MAKING RACIAL EQUITY REAL IN RESEARCH

Hana Creger | September 2020

THE GREENLINING INSTITUTE

Acknowledgments

We express our gratitude to our reviewers who provided insight, guidance and expertise to this report. The reviewers represent a diverse cross section of researchers, academics, research funders, government officials and community partners. Their insightful comments enhanced the quality and depth of this effort.

EXECUTIVE SUMMARY

The research field has come a long way since the days of explicit exclusion, exploitation and experimentation on communities of color and other marginalized populations. Today we see increasing interest and available funding both for the study of racial equity and for conducting research in more equitable ways. While this certainly represents significant progress, the research field still struggles to overcome its legacy of White supremacy and structural racism.

While research is a powerful tool to advance racial equity, progress remains stubbornly slow due to a multitude of structural barriers that prevent research from truly benefiting marginalized communities, and in some cases harming these communities. Even well-intentioned research practices can be nonreciprocal, tokenizing, extractive and culturally insensitive.

The imbalanced power dynamic can distort trust between researchers and community partners, which works against meaningful partnerships and hampers the ability to turn research into actionable policy change.

While many researchers and research institutions are recognizing and confronting inequities and power dynamics that are deeply rooted in their fields' culture and practices, this is not yet standard practice. The structures upholding racial injustice in research are so deeply entrenched that players at every level must work to dismantle them. This report offers recommendations for a wide audience, including research funders, academic and non-profit research institutions, individual researchers and community partners.

This report offers five key steps to creating partnership-based research

1
Understand
the context of racism in research in the past and present

2
Review
the challenges, best practices, and opportunities available for centering racial equity in research

3
Conduct
an internal equity assessment of your research institution, department, or team

4
Partner
with and pay a community partner

5
Co-create
the research questions and scope of work with a community partner

We offer specific suggestions for the following players

Research institutions and funders should understand how funding structures can undercut community engagement and involvement, and how lack of diversity and cultural competency can create blinders. Funders should promote true partnerships between research institutions and community partners.

Researchers should work over the long term to establish trust with the communities they wish to study rather than seeking a superficial "equity stamp of approval." They should work with community partners in ways that give those partners a meaningful role in the design and conduct of the research—more than just vague "input" that is easily dismissed.

Community partners should work with researchers, research funders, and research institutions to build their own capacity and expertise and collaborate in research dissemination to ensure that knowledge reaches affected communities. They should hold researchers accountable to meaningfully compensating community partners for their involvement and monitor for inequitable practices.

The recommendations in this report aim to provide an anti-racist approach to conducting research by recognizing and reconciling inequitable research practices and flipping the power dynamics of traditional methods. This approach is not easy. It requires dedication, self-reflection and challenging conversations with community partners, but if followed it will strengthen your research to be more effective and impactful, because co-creating research with community partners enables greater opportunities for the research findings to be embraced and adopted into policy. To guarantee that low-income communities,communities of color and other marginalized groups reap the benefits from research, we must begin by building a standardized foundation of trusting and equitable research partnerships.

INTRODUCTION

Problem

As equity in all of its forms has risen to the forefront of mainstream consciousness, researchers of all stripes—academic, government, and non-governmental organizations—are being funded to conduct racial equity research and evaluations. Researchers without expertise in racial equity are now being asked to draw conclusions about the racial equity impacts of their research. Scrutiny around whether research practices themselves are equitable, regardless of whether racial equity is the subject of study or not, has increased.

For example, many research funders—foundations and governments alike—now require specific attention to racial equity and community engagement. While this presents an exciting opportunity to advance racial equity, researchers lack clear standards, guidelines and accountability for racial equity research and for how to conduct all sorts of research in an equitable manner. Consequently, racial equity research often comes across as elitist, extractive, tokenizing and opportunistic—particularly when researchers expect community partners to share their expertise without compensation. This erodes trust between community partners and researchers and impedes the ability to foster real change.

To be clear, a number of researchers who are pushing the envelope on embedding racial equity in research in a meaningful way, and many of their perspectives are directly reflected in this report. Yet even the best efforts of researchers are often hindered or undermined because they operate within institutions that remain firmly grounded in structural racism and White supremacy. To dismantle these barriers, research institutions and funders must advance change from within in order to foster more equitable models of research[1] that benefit impacted communities.

Definitions

Racial equity: Greenlining defines racial equity as transforming the behaviors, institutions and systemsthat disproportionately harm people of color. Racial equity means increasing access to power, redistributing and providing additional resources, and eliminating barriers to opportunity in order to empower low-income communities of color to thrive and reach full potential. Our emphasis on racial equity is not about excluding other marginalized groups — we recognize that equity impacts intersect and compound with other identities such as gender, sexual orientation, ability etc. The approaches in this document are also intended to be applicable to creating equitable outcomes for other marginalized groups such as women, the elderly, and people with disabilities. This brief uses both the terms "racial equity" and "equity" depending on the context.

