarding Areca nut (Betel nut) chewing in the Pacific (associated with oral cancer), recruitment and training of Pacific Islander graduate students, and mentorship of early stage investigators.

UHCC partnerships with the Pacific community now includes collaboration with a coalition that represents the cancer prevention and control interests of the entire USAPIJ. The coalition, comprised of indigenous Pacific health professionals appointed by their respective directors of health called the Cancer Council of the Pacific Islands (CCPI), was founded for and by the USAPIJ in 2003.

Since 2003, the CCPI has formed collaborations with organizations based outside the USAPIJ, including the CDC, NCI, the Inter-Cultural Cancer Council (ICC); academic partners such as the University of Hawai'i's John A. Burns School of Medicine and Cancer Center. The Pacific Islander Health Officers Association (PIHOA), whose members are the health policy leads (ministers and directors of health) in their respective jurisdictions, link to the council as health policy advisors. Together, the collaboration is called the Pacific Regional Cancer Control Partnership (PRCCP), responsible for addressing cancer prevention and control in the USAPIJ. The coordinating body is the CCPI. Through the PRCP, local cancer coalitions, a regional cancer registry, 12 years of regional cancer control plans, and cancer prevention programs and research has been implemented.

The UHCC has formed partnerships with the Hawai'i and the USAPIJ community on several levels. Collaborations with individual scientists, institutions, as well as regional coalitions has facilitated participatory community engagement and community centric research. UHCC collaborations and partnerships have resulted in reciprocal benefits for UHCC and the Pacific communities, have served to leverage new resources, and have brought focus to community priorities with targeted cancer research, education, patient care, and community outreach.

Acknowledgement

The UHCC/UOG PACHE partnership has been supported by consecutive U56 and U54 grants, currently U54CA143727 and U54CA143728.

Author's Affiliation: University of Hawai'i Cancer Center, Honolulu, HI