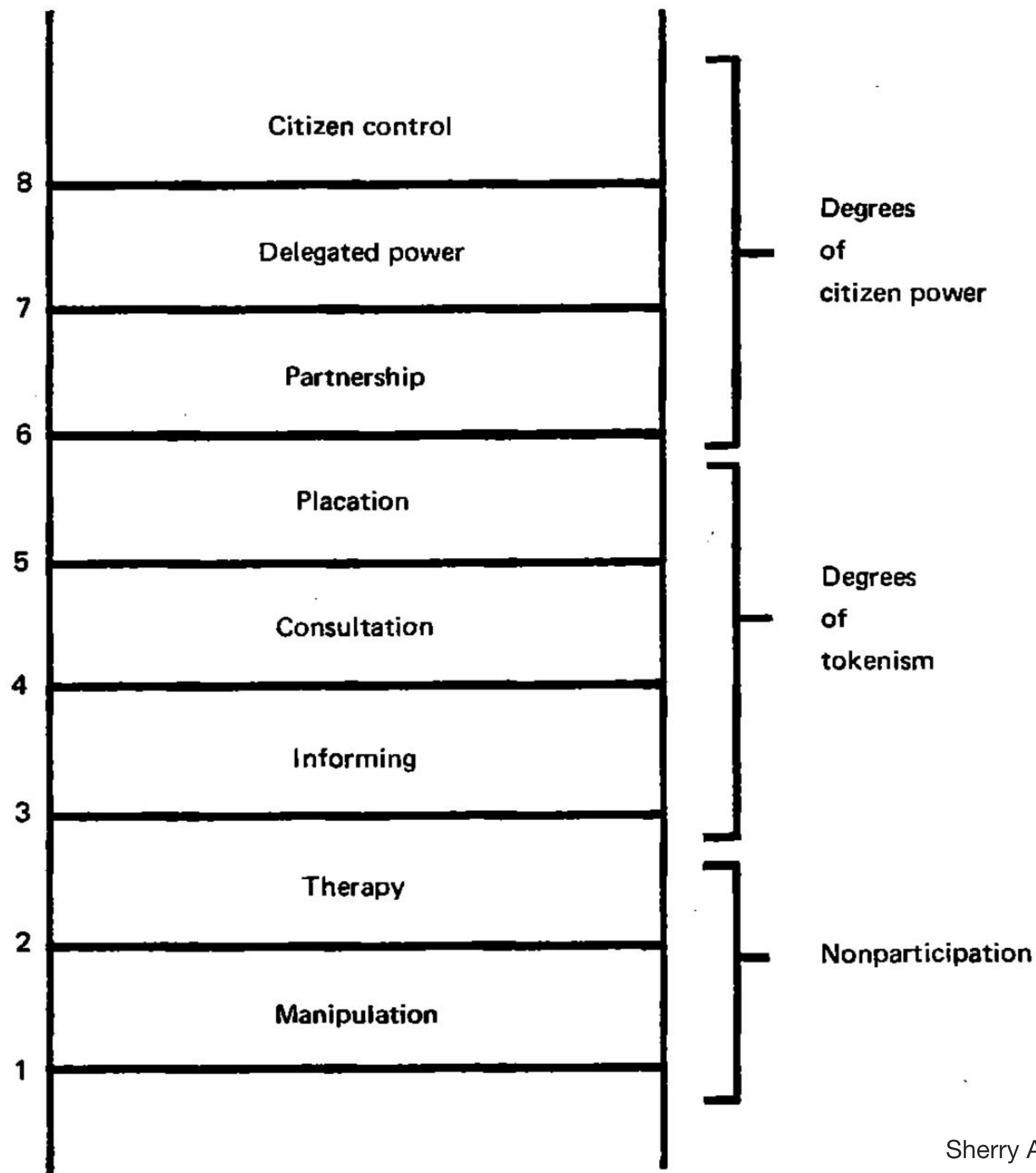


# **Co-design/co-production with Indigenous communities**

**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**

# Relationship of co-production to engagement



## 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 context 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:<br>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<sup>1,4</sup>, Katy Hintzen<sup>2,4</sup>, Brenda Asuncion<sup>3,4</sup>, Miwa Tamanaha<sup>3,4</sup>, Sara Kahanamoku<sup>4</sup>**