Tokenism: The practice of recruiting a few people from underrepresented populations to create the appearance of diversity, but without taking action to create more equitable or inclusive practices, not listening or responding to their needs and opinions and failing to include them in decision-making.

Community partner: defined as a racial equity/ justice organization, advocate, or a community -based organization that holds a deep understanding of the project scope.

Solution

We have collected a series of racial equity best practices, resources, exercises and recommendations for researchers who are conducting racial equity work or partnership-based research, based on feedback and input from community partners, academics and research funders. Many of the concepts and examples presented here represent The Greenlining Institute's own positive experiences with researchers.

However, through these collaborative efforts, our team has also identified gaps, which led us to develop this standardized approach to embedding equity in the research field. There is enormous power in building long-lasting and trusting partnerships between researchers, advocates, community stakeholders and government officials who come from a diverse set of backgrounds and lived experiences. Partnerships are most successful when they are grounded in recognizing each partners' equal expertise, power and ownership, and increasing input and decision-making from diverse perspectives. When researchers collaborate with community partners early on to co-create research questions and scopes, this opens up opportunities to leverage the findings into direct policy action. Yet in order to deliver on this transformative potential, the field must establish guidelines for equitable, community-driven research practices.

Audience of this Report

While we envision these recommendations to be applicable to a wide variety of research, it is particularly relevant for applied, policy-oriented research. Research takes many forms. For a few—like strictly mathematical modeling of climate impacts—the concepts presented here may have less applicability. For others, such as clinical drug trials, some ideas will be applicable and others may need to be adjusted. Part of our purpose is to encourage those involved in all forms of research to think seriously about equity and community impacts. Recognizing these differences, for the sake of brevity, in this report we refer to all sorts of research and evaluations under the umbrella term of "research."

In addition to researchers, this resource is also geared towards community-based groups, equity-centered organizations, government agencies, research funders and other groups who play an integral role in the research field. More explicitly this report is intended for: 1) researchers studying racial equity; 2) researchers who may not be studying racial equity, but wishing to conduct their research in a more equitable, partnership-based way; 3) research institutions aiming to support these efforts; 4) research funders seeking to embed racial equity and community engagement requirements into their grant guidelines;

and 5) community partners interested in partnerships or conducting their own in-house research. It is critical that all parties share common goals of accountability to meeting a higher standard of racial equity in research.

Instructions for Using this Report

The learnings, reflections and discussion questions presented here should be thoughtfully addressed before the research scope and questions are finalized and funded, and continually referred to throughout the process. This is the process that Greenlining will now follow when forming a partnership with research institutions that wish to embed racial equity principles into their work. This approach has enabled our team to maintain more trusting and transparent partnerships with researchers while producing more credible and accountable racial equity research.

Summary of Recommendations:

1 *Understand* the context of racism in research in the past and present

2 *Review* the challenges, best practices, and opportunities for centering racial equity in research

3 *Conduct* an internal equity assessment of your research institution, department, or team

4 *Partner* with and pay a community partner

5 *Co-create* the research questions and scope of work with a community partner

Research organizations and individuals that do not have a specific expertise in racial equity issues should not complete Step 5 without the paid partnership of an appropriate community partner. Utilizing the resources in this report is not a replacement for an actual collaboration with a community partner who has the appropriate knowledge and skills. An equitable, partnership-based approach will make your research project more successful.

1. RACISM IN RESEARCH: PAST AND PRESENT

Research topics and practices often reflect the existing values and ideologies of institutions and culture. Given the deeply rooted racism and White supremacy in the American psyche, it is no surprise that racist ideologies, whether explicit or implicit, have continued to permeate the design, execution and conclusions of research. One of the most infamous examples of unethical and exploitative research is the Tuskegee Study,[2] in which researchers studied Black men with syphilis without informing them of the purpose of the study, denied them treatment—even after simple effective treatment with penicillin became available—and studied the impact of the untreated disease over their lives. This study, among many other cases[3] of scientific exploitation of the Black community, has understandably seeded a persistent mistrust of the medical system[4] and discouraged Black people from participating in research studies.

Research has long been weaponized to justify embedding racist ideologies into public policy decisions to oppress, marginalize and harm communities of color. For example, the study of eugenics was widely endorsed by academia and was generously funded by foundations—in 1928 there were 376 courses[5] from universities across the country that extolled the fictitious "science" of white genetic superiority. The abhorrent "evidence" that falsely claimed that lower class people and communities of color were subhuman and unfit for society, laid the groundwork for a multitude of racist policies, including the forced sterilization[6] of Native Americans and people with disabilities, and helped inspire[7] the even more grotesque policies perpetrated by the German Nazis. While these are extreme examples of research that directly led to racist public policies, nevertheless they exemplify how research can easily be manipulated to perpetuate existing racist beliefs and justify racist policies.

