As summer approaches so does a time of year when researchers and technicians leave campus for the field. In this article we look at the role of researcher in partnership with Indigenous stakeholders. We’ll examine the history of the University of California on California Indian lands and what the University and associates in Integrative Biology are doing to repair and grow community between academics and Tribes.

Among the many disciplines encompassed by the Department of Integrative Biology, what perhaps most defines our common experience is working with a knowledge-base coalesced from the many specimens, observations and research plots we utilize in our academic pursuits. Fossils housed in the Museum of Paleontology, dried, pressed leaves and flowers in the California and Jepson Herbarium, and the UC Natural Reserve System are just a few bodies responsible for curating this wealth of data. This assembled work is the legacy of the incredible efforts of curators, data scientists and land managers within the University of California. But the land and opportunity for this work to take place is also a legacy of the displacement of indigenous people through the Morrill Act of 1851, both here in California and across the United States. And this history, as well as the
contributions of indigenous peoples in academia are all too often overlooked in the sciences. The culmination of a UC wide conversation on the institution’s tenuous past, in September 2021, UC Berkeley’s Joseph A. Myers Center for Research on Native American Issues (CRNAI) in cooperation with Native American Student Development (NASD), published a report titled: The University of California Land Grab: A Legacy of Profit from Indigenous Land. In this report, the authors noted that “hidden beneath the oft told land-grant narrative is the land itself: the nearly 11 million acres of land sold through the Morrill Act, expropriated from tribal nations. The revenue and growth spurred by this policy and the accompanying California Land Act, drafted that same year, supported the formation and prosperity of the University of California which currently occupies roughly 150,000 acres of former Indigenous held land.

A history of violence, forced expulsion, and the desecration or theft of cultural knowledge and resources casts long shadows on the image of public universities in this country. Recognizing the University of California’s role in this history and its responsibility to the people of California and Tribes affected by the University’s policies and reach, the CRNAI|NASD report sets forth important findings and recommendations to improve accountability and partnership with Tribes.

These recommendations include broad systemic overhauls for how the UC system presently liaise with Indigenous people and governments. Recommendations include creating a Native American Advisory Council at each UC Campus and Natural Reserves, allyship with non-federally recognized Tribes in California, and repatriation of human remains and cultural items. While many of these goals are feasible at an organizational level (beyond what students, staff or faculty can accomplish in there day-to-day) the report also suggests opportunities for personal action to best support indigenous peoples and issues. This includes giving space for indigenous voices, recognition of the history and contributions of indigenous people and culture in our curriculum, and a denouncement of racist pedagogy. We can also take action in the field. As scientists, technicians, or project managers working in the field, we are each ambassadors for our institution and academia in our every interaction with stakeholders or communities deeply connection to our study systems or study sites. This includes Tribal Nations.

Frequently cited as a model for the types of engagement researchers must strive for in their interactions with Indigenous communities the Karuk—UC Berkeley Collaborative was founded in 2008 by cultural biologist Ron Reed (Karuk Tribe), senior SOE lecturer Dr. Thomas Carlson (IB, UCB) and Univeristy of California Cooperative Extension
Specialist Dr. Jennifer Sowerwine (ESPM, UCB.) At the heart of the Karuk—UC Berkeley Collaborative is an ethos of píkyav, a Karuk verb that means to repair, or fix. This sense of restoration carries important meaning in the practice of the world-renewal ceremony which the tribe centers at the confluence of the Klamath and Salmon Rivers, each spring. But this verb also carries poignance for how the Tribe, researchers, and the UC Cooperative Extension seek equitable partnership and solutions to a historically fraught relationship. “Working to achieve its goals through authentic collaborations, the Karuk Tribe hopes to prevent exploitative relationships by creating a clear process for collaborative research/project development. A key element to this process is establishing free, prior, and informed consent over information sharing practices.” Ensuring that researchers are aware of the needs and interests of the Tribe is fundamental to establishing a baseline for respect and equity. According to the Indigenous Peoples Council on Biocolonialism, “cultural sensitivity training for the researchers and Tribal awareness presentations help develop a mutual understanding in conducting the research project. Definitions and assumptions must be clarified and questioned by each side and set forth in an agreement.”

