

Assessing Health from a **Native Hawaiian Perspective**

Native Hawaiian perspectives on wellbeing emphasize relationships, interconnections, and balance. 'Imi Pono seeks to provide a fuller picture of wellbeing among Native Hawaiians and Hawai'i residents to supplement data from narrowly focused or deficitbased surveys. The survey is a partnership among Kamehameha Schools, Lili'uokalani Trust, the Office of Hawaiian Affairs, Papa Ola Lokahi, and The Queen's Health System.

Purpose: Health from a Native Hawaiian Perspective

This brief examines health outcomes among Hawai'i residents from a Native Hawaiian perspective, which emphasizes spiritual, interpersonal, and land-based connections. Hawai'i is often associated with healthy lifestyles. However, disparities persist between Native Hawaiians and non-Hawaiians for a number of conventional measures. Using a model of health based on relationships among akua (gods, God, powers that be), 'āina (land, ocean, sky, natural environment), and kānaka (people, humankind) called the Lokahi Triangle, survey data were analyzed and statistically significant comparisons reported with a special focus on Native Hawaiians and non-Hawaiians. Understanding what comprises good health from a Native Hawaiian point of view provides new insights

interventions that can benefit all of Hawai'i.















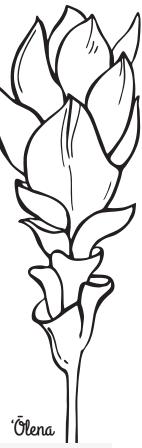
Key Findings

 Hawai'i residents feel healthy and satisfied with their lives. Over half report feeling "quite a bit" or "extremely" healthy physically, mentally, and spiritually, and nearly three-fourths report being "satisfied" or "very satisfied" with their quality of life.

2. Native Hawaiians feel less healthy and less satisfied with their lives. On average, there is a 10 percentage point gap for physical, mental, and spiritual wellbeing and a 15 percentage point difference in quality of life between Native Hawaiians and non-Hawaiians.

3. However, Native Hawaiians outperform non-Hawaiians on culturally relevant health measures. On average, Native Hawaiians carry deeper and stronger relationships with akua, 'āina and kānaka than non-Hawaiians.

4. To improve their health, Hawai'i residents (30%) participate in culturally relevant prevention or treatment programs at least monthly. Native Hawaiians are more likely than non-Hawaiians to use culturally relevant health programs at least once a month (37% compared to 22%, respectively).



Sample and Methods

Ölena.

Data were collected via electronic survey from February through April 2023. A total of 1,329 Hawai'i residents ages 18 and older participated in the survey, with 61% identifying as Native Hawaiian and 39% as non-Hawaiian. Among all respondents, 35% are from Honolulu County, 28% from Hawai'i County, 22% from Maui County, and 16% from Kaua'i County. The confidence interval for the state—including breakouts for Native Hawaiians and non-Hawaiians—is 95% or higher. The county-level confidence interval is 90%. Complete findings are available at https://www.ksbe.edu/research/imi_pono_hawaii_wellbeing_survey/.

Given the data collection methodology, survey respondents are likely more financially affluent and hold higher education degrees than the general Native Hawaiian and Hawai'i population. In comparison to results from the 2021 and 2022 'Imi Pono surveys, more affluent Native Hawaiians are reflected in this sample.

Key Findings 2

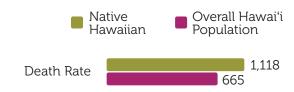
Context

Hawaii is often associated with the beauty of its natural environments and good health.¹ Compared to the rest of the U.S., Hawaii has a longer life expectancy (82 years versus 76 years). According to a 2023 report from the Commonwealth Fund, Hawaii performed the best among U.S. states for overall health outcomes and healthy behaviors.² Hawaiis healthcare system also earned a top three ranking based on 58 measures including access, quality, use of services, and costs.

Although Hawai'i consistently earns praise for promoting healthy lifestyles, sobering health disparities exist for Native Hawaiians. Compared to other ethnic groups, Native Hawaiians have a shorter life expectancy and are more likely to skip a doctor's visit because of cost.³

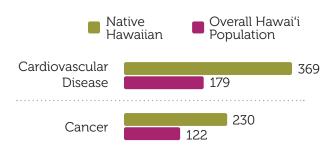
From a 2023 publication by the Hawai'i State Department of Health, Native Hawaiians have a higher mortality rate compared to the overall population of Hawai'i, even when accounting for the age-adjusted death rate (Figure 1).