Today, while racial discrimination in research operates in less explicit ways, it still causes harm to communities of color and other marginalized groups. For example, up to 80 to 90 percent[8] of patients who participate in clinical drug trials are White, meaning that the efficacy and side effects for people of color are often left unknown. These kinds of research practices uphold "Whiteness" as the standard, and fail to capture the specific needs and perspectives of communities of color. Similarly, researchers often fail to collect sufficient or accurate data[9] on people of color, which can be a result of the researchers' own biases and blind spots in the design of the study.

In the late 1980s, ACT UP and other AIDS activists pushed for community involvement in clinical drug trials,[10] arguing that, "with a new epidemic disease such as AIDS, testing experimental new therapies is itself a form of health care and that access to health care must be everyone's right." They won a variety of reforms, including protocols allowing patients to access experimental therapies during the final stage of testing as well as mechanisms for community input into the conduct of studies, such as community advisory boards. These reforms helped inspire the more extensive approaches we advocate here.

Research design can also be wielded for deceptive purposes promoted by corporate interests[11] such as the sugar, tobacco and mining lobbying groups. Industries regularly fund and drive research agendas that are well-documented for manipulating results that conflict with the public good and often disproportionately harm communities of color. The modern day science and study of economics continues to cling to entrenched racial biases in its very modeling approaches, by accepting racial disparities as a baseline[12] equilibrium that should be maintained. The propagation of these racial biases in economic research penetrates our entire economic policy agenda which only serves to deepen racial disparities.

As the American consciousness has slowly evolved over the decades to value racial equity, the research field is also beginning to reflect that shift. However, despite increasing interest in studying racial equity, research

institutions as a whole have not so easily shaken off their culture of White supremacy and practices that uphold structural racism. Institutional barriers and habits can obstruct even well-intentioned researchers from conducting research in a more equitable way. To overcome this legacy, research today must be explicitly and upapologetically anti-racist, which requires clear guidelines on how to conduct research that not only centers racial equity as a goal, but racial equity as a practice.

"We no longer have to spend so much time convincing people that racial equity matters, now we have to provide an actionable roadmap that shows how to achieve racial equity. After all equity is not a commitment, it's a practice."

—Alvaro Sanchez,
   Environmental Equity Director,
   The Greenlining Institute

2. CHALLENGES, BEST PRACTICES, AND OPPORTUNITIES FOR CENTERING RACIAL EQUITY IN RESEARCH

CHALLENGES AND BEST PRACTICES

This section lists the challenges to building equitable, partnership-based research and best practices to overcome them, broken down by the *1) institutional, 2) researcher, and 3) community-partner level*. Then examples are laid out that describe communities' strengths, skill sets, and the various research partnership approaches that are available. This section below is largely inspired from the Strategic Growth Council's 2019 Climate Change Research Symposium report,[13] which summarized participant conversations at the symposium between researchers, tribal governments, community-based organizations, government agencies, and other

stakeholders, who discussed how to conduct research informed by community engagement. Additional content in the section was pulled from Greenlining publications as well as the experience and expertise of the numerous reviewers of this brief.

Definition

Research funder: defined as an international, federal, state, or local government department or agency, a philanthropic foundation, a private industry, a professional organization, or another relevant party.

THE INSTITUTIONAL LEVEL

Non-profit research institutions, universities, program departments, the academic community, research funders (foundations, government entities, etc.), and other players who influence the research field.

INSTITUTIONAL CHALLENGE 1

Research funding structures do not incentivize equitable, community-driven research.

The way that research grants are structured often fail to incentivize research institutions to work with community partners or to dedicate sufficient budgets for community engagement. This issue can stem both from the funding restrictions within grants and also based on how researchers and research institutions create their budgets.

Another barrier is that government funding is often restricted from funding critical community engagement costs or compensation of community members for their time and expertise.

Beyond just compensation, funding structures often do not allow community partners to be co-principal investigators with grants.

Partially as a result of funding structures that fail to promote the growth of meaningful partnerships, community partners can often feel tokenized, unheard, and as if researchers are simply seeking an "equity stamp of approval" as opposed to genuinely wanting to partner on co-creating a research scope of work and deeply engaging communities.

BEST PRACTICES AND RESOURCES

Research funders should:

- **Support in-house research led by community partners.** For example, see the Asian Pacific Environmental Network's Mapping Resilience[14] report.

- **Require equitable partnership models and community engagement** throughout their grant proposals. Examples include:

  - The Civic Innovation Challenge grant[15] that requires cross-sector teams from academia, community partners, and government.

  - Requiring evidence of a detailed community engagement plan in the proposal and a letter of support. from a community partner that agrees this plan has been co-developed.