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

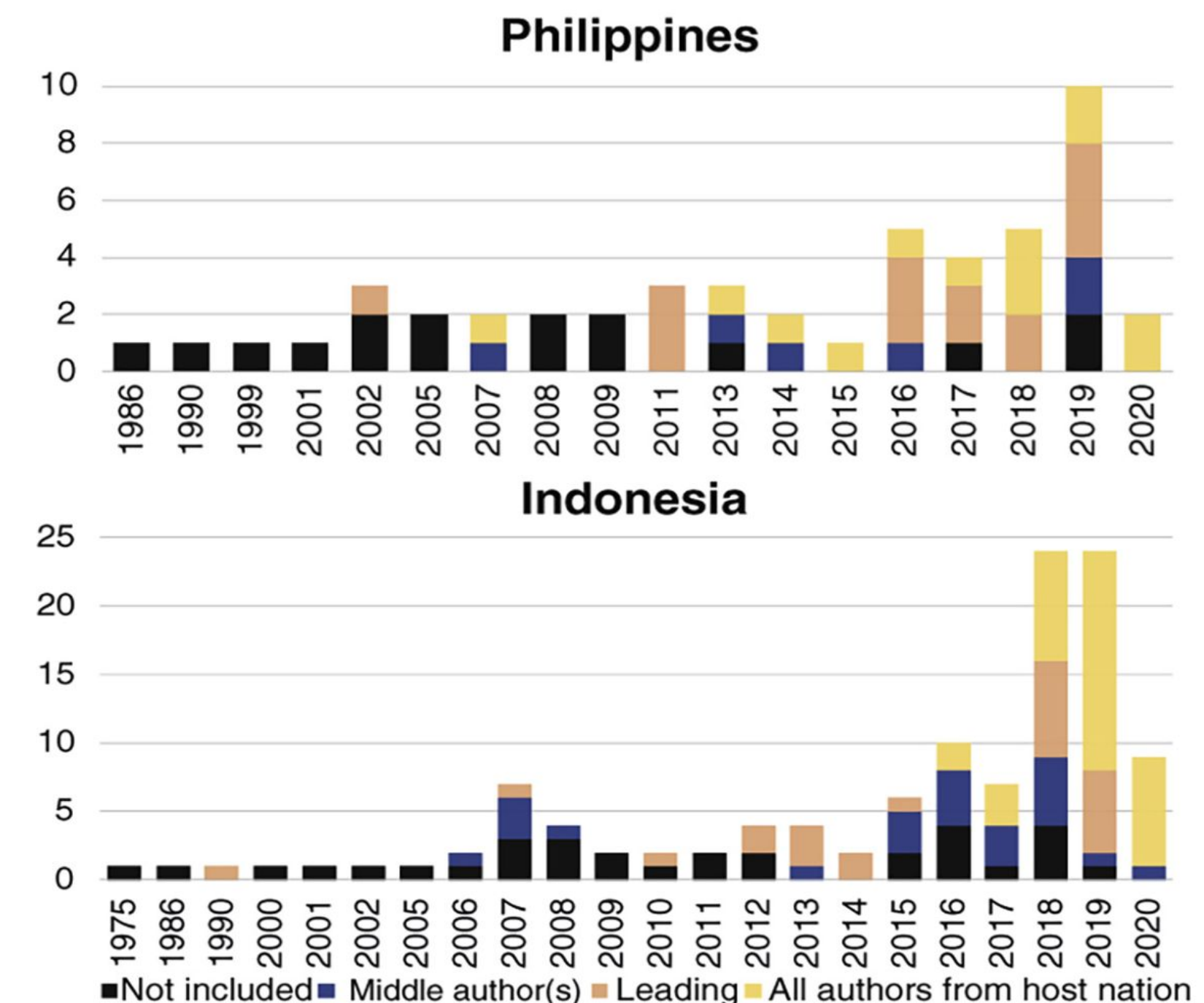


Volume 31, Issue 4, 22 February 2021, Pages R184-R185

Correspondence

### Turning the tide of parachute science

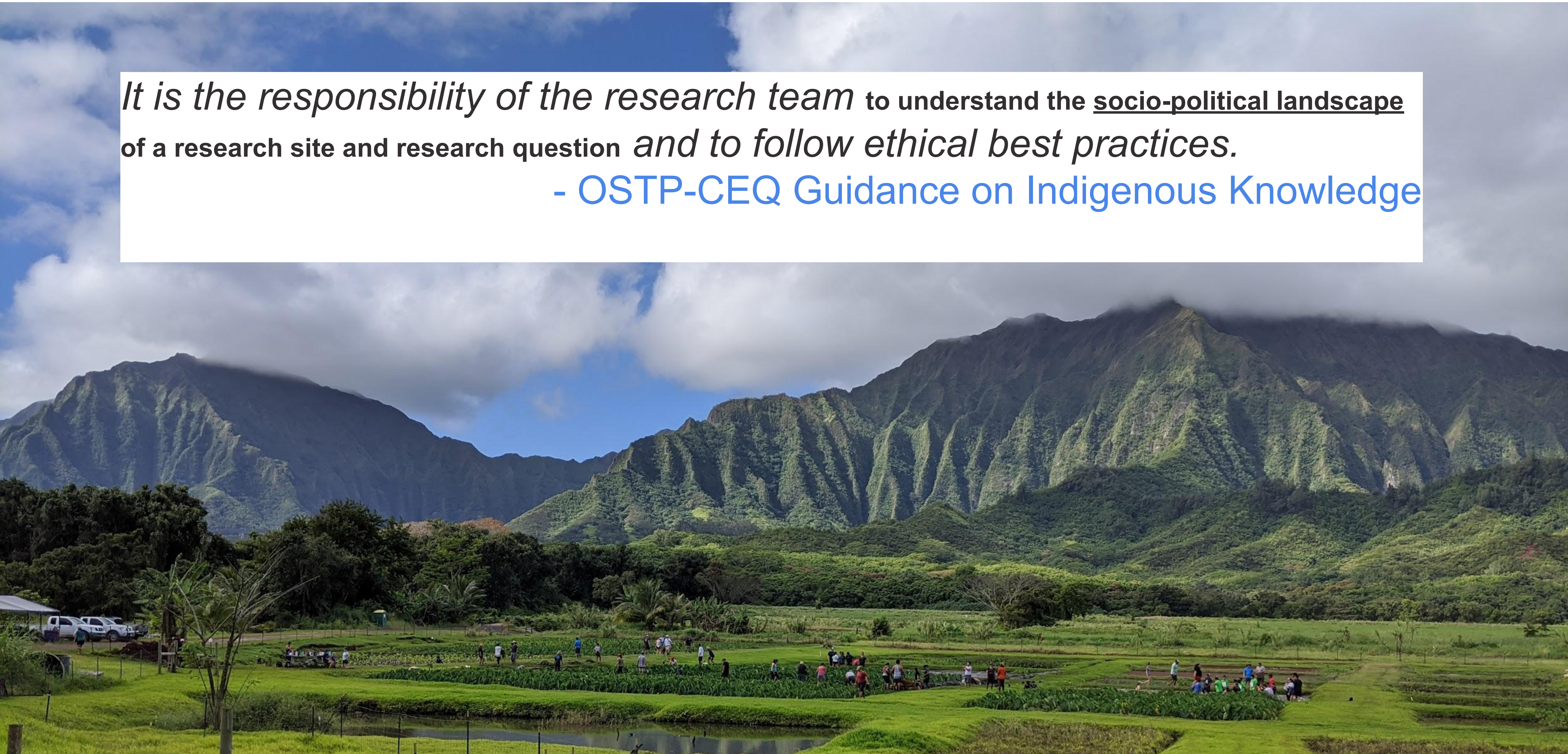
Paris V. Stefanoudis<sup>1 2</sup> , Wilfredo Y. Licuanan<sup>3</sup>, Tiffany H. Morrison<sup>4</sup>, Sheena Talma<sup>2 5</sup>, Joeli Veitayaki<sup>6</sup>, Lucy C. Woodall<sup>1 2</sup>





# Place and People Matter in Research

*It is the responsibility of the research team to understand the socio-political landscape of a research site and research question and to follow ethical best practices.*  
- OSTP-CEQ Guidance on Indigenous Knowledge