Figure 1. Age-adjusted Death Rate⁴ per 100,000 in Hawai'i from 2019-2021



Chronic disease afflicts Native Hawaiians and is responsible for their lessened average lifespan, particularly cardiovascular disease and cancer (Figure 2).

Figure 2. Age-adjusted Causes of Death per 100,000 in Hawai'i 2021⁵



Context 3

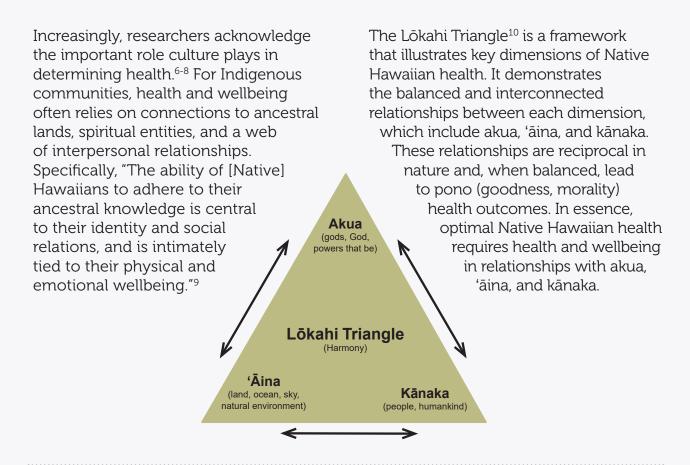
¹While this brief was being written, a series of fires on Maui caused immense destruction and Native Hawaiian cultural practitioners and community leaders are working to heal the trauma.

² 2023 scorecard on state health system performance. Commonwealth Fund 2023 Scorecard State Health System Performance | Commonwealth Fund. (2023, June 22). https://www.commonwealthfund.org/publications/scorecard/2023/jun/2023-scorecard-state-health-system-performance

³Kana'iaupuni, Shawn Malia, Wendy M. Kekahio, Kā'eo Duarte, and Brandon C. Ledward, with Sierra Malia Fox and Jenna T. Caparoso. 2021. *Ka Huaka'i: 2021 Native Hawaiian Educational Assessment*. Honolulu: Kamehameha Publishing.

⁴A community with an elder population may have a higher mortality rate than a community with a younger population. Adjusting for age allows for a fairer comparison across groups.

Data is aggregated from 2019-2021, released in February of 2023 (Hawai'i State Department of Health).



⁶McMullin, J. (2005). The call to life: Revitalizing a healthy Hawaiian identity. *Social Science & Medicine*, 61(4), 809–820. https://doi.org/10.1016/j.socscimed.2004.08.051

Verbunt, E., Luke, J., Paradies, Y., Bamblett, M., Salamone, C., Jones, A., & Kelaher, M. (2021). Cultural determinants of health for aboriginal and Torres Strait Islander people – A narrative overview of reviews. *International Journal for Equity in Health*, 20(1). https://doi.org/10.1186/s12939-021-01514-2

⁸Williams, A. D., Clark, T. C., & Lewycka, S. (2018). The associations between cultural identity and mental health outcomes for indigenous Māori youth in New Zealand. *Frontiers in Public Health, 6.* https://doi.org/10.3389/fpubh.2018.00319

⁹Look, M. A., Soong S., & Kaholokula, J. K. (2020). <u>Assessment and Priorities for Health and Well-Being in Native Hawaiians and Pacific Islanders</u>. Honolulu, HI. Department of Native Hawaiian Health, John A. Burns School of Medicine, University of Hawaiia.

¹⁰For more information on the concept of the Lōkahi Triangle and how it has been used in promoting health, see Keli'iholokai, L., Keaulana, S., Antonio, M. C., Rogerson, I., Deitschman, K., Kamai, J. A., Albinio, L., Wilson, K., Kepa, D., Makua, K. L., Vegas, J. K., Chung-Do, J. J., Ho, K., & Ho-Lastimosa, H. I. (2020). Reclaiming 'Āina Health in Waimānalo. *International Journal of Environmental Research and Public Health*, *17*(14), 5066–5080. https://doi.org/10.3390/ijerph17145066

Artist Credit: Back Page



Findings

Quality of Life

A common construct in health surveys, "quality of life" is often used to assess how satisfied a person is with their life and to better understand key factors that contribute to their health and wellbeing. Nearly three-fourths of Hawai'i residents (73%) report being "satisfied" or "very satisfied" with their quality of life. There are no major differences in rates across counties or genders. However, Native Hawaiians (67%) report lower rates of satisfaction with their quality of life than non-Hawaiians (82%).

