

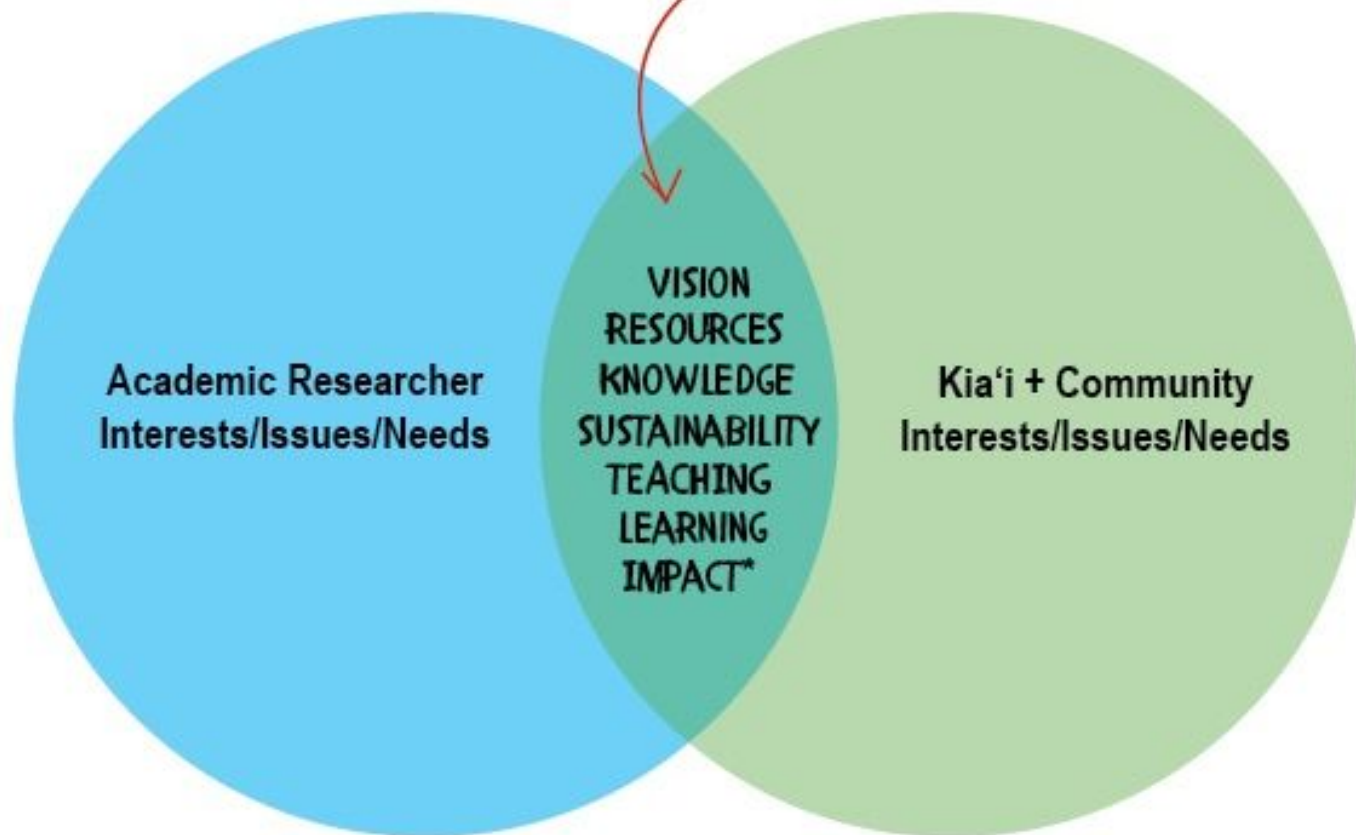


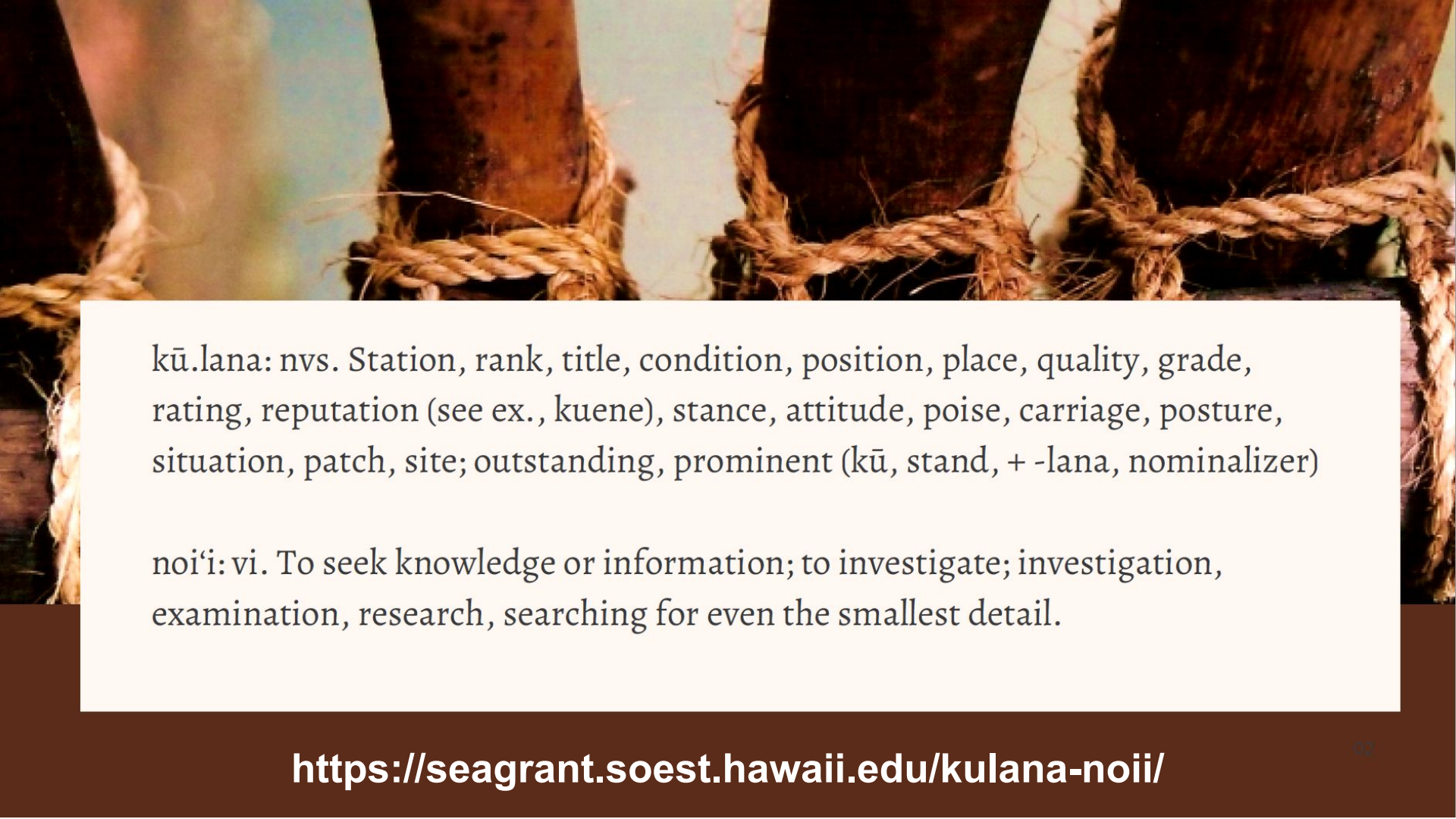
Kūlana Noi'i: Data Stewardship in Hawai'i

Rosie Alegado[†], Katy Hintzen[†], Sara Kahanamoku[†], Kaleo Hurley

[†]University of Hawai'i Sea Grant College Program, [†]Ulana 'Ike Center of Excellence

*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.



