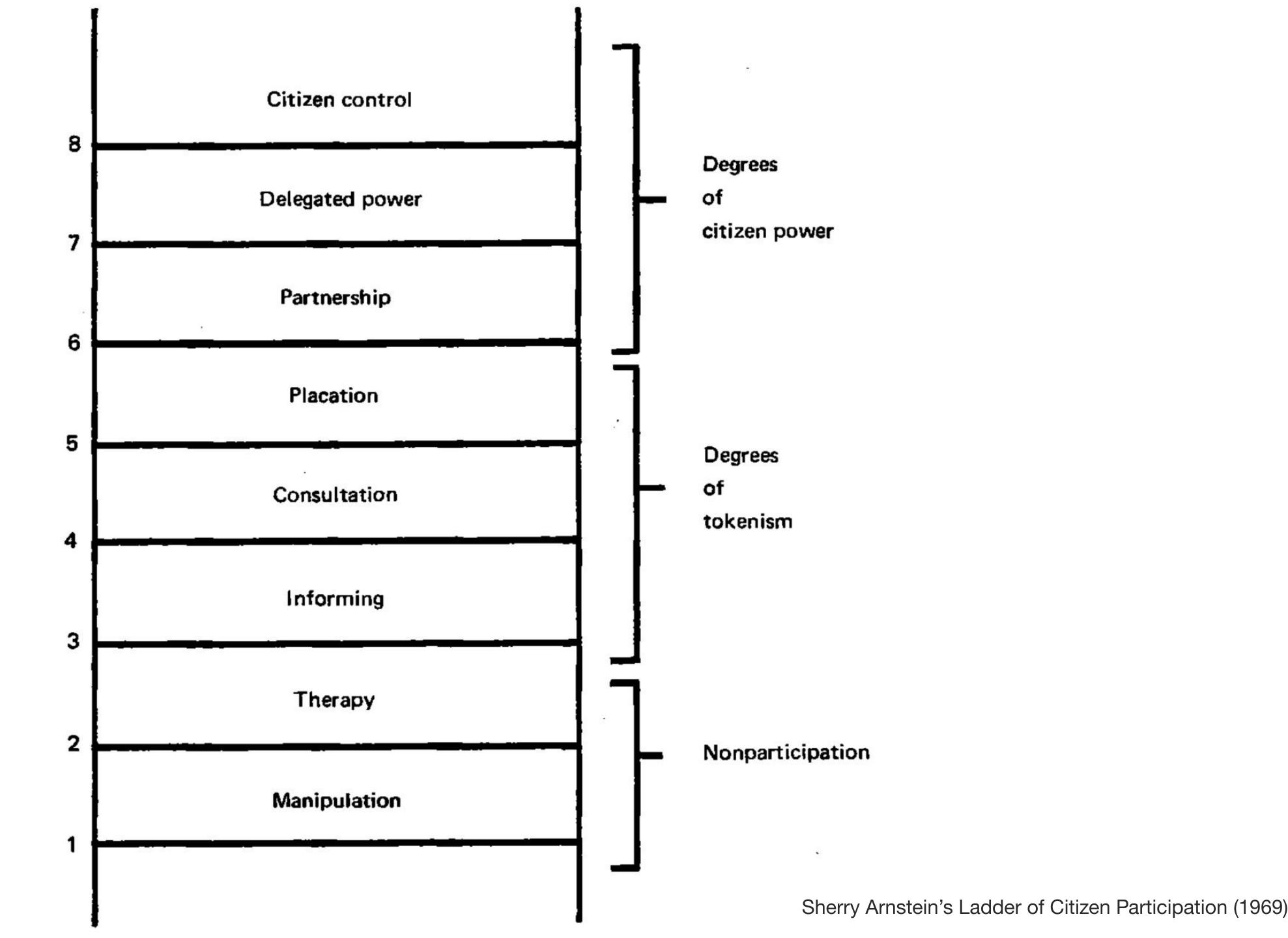
Co-design/co-production with Indigenous communities

NASEM DSOS Meeting 3: Ocean Solutions: Co-Design and

Co-Development

Rosie 'Anolani Alegado, Dept of Oceanography & Hawai'i Sea Grant Program University of Hawai'i Mānoa



Mindset

- Important but not always the answer
- A means to an end, not a box to check
- Requires a significant commitment of time, energy & resources
- Acknowledge the interdependence between facts & values

Process

- Priority should be given to the process of co-production
- Co-production should be done in the ccontext of a particular decision
- Establish co-production research standards
- One size does not fit all
- Support adaptive learning through formal procedures for evaluating processes and outcomes

Rights holders

- There should be a focus on building meaningful connections & collaborations
- Decision-making power during the process must be shared
- Respect, value & include all relevant perspectives
- There should be an understanding of reciprocity of the value of the process

Elements of Successful Co-production Processes

Important Elements					
Leadership	Community participation	Diverse skills	Resources: Financial and social	Social networks	Sense of community
Sense of partnership	Contextual understanding	Acknowledging the power of community	Shared values	Critical reflection	Ground rules
Ongoing dialog	Joint ownership decisions	Relationship building	Commitment	Flexibility	Continuous reflection
Innovation	Accomodation	Engagement locations are convenient	Partnerships with universities	Diverse rights holders	Mutual respect

Co-Production Challenges for Academics

- Lack of academic training in ways to facilitate co-production
 - Academics don't feel prepared to engage
- Young researchers see "riskiness" in being engaged in transdisciplinary research
 - Especially those who want to stay in academia
 - Transdisciplinarity is seen as an "add on" while focused research is the core of what they are "meant to be doing"
- It is hard to measure the success of co-production
- It can be hard to publish co-production research
 - Publications can be viewed as "sub-par"
- Disconnect between what institutions say they want (i.e. engaged faculty) and institutionalized practices of faculty reward
- Co-production is not always "cutting-edge" in the conventional sense
- Conventional measures might not indicate that co-produced science is "legitimate"

Kūlana Noi'i



Rosie Alegado^{1,4}, Katy Hintzen^{2,4}, Brenda Asuncion^{3,4}, Miwa Tamanaha^{3,4}, Sara Kahanamoku⁴

1) University of Hawai'i at Mānoa; 2) Hawai'i Sea Grant College Program; 3) Kua'āina Ulu 'Auamo, 4) Kūlana Noi'i Working Group