Income is an important factor to Hawai'i residents' quality of life. A majority of households making more than \$145,000 a year (92%) report being "satisfied" or "very satisfied" with their quality of life compared to families making between \$85,000 and \$144,000 (74%) and less than \$85,000 (64%).

Higher levels of education are associated with greater life satisfaction. Among all respondents, 88% of residents with a master's degree or higher and 80% of residents holding a bachelor's degree say they are "satisfied" or "very satisfied" with their quality of life. In comparison, 55% of residents whose highest degree is a high school diploma or G.E.D. and 53% of those who have less than a high school education say they are "satisfied" or "very satisfied" with their quality of life.

The survey asks respondents to rank factors that matter most to their quality of life such as 'ohana (family) relationships, career, hobbies, and social groups.

Spirituality is a key factor for one-third of Hawai'i residents (34%), with slightly higher rates among Native Hawaiians (36%) and females overall (40%). Honolulu County residents (29%) report the lowest rates of spirituality being important to their quality of life.

Family relationships are a key factor in the quality of life for 72% of residents statewide. Maui County residents (77%) and non-Hawaiians (75%) report slightly higher rates. Males (69%) and respondents between the ages of 25 and 34 (58%) rate family relationships the lowest. While cultural beliefs are important for the quality of life of 22% of residents, Native Hawaiians are nearly three times as likely to select it as a key factor than non-Hawaiians (29% compared to 11%) (Figure 3).

Figure 3. Quality of Life Factor Comparison of Native Hawaiian and non-Hawaiian Adults 'Ohana and 71% close friends 75% 42% Work or career 40% Hobbies and 42% interests 36% Spirituality 31% Cultural 29% beliefs 11% Social groups 22% and activities 21% Neigborhood and/or community 22%

Findings: Quality of Life

Physical, Emotional, and Spiritual Health

In addition to physical traits, mental and emotional as well as spiritual wellbeing are significant determinants of a person's overall health. Over half of Hawai'i residents report their physical (57%), mental and emotional (60%), and spiritual (54%) health to be "quite a bit" or "extremely" healthy. However, Native Hawaiians are less likely than non-Hawaiians to say they are as healthy physically (48% compared to 63%), mentally and emotionally (53% compared to 64%), and spiritually (57% compared to 62%). Females (56%) have the lowest rates of mental health regardless of ethnicity.

The survey asks residents what they are most worried about for themselves and their families. Health is the top worry for Hawai'i families, with 55% saying they are worried about getting sick. When it comes to mental health, 42% of Hawai'i residents report being worried for themselves or their families. Native Hawaiians (48%) are more worried than non-Hawaiians (40%), as are females (54%) regardless of ethnicity.



Access to Healthcare

One-third of Hawai'i residents (32%) prioritize access to quality healthcare as one of their top three criteria in a thriving community. Non-Hawaiians (39%) are more likely to mention it than Native Hawaiians (27%). When it comes to accessing healthcare that utilizes cultural approaches—such as lomilomi (Hawaiian massage therapy), lā'au lapa'au (herbal medicine), and lā'au kāhea (spiritual healing)—Native Hawaiians do so more frequently than non-Hawaiians (Figure 4).¹¹



Lōkahi among Akua, 'Āina, and Kānaka

Medical histories, quality of life reports, and self-assessments of physical, mental, emotional, and spiritual wellbeing are significant sources of information with direct connections to health. At the same time, Native Hawaiians believe health manifests indirectly through a person's relationships with akua, 'āina, and kānaka. From this perspective, wellness is culturally constructed, spiritually imbued, and closely tied to social and place-based interactions.

¹¹Waianae Coast Comprehensive Health Center. Healing. WCCHC. https://www.wcchc.com/Healing



Akua

Nearly two-thirds of Hawai'i residents (64%) report their belief in a higher power to be "quite a bit" or "extremely" important to their wellbeing. Native Hawaiians (69%) report higher rates of importance for spirituality than non-Hawaiians (56%).

Hawai'i is home to a number of diverse religions. As such, 39% of Hawai'i residents report feeling "quite a bit" or "extremely" connected to a spiritual or religious community.