  - Requiring explanation of how community feedback will be integrated into recommendations.

- **Communicate the equitable partnership and community engagement expectations by providing guidance** and examples that set a baseline, not a ceiling.

- **Hire community partners to conduct racial equity trainings** for researcher grant recipients. For example, the California Air Resources Board worked with Greenlining to develop and racial equity training for a UC Berkeley researcher team that they funded.

- **Develop scoring criteria for equitable partnerships**, co-created scopes of work, and community engagement practices in order to evaluate and award grant proposals.

"Market research gets a budget line to compensate participants for their attitudes and perceptions because their inherent value is well understood, a value that is recognized, monetized, and validated. Yet, when advocating for funds to compensate community members for their perspectives, we are too often met with 'we did not budget for that.' We know that these very perspectives bring deep credibility to research findings and consequently, we must fund community engagement and needs assessments, especially within low-income populations and communities of color, because they are experts in their lives, offer expert opinion, and bring undeniable value to research studies."

–Cynthia Cortez,
   Southeast Los Angeles Collaborative

- **Require that their staff who evaluate grant proposals have undergone a racial equity training** and/or have a deep understanding of racial equity issues.

- **Encourage research institutions to uplift community partners as co-principal investigators** with shared leadership and decision-making power. Grant applications should indicate how the partnership will be rooted in power sharing.

- **Require dedicated portions of budgets or community engagement and to compensate residents**, community-based organizations, and other participants for their time and expertise.

- **Ensure that food, childcare, transportation, compensation, and other relevant community engagement costs are eligible expenses within grants** and should encourage include these items to be included in grant proposal budgets.

Research institutions should:

- **Subcontract with a community-based organization if research funds are not eligible to pay for community engagement**, and then compensate residents and cover other related costs.

- **Create a fund to pay for community engagement** or compensating participants in the event that the grant or contract does not allow for these expenses.

Timelines do not allow for building meaningful, trusting relationships.

The timelines of funding opportunities run counter to developing trusting relationships between research institutions and community partners. Researchers may have to quickly conduct outreach to scope potential partners under time constraints to meet application deadlines. These timelines also drastically underestimate the length of time needed to conduct outreach and engagement during project implementation. Additionally, as a result of complex payment processes, this lag can place undue financial hardship on community partners while they contribute their labor and resources. This dichotomy exemplifies how research grants can often place more importance on meeting funder-driven deliverables and timelines as opposed to prioritizing racial equity goals,[16] compensating community partners in a timely manner, community engagement, and capacity and trust building.

Research funders should:

- **Build in more flexible timelines** and allot more time than anticipated for trust building, payment to partners, and community outreach and engagement—throughout the application, planning and implementation phase.

- **Prioritize multi-year funding alongside research institutions** to help grantees build long-term relationships with communities in order to ensure that community needs shape research processes and outcomes.

Research institutions should:

- **Provide small internal grants to begin the process of relationship-building** and "listening tours" long before researchers apply for grants and other funding.

"Organizations can say they care about equity or have equity committees, but with no clear shared definition or plan of action that they've thought through rigorously. This greatly limits the work they can do."

−Sarah McCullough,
  University of California, Davis

INSTITUTIONAL CHALLENGE 3

The motivations behind research often conflict with community priorities and substantive policy change.

Oftentimes the role of research is to "study and report" and is not necessarily to "fix" problems that have been vetted up front with impacted communities. Society needs research that points toward solutions to problems—in a way that is vetted by the impacted communities. Unfortunately there are many pressures that pull research in a different direction.

For example, academic researchers are rewarded mostly for writing peer-reviewed scholarly journal articles—and generally are not rewarded for engaging with community partners. In fact, peer-reviewed research is often a requirement for tenure-track faculty. At the same time, community partners and advocates are motivated to conduct their work based on impact and change. And while researchers are awarded funding to conduct their research, many community partners have fewer resources and have limited capacity to participate in partnership where there is not clear alignment on shared goals. This mismatch in motivations can be a barrier to forming long-lasting and meaningful partnerships.

A particularly concerning trend is that research funding from industries[17] such as medical, food and beverage, mining, computer and automobile companies have increased over the years. This has increased industry power to influence research agendas, manipulate the results, and suppress unfavorable findings to uphold their policy agendas over the public interest, such as public health.[18] Beyond just influencing the research agendas of institutions, industry funders can also exert their political agendas within institutions at the expense of academic freedom. For example, one foundation[19] granted funds to a university under the condition that the foundation be given partial control over faculty hiring and the curriculum.

BEST PRACTICES AND RESOURCES

Research funders should:

- **Incentivize and support the value and benefits of relationship-building** with community partners and other research participants.

- **Conduct their own community engagement to understand community problems, needs, priorities** and how to fund programs in a more equitable and action-oriented way.

