



MEDICAL SCHOOL HOTLINE

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The Department of Native Hawaiian Health at the John A. Burns School of Medicine

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The Department of Native Hawaiian Health (NHH) is one of 11 clinical departments in the University of Hawai'i's John A. Burns School of Medicine (JABSOM). The department's mission is to be a center of excellence in education, research, and quality healthcare practices, committed to the optimal health and wellness of Kānaka 'Ōiwi (Native Hawaiians), their families and communities, while embracing traditional Hawaiian values and practices. NHH, as an academic and medical field of study, embraces a multi-disciplinary approach in addressing the health disparities experienced by Kānaka 'Ōiwi (and other health disparate groups) that integrates the biomedical, behavioral, psychosocial, and public health sciences with Hawaiian cultural knowledge and wisdom. It applies these sciences and Hawaiian cultural knowledge to medical education, basic and clinical research, clinical services and training, and community-engagement.

Mo'olelo: A Brief History of the Department of Native Hawaiian Health

Under Dean Ed Cadman, Dean of JABSOM (1999 to 2005), NHH was first established as a JABSOM program in 2002. In 2003, the University of Hawai'i (UH) Board of Regents' established NHH as a clinical department in JABSOM. To help build NHH, the Queen's Health Systems (QHS) made an initial investment of \$5 million to support its establishment and mission to address the health of Kānaka 'Ōiwi. Two preexisting JABSOM programs, 'Imi Ho'ōla: Post-Baccalaureate Program and the Native Hawaiian Center of Excellence under the respective leadership of Dr. Nanette Judd and Dr. Ben Young, became part of the newly formed NHH's medical education activities. Dr. Marjorie Mau was appointed the founding Chair of NHH. Under her leadership, the department grew to become the only clinical department in a US medical school dedicated to the health and well-being of an indigenous population. Currently, NHH is comprised of four divisions (Medical Education, Research, Clinical Teaching and Services, and Community-Engagement) supported by an administrative core that includes an office of human resource, grants management, and program development.

Ho'ona'au'ao: Creating Diversity in the Health Profession Workforce

Comprising the NHH Medical Education Division are the Native Hawaiian Center of Excellence (NHCOE) and the 'Imi Ho'ōla Post-Baccalaureate Program. Its shared mission is to build diversity in JABSOM and the medical profession in

Hawai'i. Under the former leadership of Drs. Benjamin Young and Nanette Judd and the current director, Dr. Winona Lee, NHCOE and 'Imi Ho'ōla have become essential "pipelines" to the health professions for students from under-represented and disadvantaged backgrounds and to academic medicine for post-doctoral physicians and researchers.

The 'Imi Ho'ōla ("Those Who Seek to Heal") Post-Baccalaureate Program has a proven track record of producing physicians from diverse social backgrounds who have a commitment to providing medical care in underserved areas of Hawai'i and the Pacific.^{1,2} Annually, 'Imi Ho'ōla offers educational opportunities for up to 12 students from economically, socially, and/or educationally disadvantaged backgrounds who demonstrate the potential to pursue a career in medicine but have experienced challenges that hinder this process. The intensive one-year program integrates concepts in the sciences and humanities to strengthen the students' basic science and clinical skills. In addition, the program develops their communication, critical thinking, professionalism, and learning skills. Upon successful completion of the one-year program, students enter JABSOM as first-year medical students. Of the 226 graduates of the program, 85% have gone on to provide primary care health services and 96% take care of underserved and/or disadvantaged populations. Forty (40%) of the graduates are of Native Hawaiian ancestry. The majority of graduates originate from rural and or underserved populations with a desire to return to their home community to practice medicine.