Native Hawaiians (42%) report feeling more connected to these groups than non-Hawaiians (34%). In the last 12 months, more than half of all respondents (59%) describe their spiritual health as "extremely" or "quite a bit" healthy.

For many Native Hawaiians, 'āina is considered sacred and a source of spiritual strength. Three out of ten Hawai'i residents (31%) report interacting with the 'āina for spiritual reasons. Rates are higher among Native Hawaiians (37%) than non-Hawaiians (22%).

Over one-quarter of Hawai'i residents (27%) report caring for 'iwi kupuna (ancestral bones or burial sites) once a year or more often. Rates are considerably higher among Native Hawaiians (32%) than non-Hawaiians (20%). Geographically, Hawai'i (32%) and Kaua'i (30%) counties report slightly higher rates of caring for 'iwi kupuna once a year or more than Honolulu (25%) and Maui (23%) counties (Figure 5).

Figure 5. Percentage of Responses per County that Report Caring for 'Iwi Kupuna Once a Year or More Often

Kauaʻi H	25% onolulu ounty	23% Maui County	32% Hawai'i County
, 4	•		
27% State Average			•

'Āina

A resounding four out of five Hawai'i residents (82%) say the health of the 'āina and kai (water) are "quite a bit" or "extremely" important to their wellbeing. Compared to their counterparts, rates are higher among females (86%) and residents of Maui (94%) and Hawai'i (87%) counties.

The survey also asks respondents what a thriving community looks like to them. Nearly one out of five residents (19%) include healthy and productive lands in their top three criteria, although 'āina is a bigger factor for Native Hawaiians (21%) than non-Native Hawaiians (15%). Similarly, a strong sense of place and access to cultural experiences is a top condition of a thriving community for 19% of Hawai'i residents. However, Native Hawaiians (21%) are more likely than non-Hawaiians (15%) to say so. Younger residents between the ages of 18 and 24 (11%) are least likely to prioritize a sense of place.

Over one-quarter of Hawai'i residents (28%) say they participated in community-based stewardship of natural resources at least once a month in the last year. Native Hawaiians (32%) are more likely to do so at this frequency than non-Hawaiians (24%). A lower rate of Hawai'i residents (19%) report making use of community-based subsistence fishing areas at least once a month. Native Hawaiians (24%) report rates nearly two times that of non-Hawaiians (13%).

Hawai'i residents interact with the 'āina and kai for a variety of reasons, including recreation (52%), health (43%), cultural (37%), spiritual (31%), and subsistence (28%). Native Hawaiians and non-Hawaiians report similar rates of 'āina and kai interactions for health and recreation, but there is an average 16 percentage point difference for cultural (45% versus 24%), spiritual (37% versus 22%), and subsistence (33% versus 20%) reasons.

Artist Credit: Back Page

Findings: Lôkahi among Akua, 'Aina, and Kānaka

Kānaka

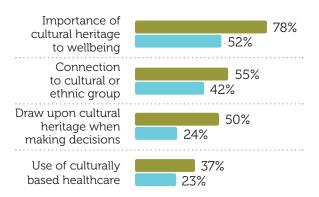
In addition to akua and 'āina, the kānaka realm offers rich insight into health and wellbeing. Across Hawai'i, 30% of respondents report they participated in a culturally based prevention or treatment program to improve their health at least monthly over the past year. Native Hawaiians (37%) make use of culturally based healthcare at higher rates than non-Hawaiians (22%).

Family relationships, connection to place, and membership in affinity groups can be determinants of good health. Four out of five Hawai'i residents (83%) say 'ohana relationships are "quite a bit" or "extremely" important to their wellbeing. Rates are similar for Native Hawaiians and non-Hawaiians, but highest among females (89%) compared to other genders.

Over half of all respondents (58%) say they feel "quite a bit" or "extremely" connected to the geographic community they live in, with Hawai'i County residents (65%) reporting the highest rates. Statewide, 51% of respondents say they feel "quite a bit" or "extremely" connected to a cultural or ethnic group. Native Hawaiians (55%) report a stronger connection to an ethnic group than non-Hawaiians (42%) as do females regardless of ethnicity (52%).