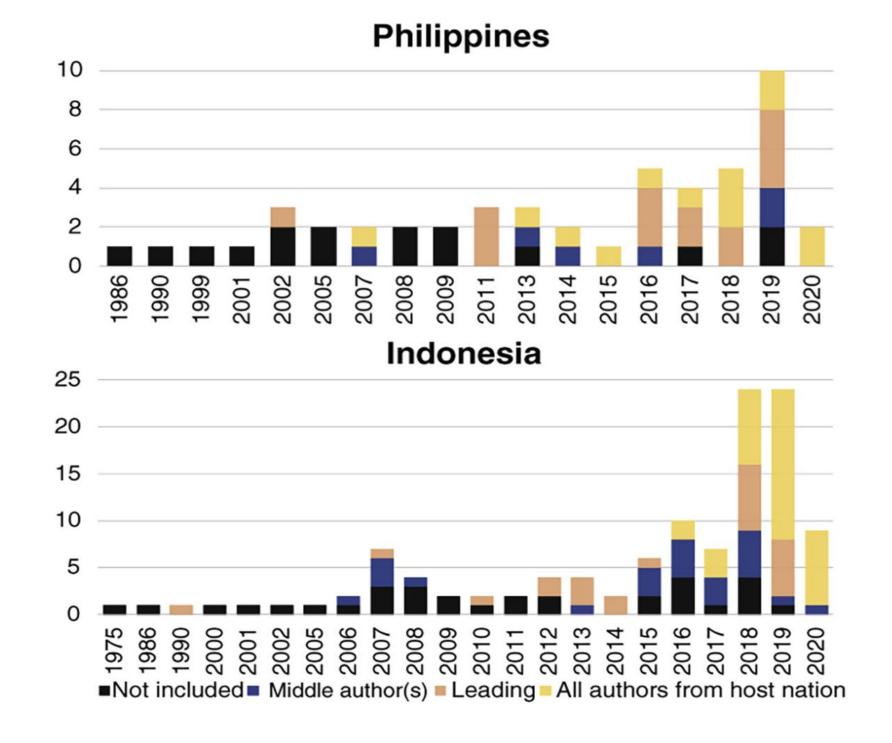


Parachute science and scientific colonialism

- The practice of obtaining data, resources from other countries while not returning research outputs or benefits is increasingly recognized as "scientific colonialism"
- Recent study on parachute science in the Coral Triangle shows the extent of externally-driven research across Moananuiākea (Oceania)

Given the deep impacts of parachute science on local communities, is this happening here in Hawai'i? If so, how can we recognize and quantify its extent?

Current Biology Volume 31, Issue 4, 22 February 2021, Pages R184-R185 Correspondence Turning the tide of parachute science Paris V. Stefanoudis 12 Q M, Wilfredo Y. Licuanan 3, Tiffany H. Morrison 4, Sheena Talma 25, Joeli Veitayaki 6, Lucy C. Woodall 12



Place and People Matter in Research



Why Community-Researcher Relationships?

How do we, as university researchers, build *equitable* relationships with Hawaiian and local communities?



What expectations do communities have for collaborations?



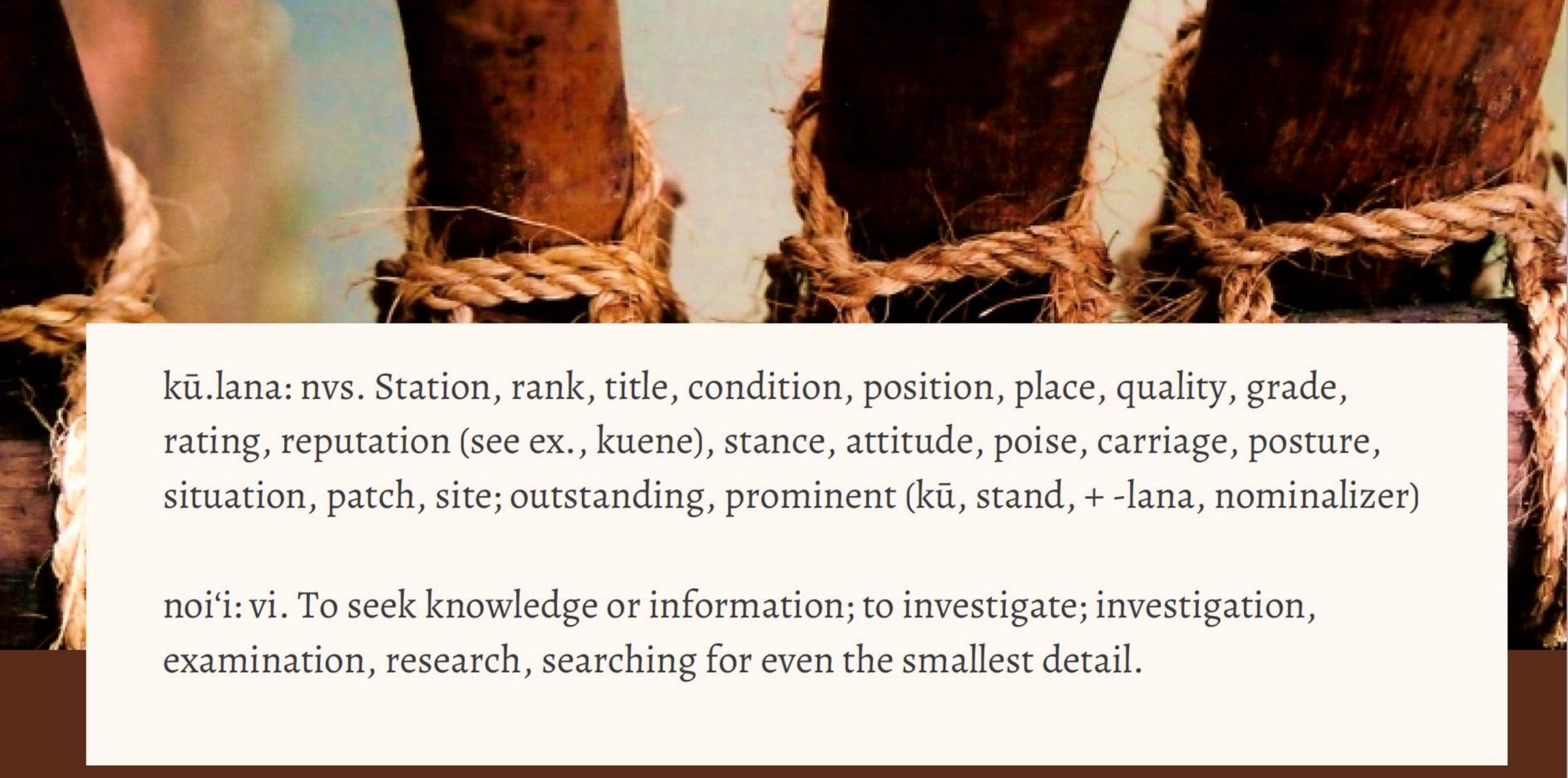
How do we hold ourselves responsible for the work we do with communities in their places?