The NHCOE provides education and training enhancement programs to Native Hawaiian students and those at the post-doctoral stage of their career (<http://www.hawaii.edu/nhcoe/>). The purpose of NHCOE is to improve the healthcare workforce in the State of Hawai'i and to increase diversity in JABSOM faculty and students through the provision of education, research, and community partnership opportunities. Led by Dr. Martina Kamaka, NHCOE offers cultural competency training to JABSOM faculty, community health care providers, and all first and second year JABSOM medical students. NHCOE also offers post-doctoral medical education and research fellowships to qualified individuals possessing an MD or PhD in a health-related field. In collaboration with the UH School of Social Work, Kipuka Native Hawaiian Student Center at the UH at Hilo, and the Office of Student Equity, Excellence and Diversity (SEED), NHCOE has reached over 2,500 middle school, high school, and college students throughout the state. It exposes them to opportunities in the health careers, and

has worked directly with 37 Native Hawaiian undergraduates through its Native Hawaiian Student Pathways to Medicine, enter medical school.

Hō'ike: Eliminating Health Disparities in Hawai'i through Research

Included in the NHH Research Division is the Center for Native and Pacific Health Disparities Research (the Center) which houses several research projects. In addition to the Center, highlighted are two of its projects, the Mālama Pu'uwai Project (MPP) under the leadership of Dr. Marjorie Mau and the PILI 'Ohana Project (POP) directed by Dr. Keawe'aimoku Kaholokula. The Center and POP are funded by the National Institute on Minority Health and Health Disparities (NIMHD) and the MPP is funded by the National Heart, Lung, and Blood Institute (NHLBI) both under the National Institutes of Health (NIH). A health disparity is known to exist "...when a particular population has significantly higher rates of disease incidence, prevalence, morbidity, or mortality than the general population" (US Public Law 106-525).

For 10 years, the Center for Native and Pacific Health Disparities Research has served as a regional focal point for research designed to eliminate health disparities and improve health outcomes for populations in the Pacific region including Native (eg, Native Hawaiians and Alaska Natives) and Pacific Peoples (eg, Pacific Islanders and Filipinos; <http://www3.jabsom.hawaii.edu/native/index.htm>).³ The Center's scientific theme is cardiometabolic health disparities, which includes heart disease, diabetes, obesity and metabolic syndrome and their risk factors, and partners with other JABSOM basic science (eg, Cell and Molecular Biology) and clinical (eg, Pediatrics and Medicine) departments and scientists, Office of Public Health Sciences, and other Native and Pacific serving organizations throughout Hawai'i and the Pacific Rim. A range of basic and clinical studies are conducted to elucidate the biological, behavioral, and psychosocial mechanisms that influence cardiometabolic health and to test novel interventions in combating obesity, diabetes, and heart disease. In addition to conducting research, the Center assists to strengthen the capacity of community organizations and scientists in pursuing research and clinical services that benefit Native Hawaiians and Pacific Peoples through annual research and grant writing workshops and He Huliau, a national health disparities conference.

The MPP is a multi-program project that has completed a randomized control trial, the Mālama Pu'uwai Study, which tested an educational program aimed at preventing adverse health outcomes in Native Hawaiian and Pacific Islander patients with cardiomyopathy. The MPP is now in its dissemination phase, an adapted version of the Mālama Pu'uwai Program, entitled Ho'omau ka Pu'uwai (Maintaining the Heart), is being disseminated into clinical practice at Queen's Medical Center (QMC) and 4 community clinical centers. This activity is in collaboration with Diane Paloma, Director of the Native Hawaiian Health Program at QMC. The work of MPP has led to funding from the Office of Hawaiian Affairs (OHA) to work

with the Hāna community on Maui to learn more about heart disease and cardiomyopathy including inheritable forms of heart disease. Dr. Todd Seto of QMC is directing the OHA-support project.