# 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?







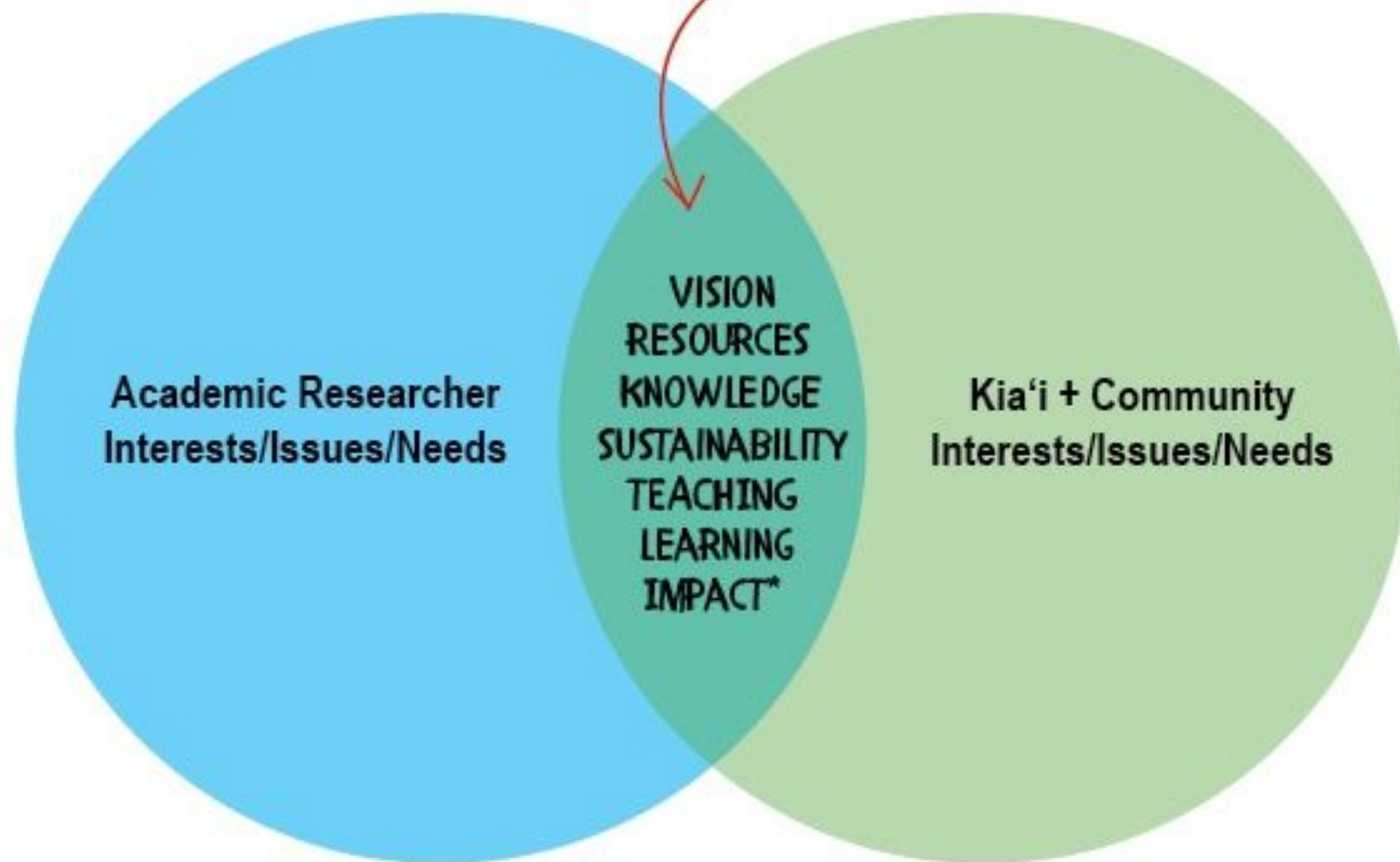


- 2014 Kua‘āina Ulu ‘Auamo facilitated committee
- Workshops with stewards, community, and researchers
- Broader body of academic literature