- **Partner with university deans, research and academic associations and community partners about how to approach issues such as motivations,** racial equity in research, community engagement, and funding models.

Research institutions should:

- **Place equitable, partnership-based research and advancing policy solutions at the core of their mission, strategies, and practices.** For example, see the approach [20] of UCLA's Luskin Center for Innovations. Encourage researchers to share authorship credit with community partners to help build recognition of their expertise and negotiate compensation for future partnerships.

- **Consider and encourage researcher-community partnerships in the review, merit, and tenure of faculty** to incentivize researchers to make themselves available to community partners.

- **Not accept grants from industry funders who dictate how the research is designed, executed, or published.** Furthermore, institutions should not allow funders to influence faculty hiring or curriculum.

Methodologies, data collection and analysis can perpetuate inequities.

Academia's focus on peer-reviewed sources of research can often exclude and devalue research and publications from community partners that have not been peer-reviewed. This can lead to research and analysis methodologies decided by outsiders as opposed to communities and an over-emphasis on the often preferred quantitative data.

Academia's peer review process exists in an academic publishing silo that can be detached from the real world. Peer reviewers are traditionally drawn from fellow academics and not community partners or members of affected communities. This can lead to research and analysis methodologies decided by outsiders as opposed to vetted by communities and an overemphasis on quantitative data. In combination, this can undermine consideration of people's lived experiences and contributes to inequity in research.

Furthermore, when research teams do not reflect the demographics or lived experiences of communities, researchers may have blind spots and therefore may conduct the data collection or analysis in a way that is not culturally sensitive. For example, a researcher may not think to disaggregate the data of broad racial groups like Asian Americans -- which obscures their disparities, stories, and individual needs.

Researchers can be reluctant to recognize that there are different measures of success. A community partner may define success in a different way from the researcher. Furthermore, failure should be recognized as a success, as there is a critical value in collecting lessons learned.

Research funders should:

- **Require that** qualitative data[21] **is also collected, in addition to quantitative.** To foster this, funders should consider requiring interdisciplinary research teams that have experts with both skill sets.

- **Require that community partners drive conversations around what types of data is collected** (both quantitative and qualitative data) and how to collect it.

- **Require grantees to report how stakeholder and community input informs the research** process, methodology and data collection.

Research institutions should value:

- Qualitative data as being just as important as quantitative data.

- Researchers confronting their own personal biases and also applying their lived experiences to how the study is designed and analyzed[22].

- Community-based sources as opposed to only peer-reviewed literature.

- Community Peer Review[23]

- "Expert elicitation"[24] methodology, which presents quantified subjective judgments from technical and community experts.

- How to Not Use Data Like a Racist.[25]

- Racial Equity Tools' Data Collection Methods.[26]

- PolicyLink's Counting a Diverse Nation: Disaggregating Data on Race and Ethnicity to Advance a Culture of Health.[27]

INSTITUTIONAL CHALLENGE 5

Lack of diversity, equity and inclusion in the research field.

In 2017 in the U.S., only 24 percent of college faculty[28] were people of color, compared to 45 percent of university students. Faculty of color face high turnover rates[29] and are less likely to receive funding[30] compared to their white colleagues. Women also remain underrepresented, as do faculty of various gender identities, socioeconomic status and abilities. The academic shift away from tenure-track positions towards adjunct positions has negative impacts on the diversity of the field[31] and severely limits stable career opportunities—particularly for faculty of color[32].This lack of diversity in academia inhibits the innovation and quality of both research and teaching. In fact, evidence shows[33] that diverse groups of people make more informed decisions and are superior at problem solving, compared to homogenous groups of people.

A chronic lack of diverse perspectives in academia also impacts which research gets published. 89 percent of scholars who are published are White and 70 percent are men[34]. This gap in diversity elevates and validates the same voices, biases and power structures that have long dominated, while excluding new ideas, lived experiences and practices from advancing various forms of equity in the research field.

Advancing diversity, equity and inclusion in research requires dedicated attention to the internal practices of institutions and individuals as well as their external practices with communities.

BEST PRACTICES AND RESOURCES

Research funders should:

- **Prioritize grants to researchers from underrepresented demographics.** Specific support should be provided to connect underrepresented faculty to funding opportunities and pathways to participate in peer review processes.

Research institutions should:

- **Require each department to develop an approach to diversity, equity and inclusion efforts.** This creates a standard of accountability, yet allows individual departments to address their unique challenges and solutions.

- **Hire diverse researchers and evaluators who reflect the impacted community.** Diverse hiring practices should not just be limited to interns and entry level staff, but also must include research leads. Diverse hiring should not only increase capacity for research institutions, but also should transfer to the community partners who may need to hire staff to increase their capacity to perform administrative tasks, translations or other tasks related to the project.