Respect

Reciprocity

Self-Awareness and Capacity

Communication

**Building and
Nurturing Pilina**

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



Maintain a Long-Term Focus

Community Engagement & Co-Review

Knowledge Stewardship

Accountability

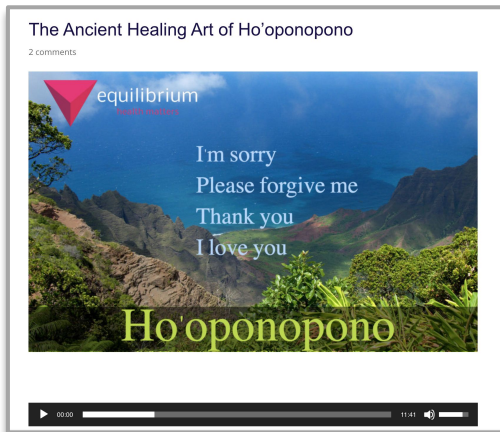
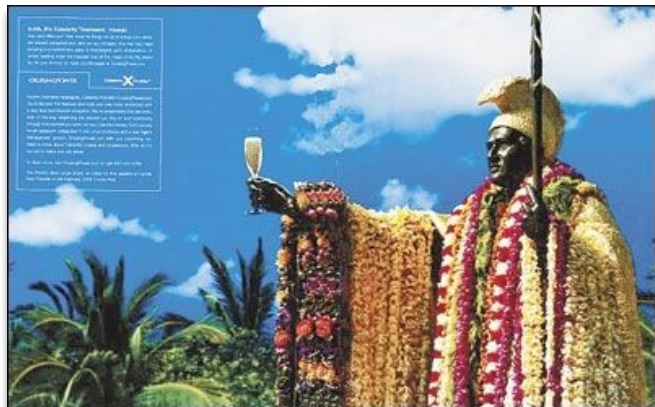


More than **600**
community members,
resource stewards, and
researchers trained in
the best practices of the
Kūlana Noi'i across **35**
workshops



- 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

Who "Owns" Indigenous Knowledge?



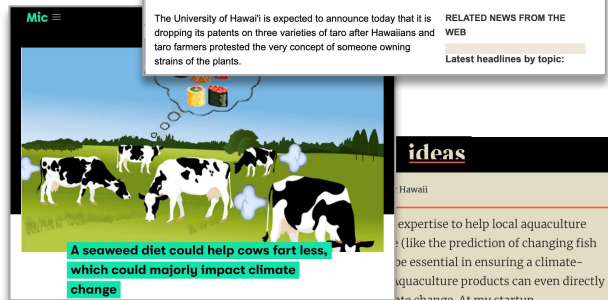
Febreze SMALL SPACES
Hawaiian Aloha

★★★★★ (80)
\$3.49 MSRP

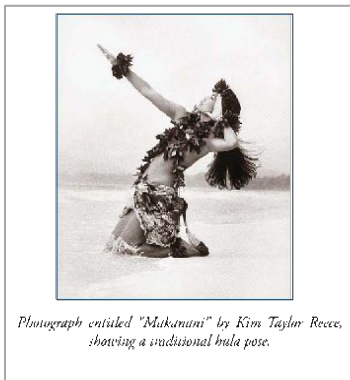


Febreze AIR Hawaiian Aloha

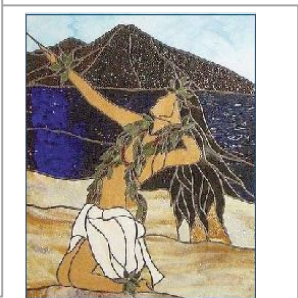
★★★★★ (337)
\$3.49 MSRP



Hawaiipublicradio.org



Photograph entitled "Mukunani" by Kim Taylor Reece, showing a traditional hula pose.



Stained-glass portrait in dispute in Reece v. Island Treasures Art Gallery. Created by Marylee Teialoha Colucci.

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

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- 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)?

Models for Indigenous Data Sharing

PAOAKALANI DECLARATION

Commentary

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

Anna Harding,¹ Barbara Harper,² Dave Stann,³ Catherine O'Neill,⁴ Patricia Berger,⁵ Stuart Harris,⁶ and Jamie Donatelli⁷

¹School of Biological and Population Health Sciences, College of Public Health and Human Sciences, Oregon State University, Corvallis, Oregon, USA; ²Department of Science and Engineering, Confederated Tribes of the Umatilla Indian Reservation, Pendleton, Oregon, USA; ³Department of Environmental and Molecular Toxicology, Oregon State University, Corvallis, Oregon, USA; ⁴Santita Uwea School of Law, Seattle, Washington, USA; ⁵Department of Information Technology, Mexican Country, Corvallis, Oregon, USA; ⁶Navaho Indian Tribal Community, Office of Planning and Community Development, La Center, 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 abuse, consequences of a community or governmental land that is recognized by students researchers.

OBJECTIVE: In this article, we review emerging research ethics and data-sharing considerations when doing cross-cultural participatory research in tribal communities. We discuss the importance of sovereignty and indigenous rights, all of which affect data ownership and control.