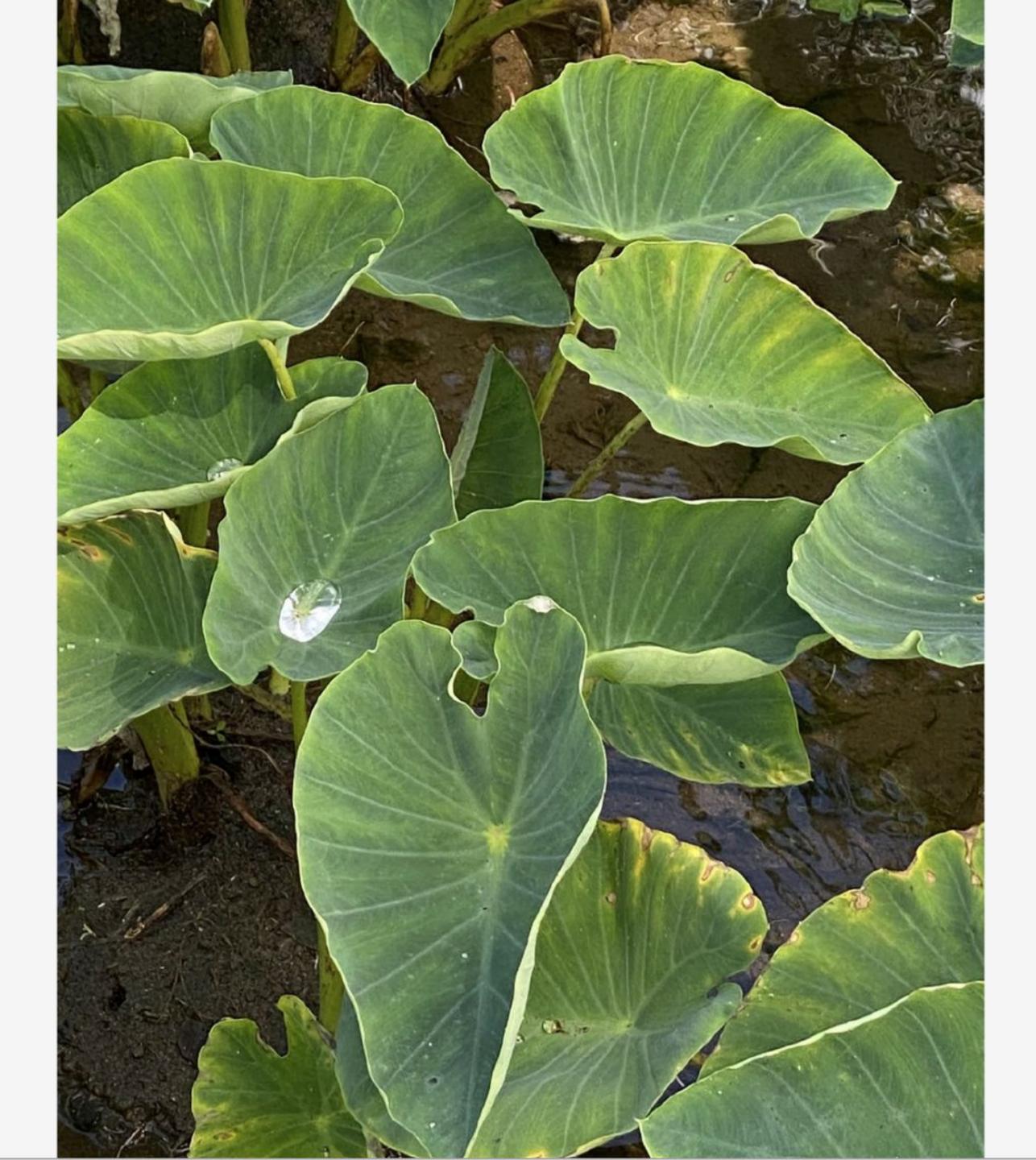


- 2014 Kua'āina Ulu 'Auamo facilitated committee
- Workshops with stewards,
 community, and researchers
- Broader body of academic literature