To these ends, the Collaborative has created a Guiding Policy document for how non-Karuk researcher can best work in cooperation with the Karuk Tribe. Creation of this document was important to the Tribe because “volunteers, researchers, project leaders, or agency representatives do not have sufficient information, training, experience, or discretion with Karuk culture to determine what information or images are appropriate for broad public use, or what information or images should remain confidential. Cultural knowledge, such as Traditional Ecological Knowledge, often requires careful interpretation.” Seeking consent from a Tribal body in the use of information or publication of findings inspired or adapted from traditional ecological knowledge not only respects Tribal sovereignty, it also protects Tribal holdings from potential desecration, mis-characterization or theft of intellectual property. A plant ecologist, paleontologist or ichthyologist working on extirpated Indigenous lands may feel that their work is far removed from the socio-cultural. But, as Dr. Sowerwine notes: “cultural resources, defined a bit more broadly, include not only archaeologically important sites, but also biologically and spiritually important sites such as traditional gathering and/or ceremony grounds, as well as culturally significant water bodies, plants and animals.” Early works by academics in indigenous communities has left scars inflicted by an extractive mindset, reminiscent of the same colonial practices that first stripped tribes of their land.
In present day, a specter of this extractive approach has been documented in bioprospecting, a field which aims to bring to market naturally derived products. The $17 billion complementary and alternative medicine sector, largely driven by bioprospecting, has relied heavily on the medical insights of the indigenous pharmaco-poeia. But even with ongoing reform in international law surrounding intellectual property rights, the benefits, financial or otherwise, generated from bioprospecting have not always had a positive affect on Indigenous communities. Though there exist many cited instances of intentional biopiracy, the misappropriation of cultural knowledge, through bioprospecting or academic endeavors can be unwitting as well. “Reframing research paradigms to center the community and de-center benefits to the university or individual researcher through use of community based participatory research methods” is one way to prevent exploitation of Indigenous peoples. This is also why it can be important for researchers and academics to learn not only the natural history of their study site but the cultural history as well, in order to be more sensitive and respectful of the communities they may impact through their work. Unlike the Karuk, not all Indigenous groups will have developed a system for collaboration. Therefore, an important first step in this process can come in the form of a land acknowledgment.

A land acknowledgment may ultimately be developed into a formal recognition of a land’s original inhabitants, as in the land acknowledgment developed for UC Berkeley by the Muwekma Ohlone Tribe and Native American Student Development. Just as these acknowledgments have entered the cultural consciousness in public forums, acknowledgments may also be incorporated into scholarly papers, lab statements, and websites. However, acknowledgments should supercede simple recognition. For this process to have impact the acknowledgment can not be empty words or a half-hearted gesture to appease obligations to cultural sensitivity. Creating an acknowledgment can, and should, be an active process that reflects on the researcher’s intentions and Indigenous paradigms. Ultimately, by taking the time to grow an awareness of the cultural history of a landscape—by learning the correct name of relevant Indigenous groups, their ancestral territory, and present involvement or ascribed significance in a study sites or systems—validates Indigenous existence and can instigate important conversation. But, while Indigenous people have been instrumental in creating a framework for land acknowledgment at UC Berkeley, the “onus is on the University, not Native peoples, to do the work of creating an authentic land acknowledgment and of educating University faculty, staff, and students about use of a land acknowledgement.” That’s why, according to CRNAI|NASD “when approaching Native communities to work on a land acknowledgment, honor the history of pain in their relationships with UC, as well as their enduring resilience as thriving members of our communities today.”