CONCLUSIONS: Academic researchers engaged in tribal projects should become familiar with all their tribal sovereignty, ethics and informed consent, and IRB. We recommend developing an agreement with tribal partners that reflects both tribal values and research research ethics considerations.

KEY WORDS: American Indian, data sharing, informed consent, institutional property, IRB, research ethics, sovereignty, tribal. *Public Health Reports* 2018; 133(2): 101-109. doi:10.1093/phr/133.2.101

The value of community-based participatory research (CBPR) is well recognized. In 2005, Minkah and Patten (2005) National Institutes of Environmental Health Sciences (NIEHS) and U.S. Department of Health and Human Services (DHHS) 2006. Successful CBPR requires a high level of collaboration to address community needs and to translate research findings to community members (Pattin et al. 2008; Gage and Patten 2009; National Institutes of Health 2009). However, cultural differences, unrealistic expectations, organizational constraints, and ongoing ethics and data-sharing concerns can create barriers that erode or end effective partnerships between universities and sovereign tribal nations (Wing and Patten 2010). The research community poses an awareness of Native American culture and belief systems, including the continuing effect of American colonialism on the people they seek to study. For example, researchers may choose a model of "indigenous science" that reflects their own values and assumptions about

community members (Kagley 2011). For university researchers unfamiliar with this history, it may be surprising when Native Americans are reluctant to engage in a proposed research project, even if the outcome is anticipated to be beneficial. Academic may also find it challenging to incorporate American Western scientific, professional codes and standards of a project. On tribal communities may have in translating the study scope to include urgent tribal health priorities or aims that were not within the initial project funded and may not match narrow research goals of the funder.

Additional challenges may center on trust, data ownership, and sovereignty rights. For example, there may be differences between conceptions of how knowledge may be generated, used, shared, and ultimately "owned." Patten (2007) observed that in Western understandings, knowledge is generated by individuals who have authority to determine whether to share it. Once knowledge is

even with other members of the tribe (2007).

First and ongoing abuses of tribal nation underline the need for data-sharing agreements specifically for the tribal, sovereign context. These issues are considered in the next section based on IRB and other tribal human rights informed consent, and ethics. However, IRB approval from university may not be sufficient to address concerns because it may give the research site to acquire and publish tribal information. Moreover, IRB rules and regulations do not include a discussion of tribal property rights (BPR). Likewise, IRB does not include human rights (privacy, as biometrics, risks and benefits, or ability). Neither the standard human requirements nor IRB rules give adequate attention to sovereignty or aboriginal which is not the reason that tribal nations of indigenous rights have been

shaped by United Nations (2007) now recognized in principle by the United States, including the United by the government of new and independent major of CBPR. Using CBPR, tribal, university, and tribal nations do together the research aims and doing data are collected, analyzed, and so on, and what results are needed to be used

Adrian (respondent to a Harding, O'Neill, and Patten 2010; Uwea School of Law, Corvallis, Oregon, USA; ⁷Uwea School of Law, Corvallis, Oregon, USA; ⁸Uwea School of Law, Corvallis, Oregon, USA; ⁹Uwea School of Law, Corvallis, Oregon, USA; ¹⁰Uwea School of Law, Corvallis, Oregon, USA; ¹¹Uwea School of Law, Corvallis, Oregon, USA; ¹²Uwea School of Law, Corvallis, Oregon, USA; ¹³Uwea School of Law, Corvallis, Oregon, USA; ¹⁴Uwea School of Law, Corvallis, Oregon, USA; ¹⁵Uwea School of Law, Corvallis, Oregon, USA; ¹⁶Uwea School of Law, Corvallis, Oregon, USA; ¹⁷Uwea School of Law, Corvallis, Oregon, USA; ¹⁸Uwea School of Law, Corvallis, Oregon, USA; ¹⁹Uwea School of Law, Corvallis, Oregon, USA; ²⁰Uwea School of Law, Corvallis, Oregon, USA; ²¹Uwea School of Law, Corvallis, Oregon, USA; ²²Uwea School of Law, Corvallis, Oregon, USA; ²³Uwea School of Law, Corvallis, Oregon, USA; ²⁴Uwea School of Law, Corvallis, Oregon, USA; ²⁵Uwea School of Law, Corvallis, Oregon, USA; ²⁶Uwea School of Law, Corvallis, Oregon, USA; 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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/>