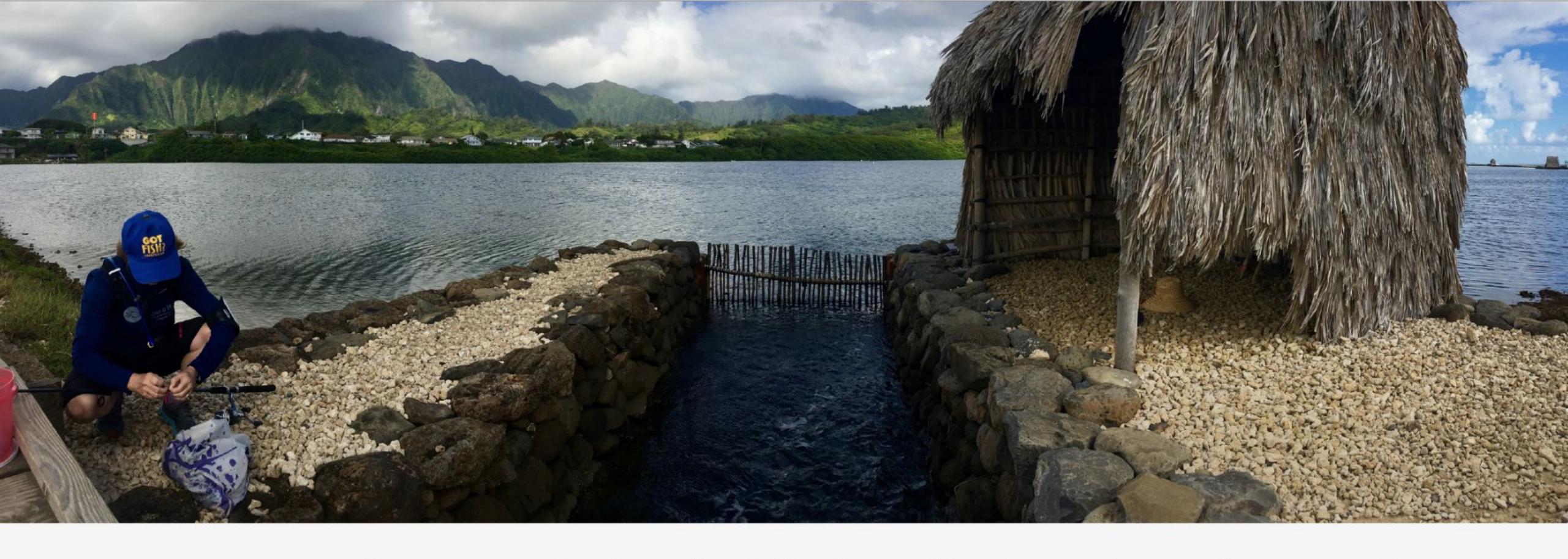


equitable, just, sustained relationships = the sweet spot where the good stuff happens. VISION RESOURCES Academic Researcher KNOWLEDGE Kia'i + Community SUSTAINABILITY Interests/Issues/Needs Interests/Issues/Needs TEACHING LEARNING IMPACT

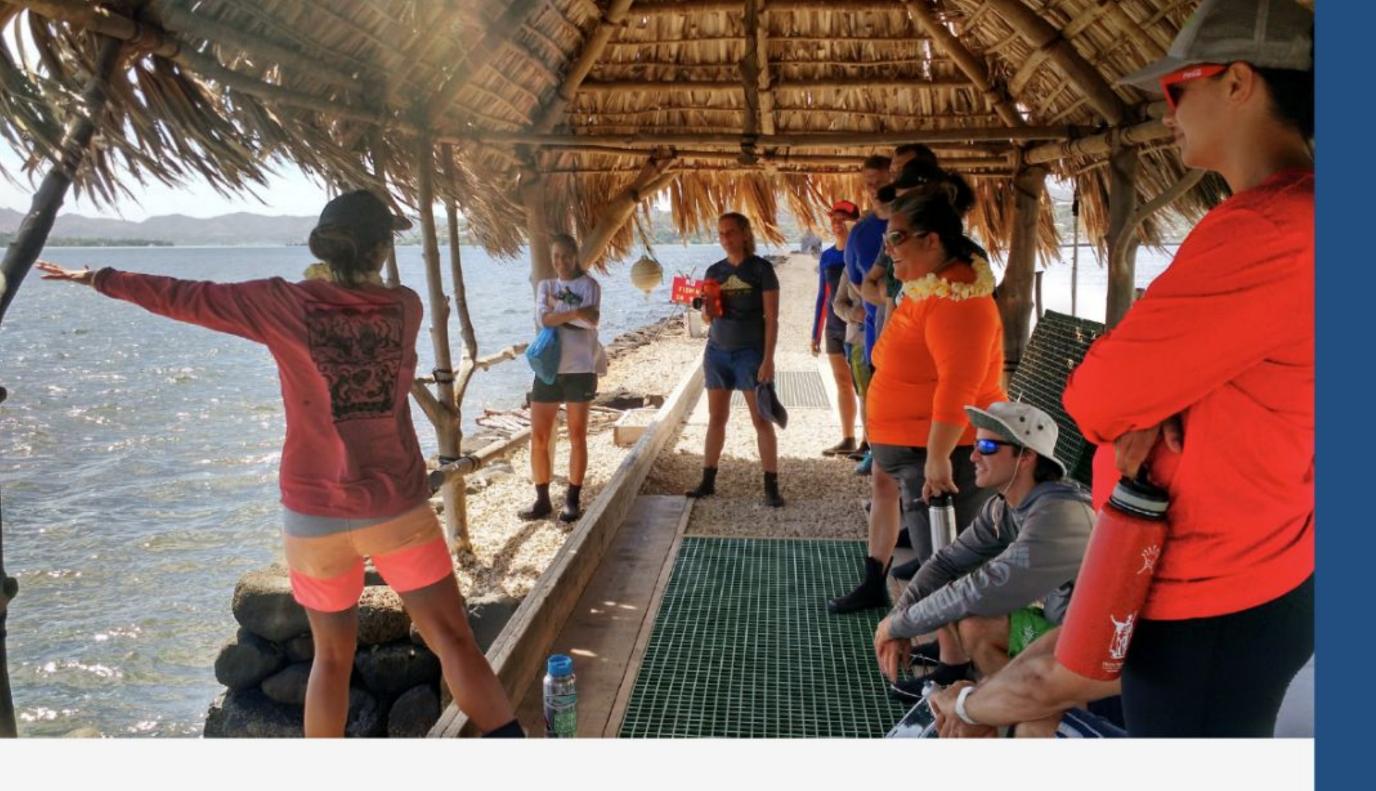




- Eight kūlana with best practices and guiding questions
- Flexible enough for broad application
- Considers researcher and community perspectives



- Not a compliance standard or checklist for achieving reciprocal community-researcher partnership.
- A set of ideas, values, and behaviors that when applied alongside hard work can build more just and generative relationship



Building and Nurturing Pilina

Respect

Reciprocity

Self-Awareness and Capacity

Communication

A'o aku, a'o mai/ Aloha aku, aloha mai



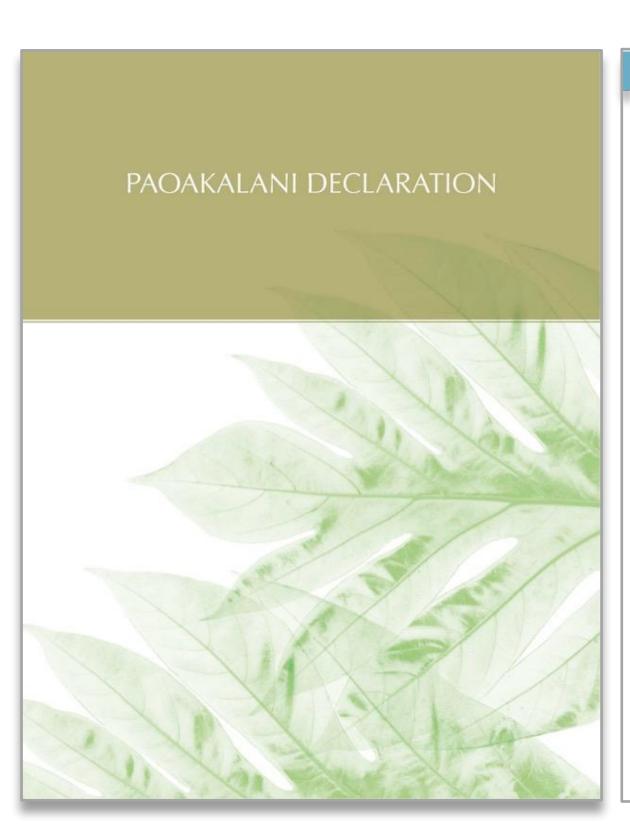
Maintain a Long-Term Focus

Community Engagement & Co-Review

Knowledge Stewardship

Accountability

Models for Indigenous Data Sharing



Commentary

Conducting Research with Tribal Communities: Sovereignty, Ethics, and Data-Sharing Issues