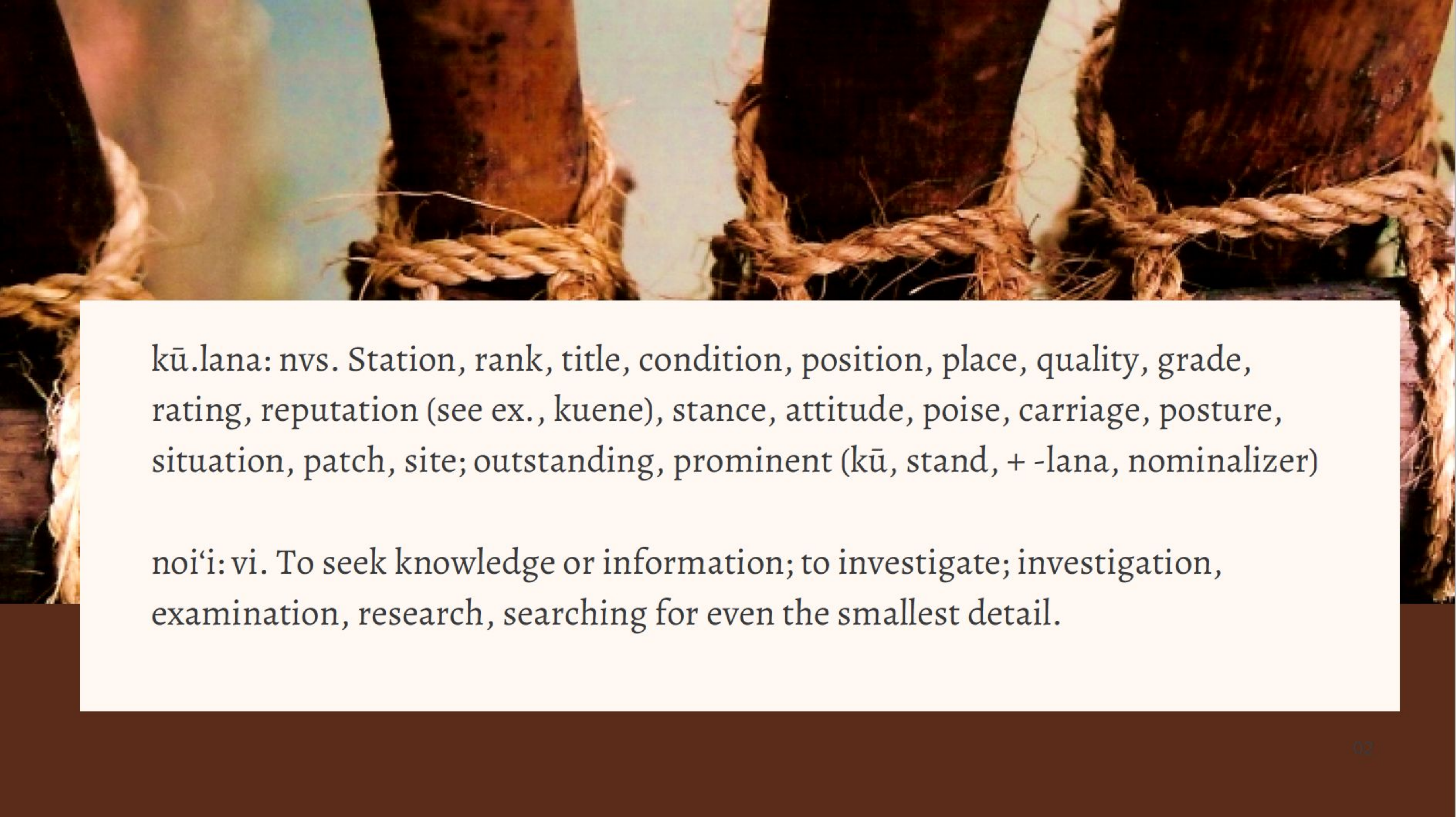




\*equitable, just, sustained relationships = the sweet spot where the good stuff happens.







kū.lana: nvs. Station, rank, title, condition, position, place, quality, grade, rating, reputation (see ex., kuene), stance, attitude, poise, carriage, posture, situation, patch, site; outstanding, prominent (kū, stand, + -lana, nominalizer)

noi'i: vi. To seek knowledge or information; to investigate; investigation, examination, research, searching for even the smallest detail.





