
URGE Policies for Working with Communities of Color for Scripps Institution of Oceanography

This is what was found by the SIO pod at UC San Diego on Policies for Working with Communities of Color as well as plans for improved processes and/or needed resources.

Audit of previous interactions with communities of color at SIO:

The scope of research conducted at Scripps Institution of Oceanography (SIO) ranges from local to world-wide projects. Some SIO research is conducted in the open ocean, ostensibly in regions that do not have local communities, while other projects use remote sensing techniques to gather observations and are therefore disconnected from the local communities in their research site. Similarly, researchers who primarily use modeling and/or theory approaches are often wholly disconnected from local communities. As such, research projects at SIO cover the full range of having no engagement with local communities, through conducting research in communities of color without engaging with them, to collaborating with local communities.

SIO has a over-100 year history with a department that, as of June 2019, has 506 academic staff, 902 administrative and technical staff, 388 graduate students and 668 volunteers across Earth, Biological Sciences, and Ocean and Atmosphere sections ([SIO 2020 Annual Report](#)). Given the size of the organization, we have chosen to focus on some examples of projects we are aware of, and those that pod members are involved in. Out of a total of 90 projects SIO pod members have taken part in, the number of projects which worked in or with communities of color was 15.

Some examples of projects that have been conducted by our organization that have had interactions with communities of color are outlined below:

- Straneo group physical oceanography research in Greenland's fjords:

This research has primarily been conducted in Sermilik Fjord in Southeast Greenland near the town of Tasiilaq, but also in West Greenland in Sarqardleq Fjord near Illulisat. The principle aim of this work is to collect measurements (temperature and salinity) of glacial fjords to better understand ocean forcing of glaciers. Most recently fieldwork has been carried out onboard the Danish icebreaker R/V Adolf Jensen that is operated by a Greenlandic crew. The crew's experience navigating around icebergs is invaluable, but no indigenous people contribute to data analysis or the publication of the research.

- Comparing traditional ecological knowledge with other sources of information in the Galapagos:

This project considered both coral bleaching events and fisheries. For the investigation of coral bleaching events, the researchers interviewed 23 fishers local to the Galápagos Islands who had been diving almost daily for more than 50 years across the archipelago. The fishers were asked open ended questions, which allied each contributor to share what they felt was most important. The accounts from the local fishers are compared to



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both shipboard measurements of sea surface temperature and geochemical records from coral cores. See [Cavole and DeCarlo, 2020](#).

A similar example of this type of approach is a subsequent project on the use of local ecological knowledge of Fishers to infer the impact of climate variability in Galápagos' small-scale fisheries. See [Cavole et al. 2020](#).

- Angelica Rodriguez worked with the Center for Climate Change Impacts and Adaptation, local community members, and stakeholders to improve understanding of flooding vulnerability in San Diego Bay and Imperial Beach. With funding from multiple philanthropic, government, and private contributors, CCCIA developed a flood forecasting system for the City of Imperial Beach and is working on a statistical forecast tool for the San Diego Bay shoreline, which borders the cities of Imperial Beach, Chula Vista, National City, Coronado, and San Diego.
- Julie Kalansky worked with the Climate Science Alliance, a boundary spanning organization, to produce a climate assessment to support a resilience plan for a tribal nation in San Diego. The resilience plan was focused on how climate change may impact culturally significant species. As part of the project we were able to visit the tribal land and hear from tribal leaders and members about how sensitive species, especially the acorn abundance, has changed over time. This ended up phase one in a larger county wide effort to understand how climate variability and change will impact culturally significant species.
- Carolyn Ellis' work with [AGU Thriving Earth Exchange](#) was as a Science Liaison in the Chollas Creek watershed of San Diego, encompassing neighborhoods of City Heights, Lemon Grove, and more. Carly worked with a Project Coordinator, a Community Leader/Teacher, another Science Liaison, and 3rd and 4th graders of Carver Elementary School to address local issues facing the Chollas Creek watershed. Carver Elementary is 49% Hispanic, 24% Asian, and 15% Black. The project was used to engage youths in the community on issues of environmental science and local stewardship. The students helped design and carry out the project, learning how to conduct a scientific study. They named their study Trash-tography and used field visits and photography, plus California's Water Quality Control Board Rapid Trash Assessment, to monitor trash in Chollas Creek. The project was meant to wrap up with the kids presenting results to local decision makers, but due to the pandemic, the end result was instead posting the methodology on [Public Lab](#), where other teachers and community leaders could implement a similar, low-cost STEM project.



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What worked well in these interactions?

- Doing the research beforehand; finding resources for how to work with the specific community involved in the project.
- Working with organizations that already have established relationships with the community, rather than reinventing the wheel.
- Initiate contact beforehand improved communication with community leaders and allowed for purposeful planning.
- Virtual outreach for initial and continued communication has provided opportunities to engage with more people.
- Involving the stakeholders that are impacted by the studied phenomena (i.e. county/district agencies, schools, etc.).
- Clearly defining a goal/purpose for co-production of knowledge and engagement.
- Learning the local languages to improve communication.
- Recognizing, learning about and utilizing the knowledge set of the local community allowed access to areas that had previously been unreachable.
- Cultivating a set of shared knowledge and input at all steps of the process. Allowing the community to direct/influence the goals of the project.
- Presenting findings in multiple languages and at conferences that are accessible to a variety of audiences (i.e. UN Conference of the Parties, PublicLab.org, non-academic conferences, within the local community)

What did not work well, and how can this be better addressed in future plans?