Anna Harding, Barbara Harper, 1,2 Dave Stone, 3 Catherine O'Neill, 4 Patricia Berger, 5 Stuart Harris, 2

School of Biological and Population Health Sciences, College of Public Health and Human Sciences, Oregon State University, Col Oregon, USA; ²Department of Science and Engineering, Confederated Tribes of the Umatilla Indian Reservation, Pendleton, Orego USA; ³Department of Environmental and Molecular Toxicology, Oregon State University, Corvallis, Oregon, USA; ⁴Seattle Univers School of Law, Seattle, Washington, USA; *Department of Information Technology, Marion County, Salem, Oregon, USA; *Swine Indian Tribal Community, Office of Planning and Community Development, La Conner, Washington, USA

BACKGROUND: When conducting research with American Indian tribes, informed consent beyond conventional institutional review board (IRB) review is needed because of the potential for adverse consequences at a community or governmental level that are unrecognized by academic researchers. OBJECTIVES: In this article, we review sovereignty, research othics, and data-sharing considerations when doing community-based participatory health-related or natural-resource-related research with American Indian nations and present a model material and data-sharing agreement that meets

DISCUSSION: Only tribal nations themselves can identify patential adverse autennes, and they can do this only if they understand the assumptions and methods of the proposed research. Tribes must be truly equal partners in study design, dues collection, interpretation, and publication. Advances in protection of intellectual property rights (IPR) are also applicable to IRB reviews, as are principles of sovereignty and indigenous rights, all of which affect data ownership and control. Conceusions: Academic researchers engaged in tribal projects should become familiar with all

three areas, sovereignty, ethics and informed consent, and IPR. We recommend developing an agreement with tribal partners that reflects both health related IRR and natural resource related IPR considerations. Key words: American Indian, data sharing, informed consent, intellectual property, IRB, research

ethies, sovereignty, tribal. Environ Health Perspect 120:6-10 (2014). http://dx.doi.org/10.1289/

The value of community-based participatory research (CBPR) is well recognized. Israel National Institute of Environmental Health ind origoing ethical and data-sharing vio- goals of the funder. lations can create bartiers that stitle or end

chp.110390 i [Online 2 September 2011]

community members (Quigley 2001). For university researchers unfamiliar with this et al. 2005; Minkler and Wallerstein 2008; – history, it may be surprising when Native – lished by the United Nations (2007) Americans are reluctant to engage in a pro-Sciences (NIEHS) 2010; U.S. Department of — poseal research project, even if the outcome is — inajor powers, including the United S Health and Human Services (DHHIS) 2010]. anticipated to be beneficial. Academics may Successful CBPR requires a high level of col- also find it challenging to incorporate non- is a major goal of CBPR. Using CBP aboration to address community needs and . Western scientific paradigms within the con- ods, university and tribal scientists di to translate research findings to community - straints of a project. Or, tribal communities - together the research aims and design members (Fleming et al. 2008; Glasgow and — may insist on broadening the study scope — data are collected, validated, and ar Entitions 2007; National Institutes of Health - to include urgent tribal health priorities of - and what results are needed to be use 2003). However, cultural differences, unreal- aims that were not within the initial project as istic expectations, organizational constraints. funded and may not match narrow research

Additional challenges may center on trust, effective partnerships between universities data ownership, and sovereign rights. For and sovereign tribal nations (Wong and Poor - example, there may be differences between 2010). Few nonnative researchers possess an conceptions of how knowledge may be generawareness of Native American culture and ated, used, shared, and, ultimately, "owned." belief systems, including the continuing effect — Tsosic (2007) observed that in Western of American colonialism on the peoples they understandings, knowledge is generated by seek to study. For example, researchers may individuals who have autonomy in determinchoose a model of "reductionist science" that __int, whether to share it. Once knowledge is

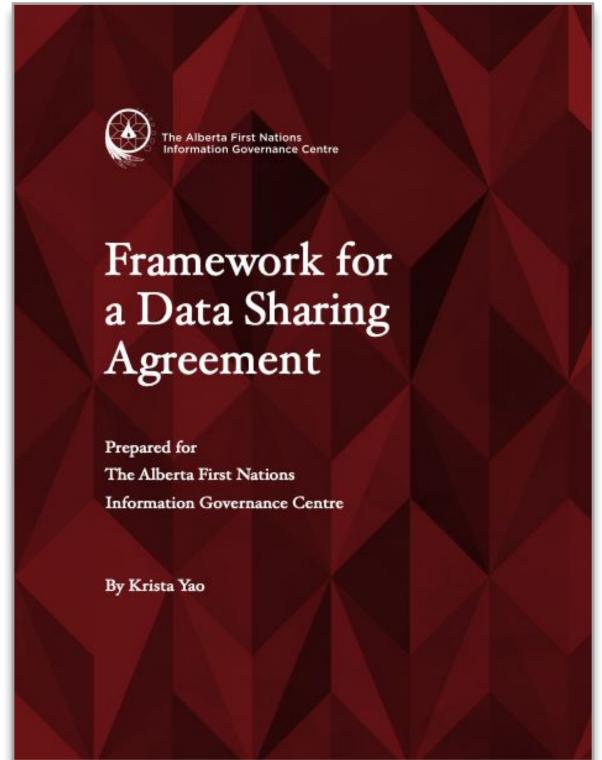
Past and ongoing abuses of triba mation underline the need for for dara-sharing agreements specifically for the tribal university context. ! these issues are considered at the inst review board (IRB) level as they relate human rights, informed consent, and cence. However, IRB approval from versity may not be sufficient to addre concerns because it may give the refree rein to acquire and publish tribal tion, Morenver, IRB rules and requido not include a discussion of inte property rights (IPR), Likewise, IPR la not include human subject princi as beneficence, risks and benefits, or ability. Neither the standard human equirements not IPR rules give adequ ideration to sovereignty or aborigina which is one of the reasons that inclus larations of indigenous rights have be now recognized in principle by the