Intentions and Guidance for Designing Tools

- Support communities in spotting and acknowledging issues with knowledge ownership, access, and dissemination
- Support researchers to engage in ethical practice
- Build capacity for communities and researchers to increase their understanding of intellectual property rights and issues



Tools for Community-Research Partnerships

1. Data Accountability and Ownership Agreement Template

2. Context and Considerations for the Agreement

[illegible]

1. Data Accountability and Ownership Agreement Template
2. Context and Considerations for the Agreement

The image is a collage of various documents related to research ethics and data ownership. The central focus is a large blue document with white text that reads: "These outputs are meant to serve as teaching tools—not legal advice. Seek legal advice before entering into an Agreement!". Surrounding this central document are several smaller, overlapping documents, including a "Data Ownership/Sharing Agreement" template, a "Community-Academic" agreement, and various forms for data collection and sharing. The documents are arranged in a way that suggests a process of navigating complex legal and ethical considerations in research.

Main Elements of A Data Agreement

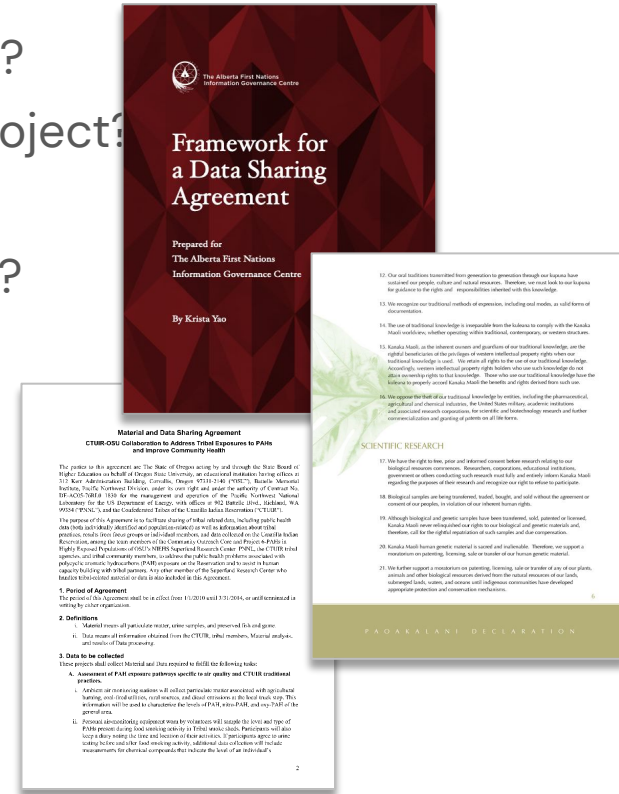
- Who does this agreement serve, and for how long?
- What data are *intended* to be collected for the project?
- How will data be stored, and who has access?
- What happens to the data when the project ends?



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***Areas that need specific work:**
How do we treat *Indigenous knowledge*?
Who is responsible for data?
Who “owns” knowledge and data?



Section 2. Data Collection: Indigenous Knowledge and Data

- What data are collected for the project?
- Indigenous knowledge (IK) typically *unintentionally* collected, or misunderstood and mistreated
- ALL project data should be treated with the same respect and care

2. Description of Data

Data to be collected:

A summary of data to be collected during this project is as follows... **[to be filled in by research group]**

Indigenous knowledge and data:

It is recognized by all parties that indigenous knowledge and data may be shared with **[research group]** in the course of this study and should be approved for sharing outside of the agreement by **[community]**. Indigenous knowledge in the context of Hawaiʻi includes, but is not limited to:

- a. knowledge of histories, folklore and other intangible heritage transmitted through Kānaka Maoli traditional and contemporary means;
- b. details of cultural landscapes and particularly sites of cultural and subsistence significance;
- c. records of contemporary events of historical and cultural significance;
- d. sacred ceremonies, processes or practices, images, sounds, knowledge, material, culture or anything that is deemed sacred by the lāhui, ʻāhuna, and traditional institutions and communities;
- e. cultural property, including but not limited to expressions, images, sounds, objects, crafts, art, symbols, motifs, names, and performances;
- f. knowledge of current use, previous use, and/or potential use of plant and animal species, soils, minerals, and objects;
- g. knowledge of traditional agriculture and planting methods, care for, selection criteria, and systems of taxonomy of individual species;
- h. knowledge of preparation, processing, or storage of useful species and formulations involving more than one ingredient;
- i. knowledge of nature-based solutions and ecosystem conservation (methods of managing, protecting or maintaining a resource);
- j. biogenetic resources that originate (or originated) in Ka Pae ʻĀina Hawaiʻi and are consistent with the Kumulipo or another cosmological lineage;