In an assessment of the historic extirpation and exclusion of Indigenous people from their land and decision making processes Ron Reed and Kari Norgaard lament that “for many native peoples
around the world, much of their struggle is invisible. This invisibility is perpetuated by myths that American Indians are gone, or that they are fully assimilated. The land acknowledgments is not meant to memorialize past transgression but to generate mindfulness and dialog around present day struggles. The acknowledgment offers an opportunity to educate oneself and gain perspective of those people whose lands and history we are engaging with. And, the conversation doesn’t end with the creation of an acknowledgment. Instead, the process may bring awareness to a need for further consultation and collaboration with a Tribe or other Indigenous group. When “Tribal representatives are consulted throughout the research process and Native people are paid as researchers for their time and expertise,” it demonstrates equity in the research process.

According to Dr. Sowerwine, “making sure to dedicate part of the research budget, when applying for grants, to support Tribal oversight and/or collaboration is critical. Even better, dedicate both consultation fees for Tribal representatives to provide guidance and oversight of the research process, and also possibly dedicate funding to hire Tribal researchers who can provide insight and collaborate on the project itself.” Keep in mind, the interests, financial resources and policies of Tribal governments are not monolithic. Taking the time to establish a dialog with the Indigenous group you will be working with will help determine the type of consultation, funding needs and engagement opportunities for your research endeavors.

While there are 109 Tribal Nations recognized in California, many of these Tribes do not have autonomy over their ancestral lands. This includes the Karuk, whose territory is over 98% controlled by the US Forest Service. Speaking to KQED last May, Bill Tripp, Deputy Director of Eco-Cultural Revitalization for the Karuk Tribe Department of Natural Resources, and a Karuk—UC Berkeley Collaborative member, noted that by not having the autonomy to work their ancestral land “it’s effectively still pushing [the Karuk] out of our ability to live in our aboriginal homelands. And it continues to function in a manner of systematic colonization.” Collaboration with US Forest Service has incrementally returned only marginal agency to the Karuk, to effect management goals.

“cultural resources, include not only archaeologically important sites, but also biologically and spiritually important sites such as traditional gathering and/or ceremony grounds, as well as culturally significant water bodies, plants and animals.”

—Dr. Jennifer Sowerwine, UCCE

King Salmon, a species of both great research interest and cultural and economic value to Tribes and rural residents on the Klamath.
in the Six Rivers and Klamath National Forests. Therefore, partnership between researchers and Tribes such as the Karuk, can be one way for the academic community to show solidarity with Tribal self-governance. Regardless of the minimum permitting requirements set by the Federal Government for research in National Forests, “our Píkyav Process,” says Dr. Sowerwine, “essentially considers any research that will be conducted in the Karuk Ancestral territory should be vetted by the Tribe.” In the interest of this goal, the Karuk—UC Berkeley Collaborative has progressed social and political capital for the Tribe by promoting “regulatory agency buy in of the described initiatives, particularly related to negotiating legal access to fisheries, lands and cultural resources.” The Collaborative has also worked to foster inclusivity and mutual benefits to all parties involved. For Dr. Sowerwine, there is little doubt that the quality of our “science could likely be improved by having a deeper understanding of the ecological history of place from the people of [that] place. There are numerous examples of how TEK has improved upon western scientific hypotheses, so there is also reason to partner with Tribes beyond the ethics of respecting Tribal sovereignty.” Direct engagement and feedback by the Karuk with researchers has opened a door for innovative applications in the state’s wildland fire management, climate change adaptation for rural communities, as well as greater agroecological resilience for tribes along the mid and lower Klamath. Collaboration has also prioritized transparency and integration of the Tribal and research partnerships by working directly in the field, through employment and trainings for Tribal youth as well as outreach and support for college and career development.

Special thanks to Dr. Jennifer Sowerwine and the Karuk—UC Berkeley Collaborative for their patients, cooperation, and feedback on this story.

reflection questions:

1. Does your research take place on Aboriginal land? How about where you work or live?

2. If you answered yes to any of the above questions, what are some ways you can learn more about the history and culture of this land?