When it comes to the importance cultural heritage plays in wellbeing, the difference is clear. Although two-thirds of Hawai'i residents (67%) say it is "quite

Figure 6. Comparison of Native Hawaiian and non-Hawaiians on Health-Related Beliefs and Activities

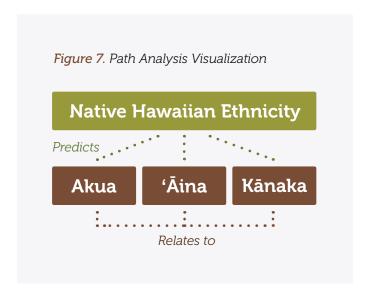


a bit" or "extremely" important, cultural heritage is a much bigger contributor to wellbeing for Native Hawaiians (78%) than non-Hawaiians (52%). Relatedly, half of Native Hawaiians (50%) say they draw upon their cultural heritage "most of the time" or "always" when making an important decision compared to non-Hawaiians (24%). Two out of five Hawai'i residents (40%) report relying on their cultural backgrounds for decision-making with the same frequency.

A similar gap is seen between Native Hawaiians and non-Hawaiians regarding participation in cultural activities in the past 12 months. One-third of Hawai'i residents (36%) report they engage in traditional learning opportunities such as hula classes at hālau hula (school or hall where hula is taught) at least monthly, with Native Hawaiians (43%) reporting a rate nearly twice as high as non-Hawaiians (22%).

Path Analysis

A path analysis is a statistical technique used to investigate patterns of effect within a set of variables (Figure 7). This analysis was performed on a subset of survey questions categorized according to the three elements of the Lōkahi Triangle. Results reveal significant and consistent differences in the ways Native Hawaiians and non-Hawaiians answer questions about akua, 'āina, and kānaka. In addition, responses representing akua, 'āina, and kānaka are highly correlated. These findings suggest



there is value in categorizing questions with culturally based criteria and important differences exist in the ways Native Hawaiians and non-Hawaiians view health and wellbeing.

Conclusions

Results from the 2023 'Imi Pono survey support prior studies associating Hawai'i with greater levels of overall health but underlying disparities for Native Hawaiians as well. Roughly three out of four Hawai'i residents are satisfied with their quality of life and more than half feel physically, mentally, emotionally, and spiritually healthy. At the same time, Native Hawaiians consistently report lower rates for these measures, which may be related to disproportionately lower incomes and educational attainment. In fact, a number of sociopolitical and historical factors, outside the scope of this brief, likely limit healthy lifestyles for Native Hawaiians.

At the same time, health is in the eye of the beholder and a very different picture emerges when culturally relevant measures are considered. The Lōkahi Triangle provides a framework for exploring aspects of health that are experienced through relationships with akua, 'āina, and kānaka. Spirituality offers a deep reservoir of hope that can buffer life's adversities.

Kukui

Path Analysis 11

In terms of akua connections, survey results indicate Hawai'i residents are "spiritually healthy." About two out of three residents say their spiritual beliefs are a big part of their wellbeing and two out of five feel closely attached to a spiritual community. For these indicators, as well as spiritual interactions with 'āina and caring for 'iwi kupuna, Native Hawaiians achieve higher levels of health.

Healthy connections to 'āina run deeper than environmental consciousness. They are rooted in kinship and interdependence. Hawai'i residents have a "healthy relationship to 'āina." This is evidenced by high rates of respondents who believe the health of the 'āina and kai is important to their wellbeing and that

productive lands and a strong sense of place are key factors in a thriving community. While all Hawai'i residents interact with the 'āina or kai for health and recreation, Native Hawaiians do so more often for spiritual, cultural, and subsistence purposes. Native Hawaiians are also more likely to participate in 'āina stewardship activities.

In line with the element of kānaka, Hawai'i residents have "healthy social and cultural relationships." 'Ohana is important to most Hawai'i residents' sense of wellbeing, as is their connection to geographic communities. Native Hawaiians,

"...health is in the eye of the beholder and a very different picture emerges when culturally relevant measures are considered."

in particular, are more likely to access culturally based healthcare and participate in cultural activities. They are also much more likely to say their cultural heritage matters to their wellbeing, to feel deeply connected to an ethnic group, and to draw upon their heritage when making important decisions. These results echo other studies that highlight the significance cultural identity plays in the health of Native Hawaiians and other Indigenous groups.