The generation of new and rele

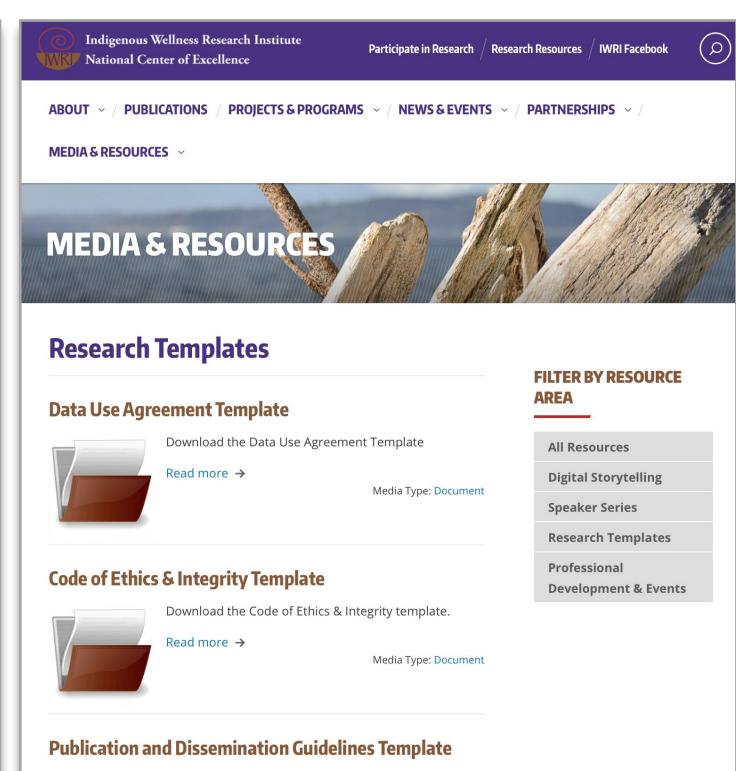
Address correspondence to A. Harding, & Biological and Population Health Scien Milam Hall, Ocean State University, Cory 737 6914. E-mailt anna hatsi ngga orogonis Supplemental Material is available onlin

Support for this research was provides National Institute of Environmental Health NIEHIS: award P42ES01846S).

swhork and dock too necessarily represent th views of NIFHS of the National Institutes



Alberta First **Nations**



Hawai'i

Confederated Tribes of the Umatilla Indian Reservation & Oregon State University

University of Washington

FAIR & CARE principles



https://www.gida-global.org/

CARE Principles for Indigenous Data Governance

Collective Benefit

Data is collected and used in a way that enables Indigenous Peoples to benefit from the process, promotes inclusive development, innovation, and government and civic engagement, and create equitable outcomes.

Authority to Control

Indigenous Peoples' rights, interests, and control over Indigenous data must be recognized and empowered. Indigenous Peoples have rights to consent in the collection and use of data, and Indigenous data must be made available and accessible to tribal entities. Tribal entities are active leaders in the stewardship of, and access to, Indigenous data.

Responsibility

Those collecting and using Indigenous data have the responsibility to share how that process contributes to Indigenous Peoples' benefit, including how one is contributing to the development of data literacy in Indigenous communities. Any data collected must be built on relationships of trust, reciprocity and respect.

Ethics

Work must be centered on Indigenous Peoples' rights and wellbeing through all stages of data collection and utilization. Ethical benefits and harms should be evaluated from the perspective of the communities to whom the data concern.

Institutionalizing the Kūlana Noi'i

At **Sea Grant**, we have a responsibility to ensure that the programs and projects we support engage in collaborative mutually-beneficial partnership with communities.