- Involvement community-based stakeholders that can benefit/are impacted by studied phenomena (local agencies, community groups, schools) in research efforts to connect the community to work and ask community members what is important to them.
 - Ex: Fishermen were not involved in the planning of the project
- Learning about the community's customs and restrictions without putting the onus on them to teach you everything.
- Training of staff and volunteers could involve coming to an agreed upon description of the project for those interested in hearing about it during the execution.
- Mandatory training for staff/faculty/graduate students, that teach these best practices in our ethics courses (engagement with and conducting research in communities of color).
- Building trusting relationships takes time and investment. Academic career paths are not structured well, at least in the early stages, to support this effort and provide the time and resources necessary to do that. Projects are generally short-term and successive positions often require relocation which can be opposed to building those relationships. Ideas of how to improve this are addressed below.
- Including local community members in the project/program leadership so the leadership looks more like the community where the research is taking place.
- Improving the integration of the scientific analysis into the final report rather than a stand alone part of the report.
- Bringing together Tribal Ecological Knowledge and western science analyses. Needed more time and effort to do this better.



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Are there ways to improve the outcome of projects already undertaken?

- Things to do early in the science process:
 - Authorship discussions; establish roles, norms, expectations, don't take anything for granted.
 - Acknowledging local community
 - Data ownership
 - Plans for the data (students, papers, etc.)
- Engage with the community to adapt your proposed project to be mutually beneficial. This includes accountability for the agreed upon research, framework, data sharing, authorship, etc. Have regular check-ins to discuss and agree upon changes/updates. All publications (including media) should acknowledge these issues.
- Develop a Checklist/Form in Proposals or travel requests that include best practices for Working with Communities of Color. The best practices can be built from the resources mentioned below.
- Curate an active list of resources on how to work with communities of color and are repository of current projects that are working with communities of colors (exemplars)
- Consider working with “boundary organizations” who are dedicated to integrating scientists with local communities. This helps develop a relationship of trust.
- Work with someone who is able to speak the local language and commit to translating any output back into the local language.
- Plan for longer duration trips to establish local relationships.

Are there specific resources or guidelines that are needed to improve the process for planning ahead and working with communities of color?

- Training for students (faculty and staff too) on conducting science with communities. Topics could cover things from the iterative process of proposing work (with community engagement at multiple steps of the process), best practices for working with and in communities (how to share leadership roles) and data stewardship, as well as committing to a plan to guarantee the results/outcomes are communicated and transferred back to the community. This could be included as a mandatory training or part of a mandatory ethics course
- Because building trust is a pillar of this work, it may be helpful to have dedicated personnel at SIO as liaisons to various communities (e.g. Tribal Liaison) who are ideally members of such a community to bring their perspective as well as an initial trust to project planning. These are important roles (within a project) to ensure that knowledge is translated to the language, perspectives, values, and framework of the community.
- Raise awareness about funding opportunities that support a project planning process with a community before an official proposal is submitted



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Existing resources for discussions about guidelines for working in communities of color

In the spirit of Patricia Cochran's talk, we would like to acknowledge the guidelines and recommendations that others have already formulated for this kind of work. We recognize that many people have been thinking about these issues for many years; it would be neither wise nor respectful of us to ignore these contributions and try to "reinvent the wheel" for ourselves.

Listed below are some of the the resources we have used to inform our discussion at SIO:

[SIO Letter on Anti-Racism](#): see sections I.x through I.xiii in particular. Briefly,

- Strengthen partnerships with communities of color in the San Diego area. (I.x.)
- Acknowledge communities we benefit from in research publications, presentations, & discussions; work toward collaborative research partnerships. (I.xi.)
- Initiate conversations with Indigenous and Native peoples/groups/institutions to end the erasure of Indigenous groups and reallocate resources toward Indigenous-led endeavors. (I.xii.)
- Acknowledge our presence on Indigenous land, work to honor NAGPRA (Native American Graves Protection and Repatriation Act), and actively work toward returning Kumeyaay land to the Kumeyaay community. (I.xiii.)

["Guiding principles for working in local northern communities"](#) (Darcy Peter at Woodwell Climate Research Center; scroll to bottom of article)

["Conclusions and Recommendations"](#) from Patricia Cochran's URGE presentation (begins at roughly 20:00)

[Southwest Climate Adaptation Science Center Tribal Engagement Strategy](#) (June 2020)

Recommendations from these sources include but are not limited to:

- Invest time from the beginning of a project in getting to know local practices, culture, history
- Include community in all stages of planning & funding
- Be willing to relinquish and/or share PI roles; go beyond respecting local knowledge systems to integrate traditional ways of knowing into all stages of research
- Commit to communicating research objectives and results clearly (may require translation) and in an ongoing process
- Guarantee: confidentiality of sensitive material, credit and recognition in publications, compensation for community members' time and work, data sovereignty
- Use existing resources/partnerships: don't try to reinvent the wheel!