3. In what ways should Indigenous people, their experiences and perspectives be included in your work?

2. Karuk—UC Berkeley Collaborative
5. Venton, Daniella. (2021). The Karuk Used Fire to Manage the Forest for Centuries. Now They Want to Do That Again. KQED.
Over the last decade, all-gender restrooms have become more accessible on and off campus, from the Greek Theater to SFO, to Alcatraz. Not just a California phenomenon, institutional understanding of the rights of transgender and gender nonconforming people has grown worldwide (see this university FAQ and this op-ed on inclusive design). VLSB remains unchanged. The story of UC Berkeley students’ fight for gender equity in our work facilities highlights the University’s chronic lack of follow-through but illustrates how meaningful change can be won on our campus.

In 2015, then UC President Janet Napolitano introduced a new all-gender restroom policy, beginning, “The University of California sets the global standard of inclusiveness, understanding, and equitable treatment in all its endeavors, creating a world where individuals and communities of diverse sexuality and gender identity and expression are sage, supported, respected, empowered, and truly equal.” The following year, California passed the Equal Restroom Access Act, requiring all establishments statewide to designate single-person restrooms gender neutral. The right to all-gender restrooms was added to the GSIs’ next UAW 2865 contract in 2018.

“In the past seven years, thousands of graduate students have graduated without witnessing the implementation of the changes they organized to gain.”

Despite these multiple contractual obligations, and the enormous effort from our LGBT+ community and allies it took to win them, gender equity in campus facilities has not improved for all graduate students. In the past seven years, thousands of graduate students have graduated without witnessing the implementation of the changes they organized to gain. University policies have been interpreted to postpone follow-through indefinitely.

Renovation cost is the biggest alleged barrier to getting all-gender restrooms into buildings without single-person facilities, like VLSB. This map of all-gender restrooms on Cal’s campus is misleading; many single-person restrooms like those in the Herbarium and MVZ are restricted to locked, private office suites. The construction of new facilities is supposed to wait until each building is

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**special guest write:** Maya Samuels-Fair

**Finnegan Lab**

**IB Union Steward, UAW 2865**

**vlsb all-gender restrooms, seven years overdue**

Over the last decade, all-gender restrooms have become more accessible on and off campus, from the Greek Theater to SFO, to Alcatraz. Not just a California phenomenon, institutional understanding of the rights of transgender and gender nonconforming people has grown worldwide (see this university FAQ and this op-ed on inclusive design). VLSB remains unchanged. The story of UC Berkeley students’ fight for gender equity in our work facilities highlights the University’s chronic
undergoing renovation for other reasons, perhaps many more years and thousands more students in the future. The current system of patchily distributing all-gender restrooms where convenient is virtue signaling. All-gender restrooms must be standard facilities.

The **Gender Equity Resource Center** (GenEq) and graduate student union stewards have been working to hold the University to its commitments. Physics department organizers took a UAW contract grievance to arbitration with the University, and after two years won an agreement to equalize the number of men’s and women’s restrooms and add all-gender restrooms in Birge Hall. Their agreement breaks with previous policy; rather than fully renovating restrooms, the new agreement implements quick, low-cost signage and fixture changes. GenEq has worked to make this the standard, winning a policy update in December of 2021. An increasing number of departments are taking up grievances with the University on this issue, including IB. Fifteen of our active GSIs and fourteen other ASE’s (soon to be covered by the SRU contract) signed our grievance, and we are progressing towards a solution with campus labor relations. The discussions were had long ago, the contracts signed, now all that’s left to do is make real the solutions we agreed upon.