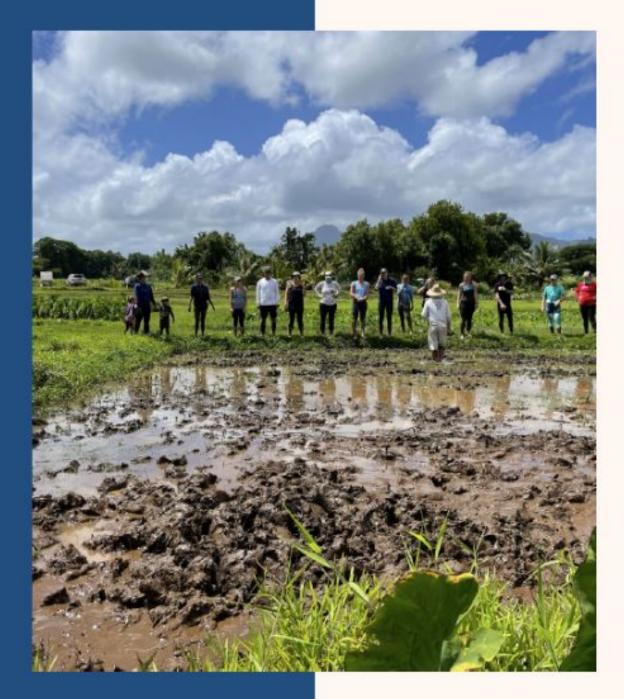
As a Mediator







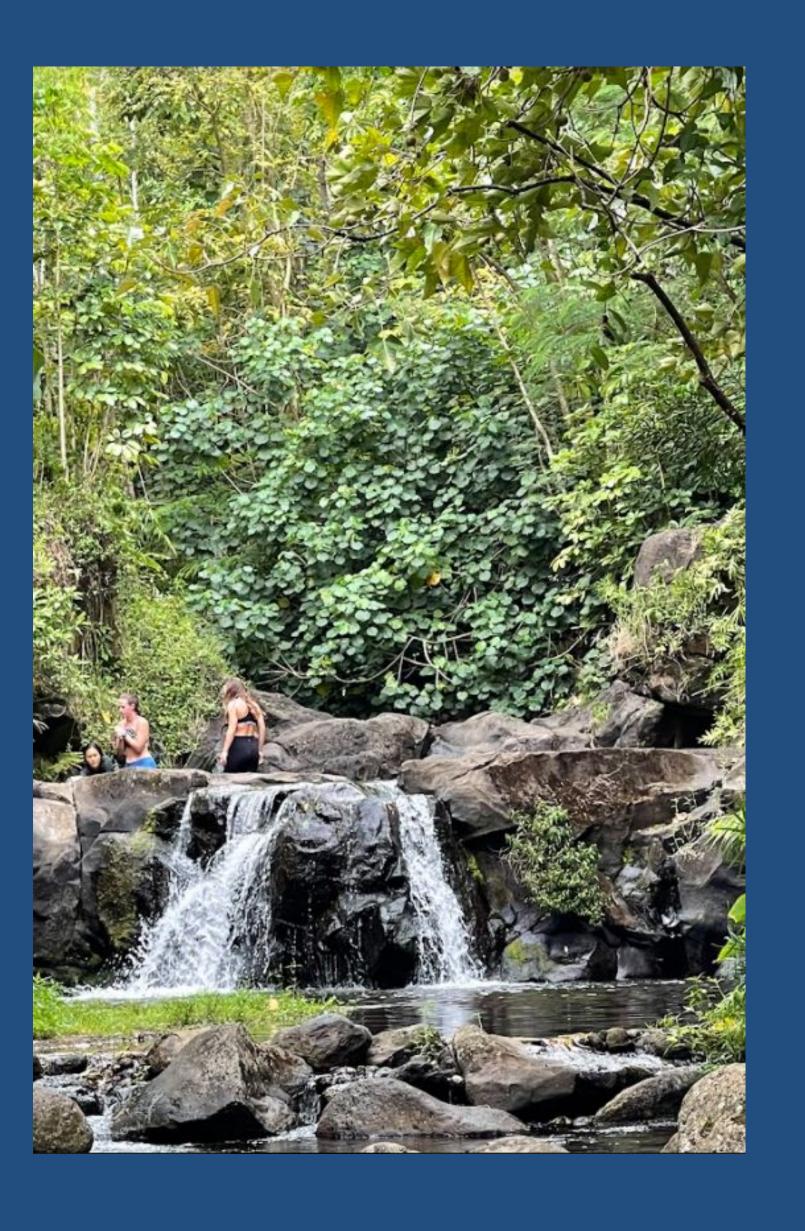




As a Capacity and Network Builder

More than 600 community members, resource stewards, and researchers trained in the best practices of the Kūlana Noi'i across 35 workshops

As Educators (NSF IGE funded)



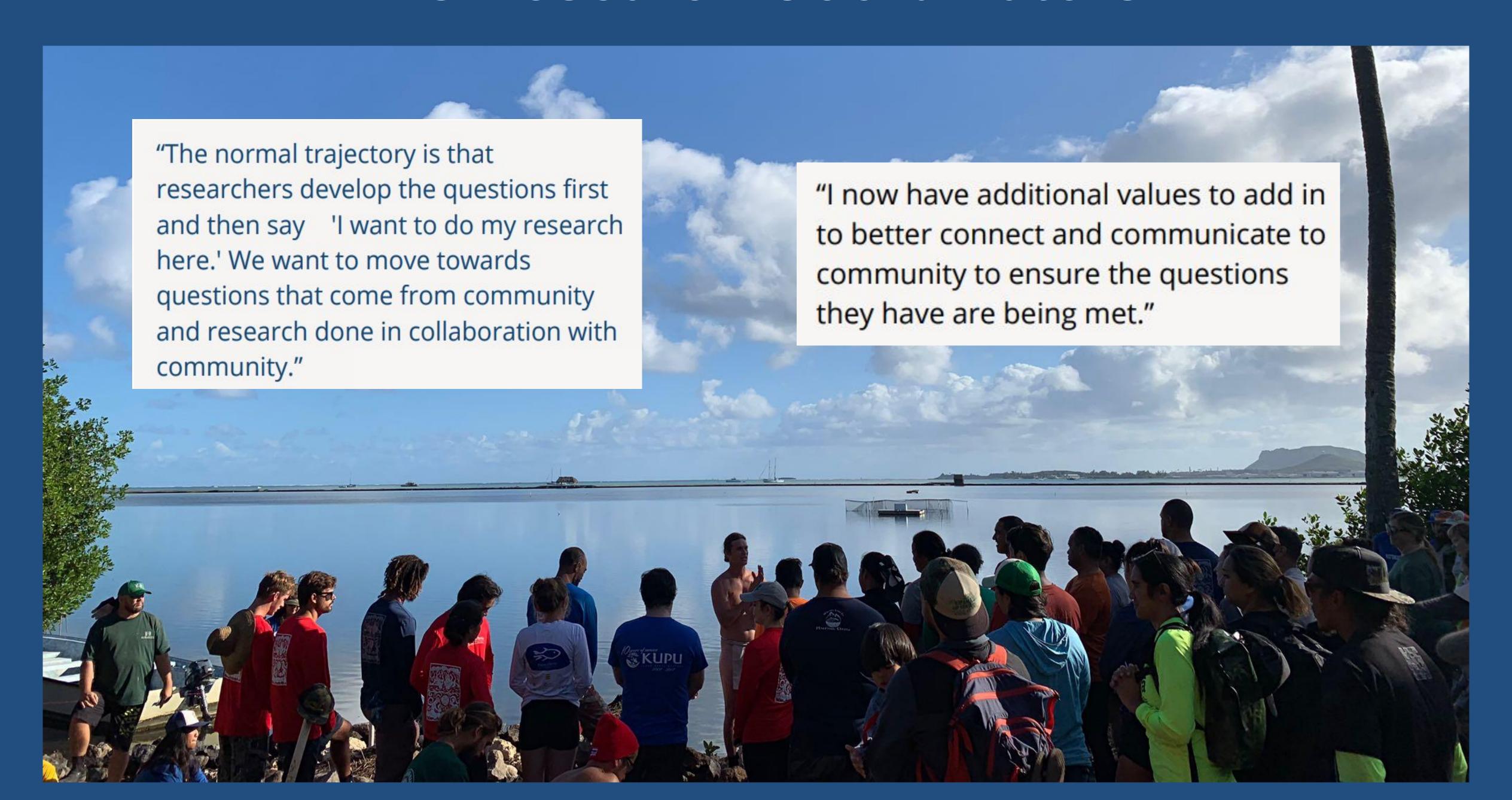








As Research Coordinators



Funders are a <u>key player</u> in ensuring accountability

- Funders have a responsibility to invest in reciprocal research practices – and avoid investment in extractive research
- Kūlana Noi'i is one example of a strategy for encouraging reciprocal research with Indigenous peoples
- Vision: funders support place-based and Indigenous-led research



Building Accountability



White House Releases First-of-a-Kind Indigenous Knowledge Guidance for Federal Agencies

Kūlana Noi'i cited in CEQ-OSTP guidance



Reframing Funding Strategies to Build Reciprocity

Extractive and exploitive practices erode trust in Western science among Indigenous communities. Changing funding structures is one way to develop reciprocity and respect and repair relationships.