- 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





Respect

Reciprocity

Self-Awareness and Capacity

Communication

**Building and  
Nurturing Pilina**



# A'ō aku, a'ō mai/ Aloha aku, aloha mai

Maintain a Long-Term Focus

Community Engagement & Co-Review

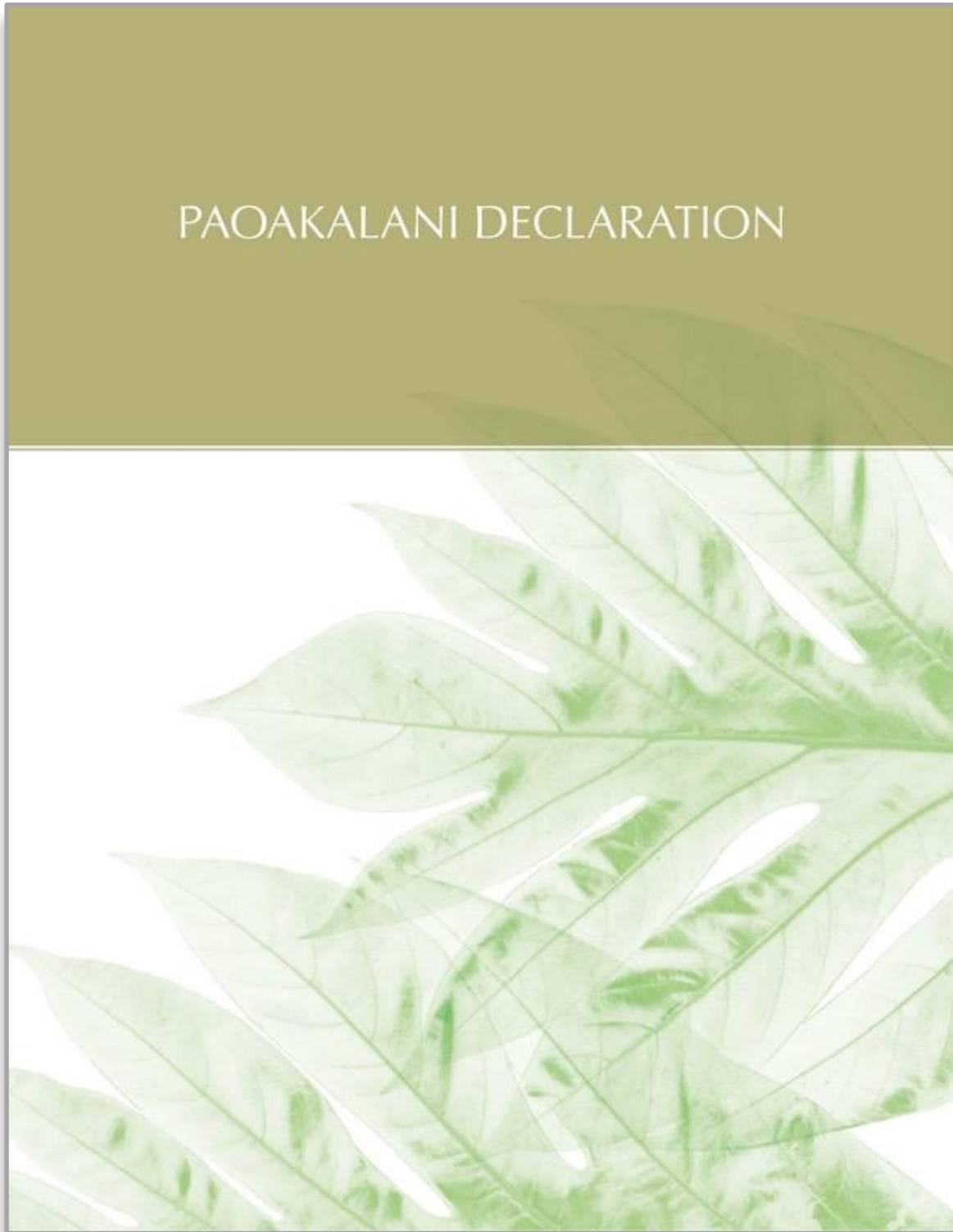
Knowledge Stewardship

Accountability





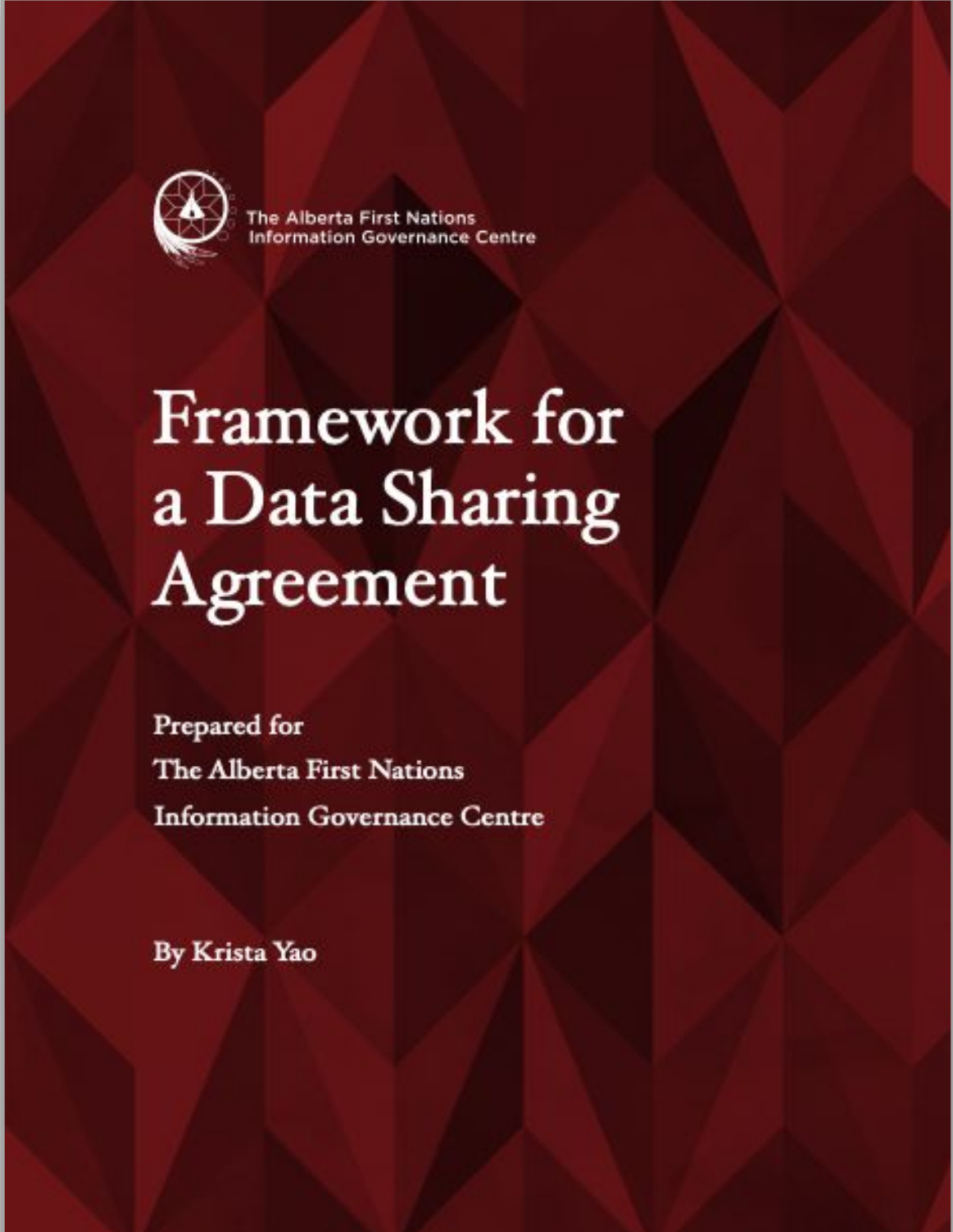
# Models for Indigenous Data Sharing



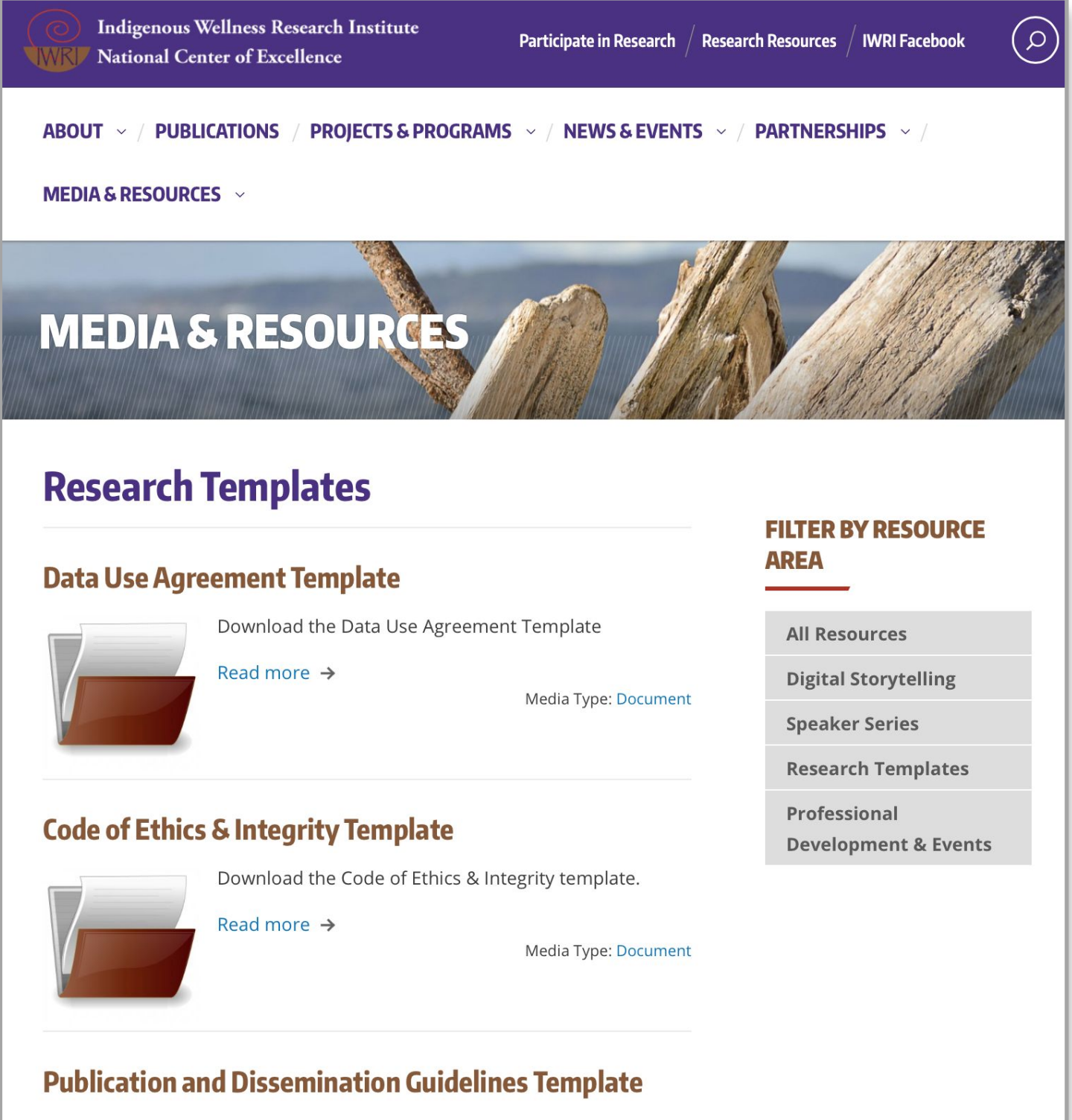
Hawai‘i



Confederated Tribes of  
the Umatilla Indian  
Reservation & Oregon  
State University