Gender neutral restrooms are not the only physical manifestation of systemic bias in VLSB, which is also not adequately ADA accessible. This process exemplifies how union organizing and strong contracts are vital in enabling graduate students to support one another’s rights through negotiations with the University. As we now negotiate new contracts, postdocs, GSIs, GSRs, readers, tutors, and fellows all have the chance to win better pay, rights, and benefits. But in order to do so, we must practice solidarity through mass action during this year’s negotiations.

This summer the Department of Integrative Biology will host its inaugural Summer Undergraduate Research Experience (SURE) program. The program is supported by grants from the Graduate Division. This **pilot program** is part of an ongoing initiative to increase diversity, equity and inclusion within IB and aims to greatly broaden participation by students of historically excluded identities in organismal biology. Says SURE’s Research Programs Coordinator, Lourenço Martins (IB), “we have a real opportunity to positively impact Black, Latine and Indigenous scholars who may otherwise not have access to hands-on biology research. And who knows, they could even apply and join the department which would be super cool!” The objective of this summer program,
outlined in the DEI Pilot Proposal is to recruit a mix of masters, post-baccalaureate, and advanced undergraduate students of historically excluded identities who have an interest in applying to graduate school. Through IB’s SURE students will have the opportunity to work on a project with mentors on research that places a strong emphasis on field work. The program will kick-off with a retreat at UC’s Hastings Natural History Reservation and will conclude with an end of session symposium where students will present their work to their peers and the greater IB community. “In addition,” Martins adds, “there will be many opportunities for professional development and to simply get outside!”

**SURE program information**

*Program timeline:* 21 June—12 August, 2022

*Program logistics:* $4000 stipend, plus room and board for participating scholars.

For more information about SURE, contact Lourenço Martins at lmartins@berkeley.edu and visit IB’s DEI homepage for more details about program specifics and the application process.

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**in history:**

Thenmozhi Soundararajan

by Emily Bögner
FAVE Lab

As of 1949, India’s constitution outlaws caste discrimination, specifically of the Dalits, also known as the “Untouchables”. However, with the caste system dating back thousands of years, it is deeply rooted and systemic in nature, and people from oppressed castes still routinely face discrimination. Thenmozhi Soundararajan, a filmmaker, transmedia artist, and storyteller, publicly came out as a Dalit in a documentary film on caste and violence against women that she made while attending the University of California Berkeley as an undergraduate. After the release of the documentary, Soundararajan says she faced discrimination from all of her professors who are part of the caste system that refused to advise her on projects. While some might not expect to face caste bias in the United States, Soundararajan says “Caste has been here (in the US) for a long time, wherever South Asians go, they bring caste.” And unlike race, religion, and sex that are protected under federal or state laws, few institutions have included caste in their anti discrimination policies. Growing from her undergraduate experience, Soundararajan, now the executive director of South Asian Advocacy
Organization **Equality Labs**, works to fight the oppressions of caste partheid, Islamophobia, white supremacy, and religious intolerance. In 2015, she was one of the first people to be included as a Robert Rauschenberg Foundation Artist as Activist fellows, and through the fellowship has created the #DalitWomenFight movement and curated Dalit History Month which aims to share Dalit historians’ research. Her work is making an impact. As of January 2022, the University of California Berkeley added caste to campus anti-discrimination policy. “A lot of times when people talk about the caste system, they talk about it being one of the oldest systems of repression in the world,” Soundararajan said. “But I also like to talk about the fact that that means Dalit movements are one of the oldest resistance movements in the world.”

### upcoming events + campus resources

- 2 Mar.—Noon Concert: Celebrating Black Composers of Art Song, 12.00pm, Hertz Concert Hall.
- 3 Mar.—Berkeley Art Museum & Pacific Film Archives, Free First Thursday
- 15 Mar.—IB Research Mixer, 5.00pm, VLSB Courtyard
- 22 Apr.—Quiet Orient Riot: A Poetry Reading with Music, 4.00-5.30pm, 340 Stephens Hall

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*Supervisors—please circulate this newsletter to lab members and staff who may not be on our listserv.*