- **Create diverse workforce pipelines.** Prioritize internship opportunities for diverse communities by targeting high schools, community colleges and workforce development organizations.

- **Work with underrepresented faculty to understand their challenges in retention, develop a comprehensive action plan, and recognize this work as valuable in tenure packages and promotions.** Beyond just equitable hiring practices and mentorship, research institutions must deeply interrogate their culture, climate and power dynamics that reinforce this diversity gap.

INSTITUTIONAL CHALLENGE 6

Lack of cultural competency of researchers.

Very much related to the lack of diversity in academia, researchers also often lack the understanding and experience of working with diverse communities. Researchers can unknowingly partner more closely with those who share similar cultures, educational levels or lived experiences, while keeping others potential partners on the periphery.

Researchers can sometimes be unaware of how their social position influences the assumptions, biases and norms that they bring when interacting with a community. Existing curriculum often fails to help students and future researchers understand how they would benefit from engaging with communities to solve problems and how to gain insight from a perspective they don't have themselves.

In particular, researchers can be unwilling to understand unique community needs and to adapt and learn from the bottom up. For example, traditional ecological knowledge and other types of culturally relevant research has often been ignored, devalued and dismissed. Furthermore, in addition to undermining communities' work, researchers can perpetuate unequal power dynamics when assuming English is the dominant language when conducting participatory research.

BEST PRACTICES AND RESOURCES

- In undergraduate and graduate school, weave into the curriculum:
  - Interactive bias training
  - Ethnic studies coursework
  - Diversity, equity and inclusion trainings
  - Science communication
  - Research methodologies
  - Examples of community partner-led research to normalize this as a valid source of data
  - The practice of developing community engagement strategies and plans
  - Interrogate teaching approaches that insert an industrial lens into student project design (e.g. maximizing profit at the expense of community safety)

- Educate researchers with information and recommendations from tribes[35] on forming partnerships with tribal members and incorporating traditional ecological knowledge and cultural practices in research methodologies. Additional examples and resources include:
  - Karuk Tribe-UC Berkeley Collaboration[36]
  - The Climate Science Alliance Tribal Working Group[37] funded by the state of California's Strategic Growth Council
  - Principles and research proposal requirements listed in the Indigenous Research Protection Act[38]

- Educate researchers about the principles of language justice[39] and the importance of providing translators and interpreters for non-English speakers and for people with disabilities.

INSTITUTIONAL CHALLENGE 7

For-profit academic journals are widely seen as exploitative and inequitable.

The business models of academic publishers use a variety of unethical practices[40] to poach enormous profits. They rely on government or foundation-funded research to be handed over for free, peer reviewers who operate on a pro bono basis, and then they sell the final product back to universities to be read by researchers at sky-high rates. This model prevents researchers and community partners without journal memberships from accessing key information hidden behind their paywalls. Furthermore, if a researcher does want to publish in an open-source format within a for-profit journal, they must pay for it, which may end up diverting funds from other items such as community engagement. For-profit academic journals ultimately control what is published and then remain the gatekeepers of knowledge, which further entrenches inequitable practices in academia.

BEST PRACTICES AND RESOURCES

Research funders should:

- Require open access to all research results.

Research institutions should:

- Prioritize the use of open access journals[41] to aim for more accessible information and more collaborative publications between researchers and community partners.
  - For example, the University of California system hosts eScholarship,[42] an open source repository, and encourages faculty to publish open source.

INSTITUTIONAL CHALLENGE 8

Research funders prioritize academic institutions over community partners.

Funders often hold academic institutions in higher regard while overlooking the ability of community partners to conduct their own in-house research—a perception that further contributes to an inequitable distribution of research funding and power. Community partners are very well positioned to conduct their own research because of their ability to reach the target populations more effectively—yet many are held back due to limited capacity or technical expertise.

BEST PRACTICES AND RESOURCES

Research funders should:

- **Provide capacity building and technical assistance** to under-resourced community partners to apply for research grants and to those who are conducting research. Just as funders aim to build the capacity of community partners to improve their operational, financial and leadership structures, funders should also aim to build their capacity to conduct research and evaluations within their communities.

EXAMPLES OF A RESEARCH FUNDER REQUIRING EQUITY AND MEANINGFUL COMMUNITY ENGAGEMENT

- The research grant guidelines from California's Strategic Growth Council [43] *1) require the paid partnership of a non-academic partner; 2) incentivize non-academic partners to co-lead research; and 3) include scoring criteria for meaningful engagement*. As a research funder, SGC also conducts its own community engagement [44] to drive its research program priorities.