Conclusions 12

While these findings suggest merit in approaching health and wellbeing from a cultural perspective, they also raise new questions. Despite higher levels of chronic disease and lower lifespans, only about one-third of Native Hawaiians (32%) believe access to healthcare to be a key factor in a thriving community. On the other hand, 37% of Native Hawaiians make use of culturally based healthcare at least monthly. More research is

required to explore perceptions of western and traditional medicine and how these views relate to healthcare access. Likewise, more studies are needed to examine reported health outcomes or medical diagnoses.¹²⁻¹⁴

Still, the Lōkahi Triangle flips health statistics and recasts Native Hawaiians as standard bearers of wellness rather than anchors. When good health includes close relationships with akua, 'āina, and kānaka, Native Hawaiian families have a firm foundation to stand upon when dealing with higher rates of morbidity and mortality. One way to extend lifespans and increase quality of life for Native Hawaiians may be to expand ideas of health



to incorporate culturally based diagnoses and treatment. This is not a radical idea, since social work was transformed in Hawai'i by pioneering collaborations between western and Native Hawaiian professionals in the late 1960s and 1970s. 15,16

Considerations

The 'Imi Pono survey collects data on a range of wellbeing indicators, but it is not a medical diagnostic tool. Analyses do not take into account medical histories nor does the survey include common health questions (e.g., physical activity or risky behaviors). This brief focuses primarily on comparisons between Native Hawaiians and non-Hawaiians. These descriptive statistics are intended to provide a broad understanding of residents' perceptions and relationships to health. Multivariate analyses may yield additional insights.

Conclusions 13

¹²Rubas, N. C., & Maunakea, A. (2021). Medical School Hotline: Immunoepigenetic-Microbiome Axis: Implications for Health Disparities Research in Native Hawaiians and Pacific Islanders. *Hawai'i Journal of Health & Social Welfare*, 80(8), 195–198. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8334073/

¹³Maskarinec, G. G., Look, M., Tolentino, K., Trask-Batti, M., Seto, T., de Silva, M., & Kaholokula, J. K. (2015). Patient perspectives on the Hula Empowering Lifestyle Adaptation Study: Benefits of dancing hula for cardiac rehabilitation. *Health Promotion Practice*, *16*(1), 109–114. https://doi.org/10.1177/1524839914527451

¹⁴Kaholokula, J. K., Look, M., Mabellos, T., Zhang, G., de Silva, M., Yoshimura, S., Solatorio, C., Wills, T., Seto, T. B., & Sinclair, K. A. (2017). Cultural Dance Program Improves Hypertension Management for Native Hawaiians and Pacific Islanders: a Pilot Randomized Trial. *Journal of Racial and Ethnic Health Disparities*, 4(1), 35–46. https://doi.org/10.1007/s40615-015-0198-4

¹⁵Pukui, M. K., Haertig, E. W., & Lee, C. A. (1979). *Nānā i ke kumu = look to the source (Vol. 1)*. Hui Hānai.

¹⁶Pukui, M. K., Haertig, E. W., & Lee, C. A. (1983). Nānā i ke kumu = look to the source (Vol. 2). Hui Hānai.

Next Steps

- 1. Educate healthcare professionals and community members on the value of *integrating cultural beliefs and practices* with established health promotion strategies.
- 2. Adopt policies and practices to *address health disparities* for Native Hawaiians and other groups.
- 3. Support existing *community based health centers* and create new ones in underserved areas.
- 4. In line with <u>AlohaCare</u>, encourage *health insurance companies to cover costs* for culturally based treatment.
- 5. Through programs like <u>'Imi Ho'ōla</u>, increase the number of *Native Hawaiian physicians* practicing across Hawai'i.
- 6. Increase resources for *community based programs* and organizations that integrate all dimensions of the Lōkahi Triangle in program activities and missions.
- 7. Provide resources for additional research on *culturally based health approaches and assessments*.
- 8. Continue to develop, validate, and implement measures of health that align with *Native Hawaiian understandings of health and wellbeing*.

The Artist

Lehuauakea

"Through traditional kapa (bark cloth) and 'ohe kāpala (carved patterned bamboo stamps), hybrid textiles, and installation, I aim to address complex subjects of mixed identity and cultural erasure, Indigenous resilience, and ecological relationships through a contemporary Hawaiian lens..."

Lehuauakea is a māhū mixed-Native Hawaiian interdisciplinary artist and kapa maker from Pāpa'ikou on Moku O Keawe, the Big Island of Hawai'i. Lehua's Kānaka Maoli family descends from several lineages connected to Maui, Kaua'i, Kohala, and Hāmākua where their family resides to this day.

https://lehuauakea.com/

@_lehuauakea_



Title: Kānekauilanuimakehaikalani

Next Steps 14