By Diamond Tachera

13 October 2021

Webinar: Who Bears the Burden of Broader Impacts

https://tinyurl.com/WBTByt



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Respect

The history, people, and place are respected through understanding, acknowledging, and honoring local culture, traditions, knowledge, and wisdom.

- What is the history of this place?
- What is the history of wrongs that occurred in this place?
- What are the significant ka'ao and mo'olelo (legends and stories) of this place? What are the wahi pana (storied and sacred places)?
- What or who are trusted sources of knowledge?
- What are the best ways to ask for permission to engage in this research and work?
- How will the place be physically impacted by research activities? How might those activities impact community interactions with place (restoration, resource use, ceremonies)? How can those impacts be mitigated or minimized?

Reciprocity

The relationship between researchers and community is reciprocal rather than extractive.

- How will those involved in the research contribute to the community?
- What investment is being asked of the community and researchers at each stage in the research process (time, labor, etc.)?
- How will community members be compensated for their investments?
- How will the budget be allocated among partners?
- What are the direct benefits of research to the community? When and how will the community access those benefits?
- How can community and researchers continue to nurture the reciprocal relationships built through projects? (Oliveira & Wright, 2016)

Self-Awareness and Capacity

Be aware of and address your position, intentions, power, and value to the place both as an individual and a representative of a group or institution, such as a community organization, university, or government agency (KUA Research Committee, 2014; Fletcher, 2003).

- Do you see this as a long-term focus of your research? What are your other commitments?
- How do your intentions, research, and long term commitment align with and support the short and long-term goals of the community and the place? How might they conflict? How will you handle these conflicting goals?

Communication

Pursue inclusive, transparent, and open communication throughout the research process.

- What does the community look like (diversity of practices, traditions, gender, age, language, origin, livelihood)? How can communication strategies be tailored to fit that diversity? What are the community's preferred methods for communicating?
- What is the plan for communication at each stage in the research project (pre-project planning, implementation, and sharing results)?
- How often during the research process will the community receive updates? How long after project completion will results be shared and in what format?

Maintain a Long-Term Focus

All research projects contribute positively to the effort to mālama this wahi (KUA Research Committee, 2014).

- How will this research contribute to capacity building, education, and knowledge exchange in the community?
- How can this research and the knowledge generated influence or improve stewardship and policy at multiple scales (local, county, state)?
- How can this research contribute to the community's ability to adapt to change?
- What are the full implications of this research? Consider short- and long-term implications; negative and positive implications; and ecological, social, economic, and political implications.
- What are the potential harms of this research to the community?

Community Engagement and Co-Review

Promote co-learning and co-development of methods, strategies, goals/objectives, and outputs/outcomes that are adaptable to local place, people, climate, resources, and needs (KUA Research Committee, 2014).

- What will be the process for community involvement in knowledge generated by the project? How will the community review and provide input into presentations, papers, and other research products?
- How can research practices and procedures be modified to be culturally respectful and acceptable to the local community?
- How does the research project develop capacity in the community? How does it contribute to self-sufficiency and self-determination?
- What skills, information, or materials does the community need to conduct their own research? How can researchers support community led research?
- What are potential disconnects in timeline, benefits, goals, and outcomes of the project for the community and researchers? How can these disconnects be addressed?
- How will community contributions to research be acknowledged?

Knowledge Stewardship

As part of their <u>kuleana</u>* to place, ancestors, and descendants, communities have access to and ability to utilize data. Communities have decision-making power in determining how information and data are shared.

What are the values related to knowledge stewardship held by researchers and community members? What are the values related to knowledge access held by researchers and community members? How can common values be reinforced and conflicting values be respectfully addressed?

What is the process and timeline for researchers and community members to access data associated with the project? Who has decision-making power over how information is shared and used? What information and data should have limited access? What protocols will ensure appropriate access?

What information and data formats might be most useful to the community? (Note that this may change across different segments of the community.)

Knowledge Stewardship

As part of their <u>kuleana</u>* to place, ancestors, and descendants, communities have access to and ability to utilize data. Communities have decision-making power in determining how information and data are shared.

- What are the potential consequences of outside entities accessing information generated by this project (e.g., government agencies, insurance companies, media, funders, and other researchers)? How might information or data be misused or appropriated?
- What is the plan for developing data products and what are the roles and responsibilities
 of the community and researchers in this process (for example authorship of papers or
 community involvement in presentations)?
- What institutional clauses, policies, or agreements related to data ownership and access may apply to the research project (e.g., federal funding requirements that data be shared publicly, or academic institution policies that award the institution intellectual property rights for research conducted by students, faculty)?

Accountability

When a project fails to meet these kulana, the community and researchers work together to identify problems and adjust the project accordingly.

- What is the process for community members or researchers to communicate that they feel a project is not meeting the Kūlana Noi'i or other agreed upon standards?
- What is the process for resolving problems when behavior is not aligned with the kūlana?
- What individuals or organizations might serve as neutral facilitators to help resolve issues?
- Who amongst your peers can help support and hold the project team (as individuals and a collective) accountable to agreed-upon ethics standards?

Place Matters

Place is about geography—but also about memory and imagination. People make places even as places change people. Places are secured by individual and collective struggle and spirit. Place is where culture is made, where traditions and histories are kept and lost, where identities are created, tested, and reshaped over time.

Indigenous Value Systems: Kinship to 'Āina



"Aloha 'āina is an expression for the Hawaiian way of loving, working, and protecting the land and native environment. It is a way of the kupuna, Hawaiian elders and ancestors. At its root, Aloha 'Āina has a tenet that the land is the religion and the culture..When Hawaiians live on and work the land, they become knowledgeable of the life of the land. In our daily activities, we develop a partnership with the land so as to know when to plant, fish, or heal our minds and bodies according to the ever changing weather, seasons and moons."

Colonialism in Hawai'i