- The Climate Smart Communities Consortium Research: Metrics and Evaluation Methodologies for Clean Mobility and Sustainable Transportation Equity Projects is a California Air Resources Board-funded research contract. This includes an explicit task to conduct an assessment of community engagement, as well as to address specific questions, such as:
  Is this what the community wants? Are the needs of underserved communities being adequately met? What should be measured to allow for meeting collective community goals? In addition, this research project gathered community input during the project scoping phase and will include a community-based advisory panel that will infuse ideas and perspectives through the life cycle of the project. Furthermore, CARB is funding a racial equity training for the researchers on this project. This project leverages critical equity project lessons and existing resources, such as CARB's Sustainable Transportation Equity Project Community Inclusion Guidance [45] and Clean Mobility Options Voucher Pilot Program.[46]

"Researchers and other partners may come into a project with a proposed 'solution' to be tested vs. developing context-sensitive strategies with the community. This can lead to frustration and less successful project outcomes."

–Susan Shaheen,
 University of California, Berkeley

THE RESEARCHER LEVEL

Individual researchers or teams of researchers at academic institutions, government agencies, private industries, or nonprofit organizations.

RESEARCHER CHALLENGE 1

Lack of trust and meaningful relationships.

It can be challenging for researchers to know where to begin engaging potential partners and building trusting and meaningful relationships. Relationships should be built long before funding opportunities come along, and should continue to exist beyond any one proposal. Without such long-lasting partnerships, attempts to connect can feel ingenuine, opportunistic and extractive to community partners. It's particularly important to understand the local context that may cause individuals or groups to distrust various actors, whether that's government, researchers or nonprofits.

BEST PRACTICES AND RESOURCES

- **Before meeting with or asking anything of a community partner, do your research to understand their history, local context and priorities.** Express a genuine interest in understanding a community partner's needs before imposing your own agenda. It's important that researchers also understand the community partner's previous research partnerships and existing projects.

- **Recognize a community's past traumas and historical injustices and inquire how you or your work can contribute to reconciliation.** Ask how you can be an ally or how you may need to show up differently.

- **Remember that different individuals within a particular community may hold divergent viewpoints** on challenges and opportunities. Partnering with one group may limit access to another.

RESEARCHER CHALLENGE 2

Lack of support from their institution and the broader academic field to pursue diversity, equity and inclusion in research.

Many researchers are pushing the envelope on developing equitable, partnership-based research. Yet they often face institutional barriers, such as funding, culture and leadership structures.

BEST PRACTICES AND RESOURCES

- **Advocate from within and challenge your institution to do better.** Form an internal diversity, equity and inclusion group with the goal of fostering conversation and institutional change.

- **Connect with other researchers outside of your department or institution** to understand how others have successfully pushed for more equitable practices.

RESEARCHER CHALLENGE 3	BEST PRACTICES AND RESOURCES

Lack of communication and transparency.

When project goals, updates and timelines are not transparently and clearly communicated, this can fracture trust and relationships. This often contributes to community partners feeling tokenized and as if they're opinion only matters when researchers want the "equity stamp of approval."

Expectation setting and management around a research project's scope can also be a challenge between researchers and community partners that can leave partners feeling unheard and disillusioned. There is a delicate balance between researchers adopting community partners' goals and feedback, and the limitations of any one research project.

- **Be transparent about regularly providing timelines and project updates** while also being respectful of community time (e.g. bring information in a streamlined fashion to allow for the most input to be gathered or more than one update to be provided.)

- **Translate and share data and research results in ways that are useful to communities.** (e.g. value lived experience, address language barriers, avoid technical jargon.)

- **Before forming a partnership, create a dialogue to set realistic expectations** about the limitations for the specific research project and the capacity of the research team. For example, research funds are often restricted from being used for direct lobbying activities.[47] Find touch points where researchers can be flexible about adapting various goals and processes based on community input.

- **As a partnership, set expectations for engagement and plan for differences in communication approaches based on culture** (e.g. conversations around what respect looks like, perceptions on timeline flexibility, interpersonal dynamics associated with asks for labor, etc.)

"A common challenge is that researchers may only identify potential partners when a particular grant opportunity has just come out, and then they're trying to do outreach under time constraints. That runs counter to building a meaningful, trusting relationship. Researchers should familiarize themselves with the work of potential partners and not attach relationship-building to any one project or proposal."

—Amanda Howell,
   University of Oregon

RESEARCHER CHALLENGE 4

Inequitable power dynamics between researchers and community partners.

Researchers often come to community partners with a fully fleshed out research plan or a proposed "solution" to be tested, instead of co-developing context-sensitive strategies with the community. Advisory committees are more common than true, equal partnership, and rarely provide opportunities for real decision-making authority. This leaves little room for community partners to have a meaningful impact on the research topic, questions and design—and instead can feel like it's a way to "check the equity box". These power dynamics often remain apparent throughout the duration of the research project, and can come in many forms, such as: 1) not compensating community partners for their time and labor; 2) undemocratic and non-transparent decision-making processes; 3) using inaccessible technical language and jargon.