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Section 2. Data Collection: Rights and Privileges of Indigenous Knowledge and Data

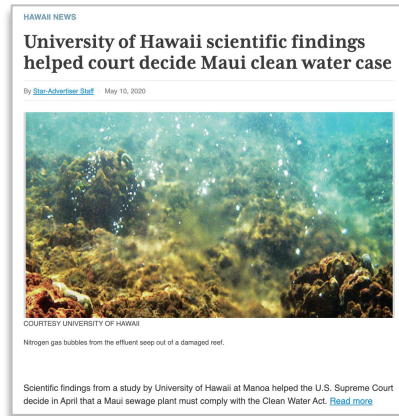
Special protections are acknowledged for *Indigenous knowledge*...

...internationally through the United Nations Declaration on the Rights of Indigenous Peoples

...federally for Native Hawaiians in the 1993 Apology for the Overthrow of the Kingdom of Hawai'i

...locally for Native Hawaiians under the Constitution of the State of Hawai'i

- Commit to a schedule for researchers to update community on research progress
- Share data and findings with community before any public presentations
- Includes a statement that acknowledges the Agreement – help protect data from unauthorized third party usage



Section 5. Data Ownership


- Data shouldn't be shared outside of the Agreement without permission
- Stick to the purpose of the project
- Researchers and community have an ethical responsibility to *protect* Indigenous knowledge



Section 6. Statements of Institutional Data Ownership

- Other parties that have ownership of data but are not in the Agreement:
universities, funding resources, journals, government...
- *Everyone* should be made aware of the different parties and terms!
- Informed, but not consenting...

“The University of Hawaii shall have complete ownership of all physical material, both finished and unfinished, which is acquired, developed, prepared, or assembled by CONTRACTOR pursuant to this Agreement From Research Corporation of the University of Hawaii Agreement for Services”



GRADUATE DIVISION
UNIVERSITY OF HAWAII AT MĀNOA

Menu

Intellectual Property

Home » Intellectual Property

In general, materials developed exclusively by a student as part of course work (including theses and dissertations) are the student's property, the final disposition of which remains the student's prerogative. Should materials so developed result in publication or other types of dissemination, the authorship or other credit shall be determined by the student. Note the following exceptions:

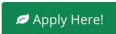
Materials from Funded Research

If a student develops materials with funding from a grant or contract, even partially, then provisions of the grant or contract may determine ownership of intellectual property. The student should ascertain the expectations of the funding agency with respect to the ownership of the materials developed from the research and secure necessary agreements in writing.

Materials from University Employment

If a student develops materials while working as a university employee or if the work involves more than incidental use of university resources, then the university may have a right to a share of the intellectual property. In addition, the student must disclose the development of the materials to the [Office of Technology Transfer and Economic Development](#).

ENROLL AT THE UNIVERSITY OF HAWAII AT MĀNOA NOW!



Kūlana Noi'i

Version 2.0

For more information, please contact:

Dr. Rosie Alegado, Associate Professor
Department of Oceanography & Hawai'i Sea Grant
r alegado@hawaii.edu

Katy Hintzen, Extension Agent
Hawai'i Sea Grant
(808) 956-3349 | hintzen@hawaii.edu

Future Directions

- UH has extremely limited capacity/infrastructure to protect sensitive Indigenous knowledge and Indigenous data sovereignty
- Identify and address barrier to co-production at University of Hawai'i
- Hawai'i EPSCOR: developing curriculum and practices for operationalizing CARE principles
- Participation in the Earth Data Relations Working Group (NEON)
- **Do you have any ideas?**

Kūlana Noi'i, Research Standards



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



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?

Kūlana Noi'i: Data Stewardship in Hawai'i



Kaleonani KC Hurley
PhD Candidate, Zoology, UHM

Primary Mentor: Katy Hintzen

Co-Mentors: Rosie Alegado, Kevin Chang, Miwa Tamanaha
2020 Peter J. Rappa Sustainable Coastal Development Fellowship