The PILI 'Ohana Project (POP) is a community-academic partnership to eliminate obesity and related disparities through the development of effective and sustainable community-based and community-led health promotion programs for Native Hawaiian and Pacific Islander communities (<http://www2.jabsom.hawaii.edu/pili>). The community-based organizations involved are (1) Hawai'i Maoli of the Association of Hawaiian Civic Clubs, (2) Kula no nā Po'e Hawai'i of the Papakōlea, Kewalo, and Kalāwahine Hawaiian Homestead communities, (3) Ke Ola Mamo, the Native Hawaiian Health Care System for the island of O'ahu, and (4) Kōkua Kalihi Valley Comprehensive Family Services.⁴

Along with NHH scientists, the POP partnership has developed and tested several versions of a lifestyle intervention (The PILI Lifestyle Program) and a diabetes self-management program (Partners in Care) over the past 8 years that uses a Community-Based Participatory Research (CBPR) approach.⁵⁻⁸ Currently, the POP partnership is working with other community-based organizations that serve Native Hawaiians and Pacific Islanders to disseminate and implement these interventions.

Ho'ōla: Improving Healthcare in Hawai'i

To meet the quality healthcare practices mission of NHH, the Lau Ola Healthcare System (referred to as Lau Ola) was formed through JABSOM's faculty practice plan known as UCERA (the acronym for the University Clinical, Education, & Research Associates). A team of primary care, behavioral health, and other providers of Lau Ola work toward improving the clinical outcomes of Native Hawaiians and other health disparate groups while developing innovative models of care to meet the needs of these communities. Following are some of the healthcare services and trainings being provided by providers of Lau Ola.

Dr. Kalani Brady and his team of physicians, Drs. Peter Donnolly, Martina Kamaka and Chad Koyanagi, care for the Hansen's disease patients of Kalaupapa on Moloka'i as well as in Hale Mōhalu on O'ahu. At the Lau Ola Clinic on O'ahu, Drs. Kalani Brady and Dee-Ann Carpenter provide culturally-appropriate primary care services. Dr. Chad Koyanagi is available for psychiatric services, and Dr. Amy Wassman administers behavioral health services. In collaboration with the UH School of Pharmacy, Dr. Candace Tan, a clinical pharmacist, has joined the healthcare team.

Lau Ola Clinic is also a training site for clinical teaching of JABSOM medical students and Internal Medicine residents, such as Dr. Marcus Iwane (a 3rd third year resident). Additionally, the providers, staff, and students provide regular health care screenings and counseling at the Papakōlea Hawaiian Homestead Community Center and other venues, such as at the 'Aha Kāne an 'Aha Wāhine conferences and the annual cultural gathering at Pu'ukoholā Heiau on Hawai'i island.

Laulima: Engaging Community Partnerships to Translate Science into Practice

The Community Engagement Division of NHH, directed by Ms. Mele Look, MBA enables and nurtures multiple community partnerships through an extensive 32-member community coalition called the Ulu Network. The membership includes 14 federally qualified community health centers (CHC) in Hawai'i, five federally established Native Hawaiian Health Care Systems (NHHCS), two partners in California, and several rural community hospitals, and Hawaiian Civic Clubs that serve Native Hawaiians and other Pacific Peoples. Of the 32 members, 11 have been involved in 12 NIH-funded studies and 13 organizations have collaborated on 18 health information dissemination programs. A particularly effective program has been the Land, Food, and Health initiative that combines diabetes self-management classes and activities that reconnect patients with the Pacific concepts of land and health.

A priority of the Division has been trainings for community health workers to build clinical and research capacity and support community-based health promotion activities. The division has conducted 42 cardometabolic health training seminars targeting outreach and community health workers, reaching 607 attendees. The culturally relevant seminars were led by multi-disciplinary instructors and taught across Hawai'i and on the continental US. The Division plays a vital role in ensuring community participation across all other NHH Divisions.

Ka Wā Mahope: Looking Toward the Future

NHH continues to broaden its scope of activities in ho'ona'au'ao (teaching), hō'ike (discovering), and ho'ōla (healing) to realize its vision of a vibrant, robust, and healthy Kānaka 'Ōiwi population. As NHH celebrates a decade of working toward this vision, the faculty and staff extends a mahalo (thank you) to its academic and community partners for allowing us to work together, in the spirit of laulima (cooperation), to achieve our shared visions of a healthier Hawai'i.

Conflict of Interest

The authors report no conflict of interest.

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