Alberta First  
Nations



University of  
Washington



# FAIR & CARE principles



## 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.

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



# 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)

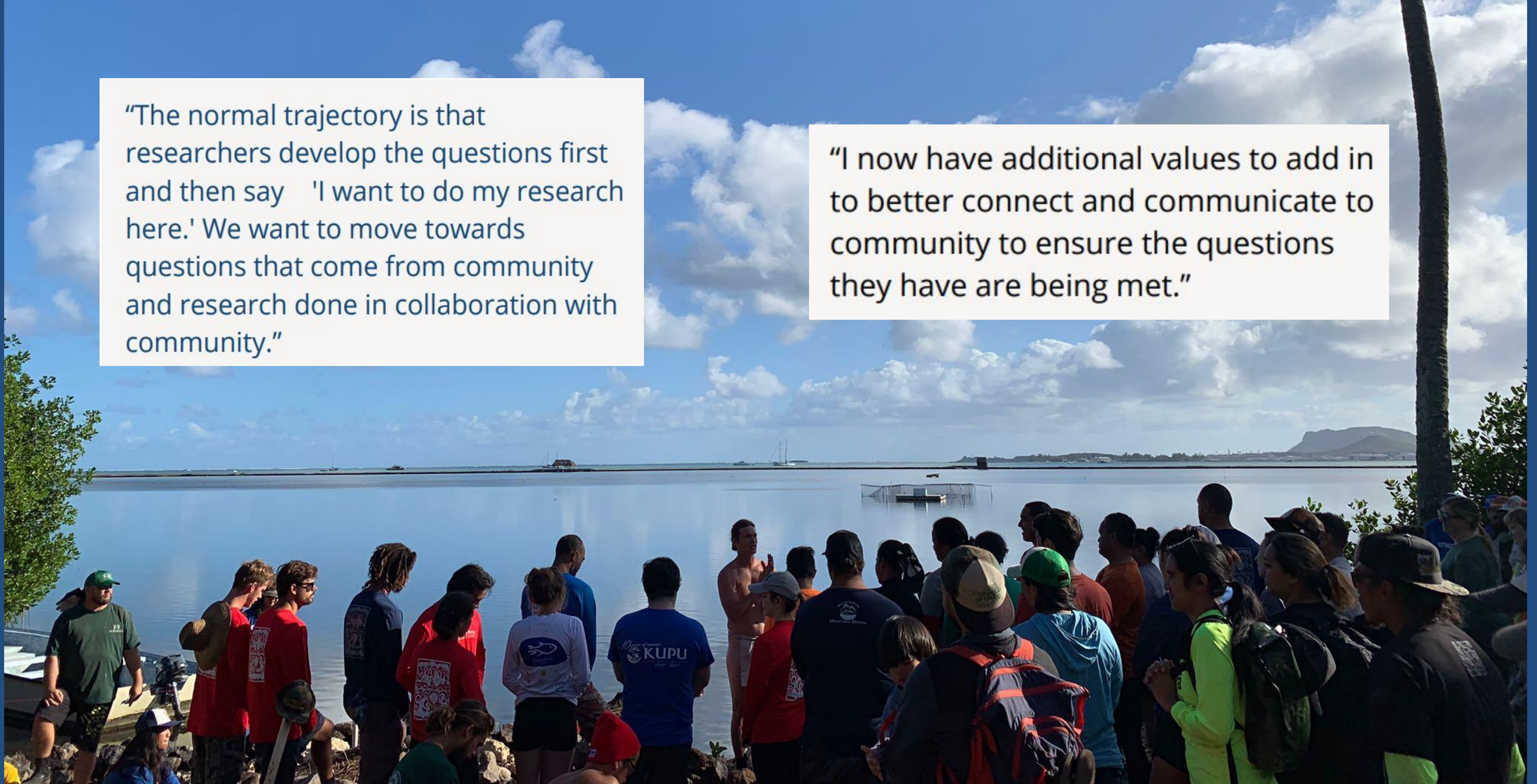




# As Research Coordinators

"The normal trajectory is that researchers develop the questions first and then say 'I want to do my research here.' We want to move towards questions that come from community and research done in collaboration with community."

"I now have additional values to add in to better connect and communicate to community to ensure the questions they have are being met."





# Funders are a key player 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



DECEMBER 01, 2022

## 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>





# Mahalo!

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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 kuleana\* 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 kuleana\* 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 kūlana, 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.”

-Dr. Noa Emmett Aluli



# Colonialism in Hawai'i