These inequitable power dynamics can exist not only between researchers and community partners, but also occur within research teams and often disproportionately harm or silence researchers who are female, people of color, and other marginalized groups.

BEST PRACTICES AND RESOURCES

- **First understand a community's needs, goals and expectations, and then co-create the questions they want answered.** Then you can begin to co-create a scope of work.

  - For a partnership-based pilot project, consider first starting with a project planning process (e.g. a feasibility study, equity analysis, etc.) and then advance to a full pilot proposal when appropriate.

- **Value community partners as paid co-principal investigators** even if this is not a grant requirement.

- **Give equity advisory committees direct and meaningful decision-making power.** (e.g. equity advisory committees must approve committee's roles and responsibilities, research design, research tools [surveys, etc.] before the next phase of the project can begin.)

- **Partner with community leaders to co-design inclusive community engagement processes.** The specifics will vary with each community, however some examples include: going to familiar places where the community already gathers, leveraging existing community meeting structures and timing, plainly communicating technical information, avoiding acronyms, and providing language translations,[48] child care and transportation.

  - When in-person contact and meetings are not possible, you can find resources[49] here on virtual engagement strategies.

- **Researchers should carve out healthy budgets and realistic timelines for community partnerships and engagement.** Work with community partners to identify ideal budgets and timeframes.

"It is more transformative to go beyond just compensation and to really value community partners as co-principal investigators. This moves away from being just a token honorarium, but actually a more equitable and less hierarchical leadership structure."

–Amee Raval,
 Asian Pacific Environmental Network

- **Co-develop equity indicators and metrics that reflect the needs and priorities of the community, even if those needs and outcomes are outside of the scope of your research.** People's lives are complex and intersectional—and therefore researchers need to understand the full picture. For example, some community members may inform you that they prefer not to bike because they are disproportionately profiled and targeted by police, and therefore your research should track data of police stops. Furthermore, community priorities often shift, and therefore your equity indicators and metrics should be flexible to reflect changing needs, while still holding a baseline measurement to evaluate success over time.

- **Shift power dynamics** (e.g. encourage diverse people to facilitate meetings, utilize consensus-based decision making, develop and use accessible language instead of jargon, be aware of body language, utilize small group discussions to foster greater engagement, etc.)

- **Participate on advisory committees** and interviews for research led by community partners, or offer other relevant services.

- **Utilize more inclusive research and engagement methods such as:**
   - Community Based Participatory Research[50]
   - Youth Participatory Action Research[51]
   - Focus groups
   - Storytelling

THE COMMUNITY PARTNER LEVEL

Community-based organizations, equity/justice advocates or other groups who are interested in partnering with researchers or conducting their own in-house research.

COMMUNITY PARTNER CHALLENGE 1	BEST PRACTICES AND RESOURCES

Lack of funding, capacity and technical expertise to conduct in-house research.

Community partners more often than not are over capacity and under-resourced, making it difficult to find the bandwidth to participate in research projects—especially if they are uncompensated. Furthermore, grant writing and even joining research contracts is complex and time-consuming. These barriers can prevent community partners from participating in potential research partnerships altogether. Depending on the type of research, specialized and technical skill sets or tools may be required for which community partners do not currently have capacity or technical expertise. This barrier can also prevent community partners from being eligible to apply for certain types of research funding.

Community partners who do regularly conduct research are often better qualified to conduct in-house research than universities or other research institutions because they have a deeper understanding of the racial equity implications, the cultural context and relationships with the impacted communities. However, community partners are often overlooked in funding opportunities in favor of research institutions, yet are still asked to participate unpaid on the project advisory committees.

- **Tie research needs to specific policy needs and platforms,**[52] **community priorities, and your organization's theory of change** in conversations with research funders. Begin by fostering conversations with other community partners, residents and other stakeholders to understand their research needs.

- **Advocate for research skill development as a form of capacity building** in conversations with funders.

- **Identify your organization's gaps in research skill sets** and seek research partners who can provide complementary research skills and tools.

- **Request assistance from research institutions and researchers** to advise the development of their in-house research, provide feedback or specific technical expertise.

- **Request training, capacity building and technical assistance from researchers and their institutions to develop the research skills, methodologies and tools they are currently lacking,** in order to create self-sufficiency for future research projects.

- **Consider hiring researchers or Ph.D. candidates from underrepresented backgrounds** who hold specific expertise or skill sets related to the research project.

- **Resources and examples from the Community Tool Box**[53] provide guidance for applying for grants, conducting interviews and focus groups, community needs assessments and other relevant research activities.

COMMUNITY PARTNER CHALLENGE 2

BEST PRACTICES AND RESOURCES

Unequal power dynamics between researchers and community partners.

Researchers often hold disproportionate power regarding funding, research design, and decision-making, as explained in the previous section. These dynamics devalue the role and importance of community partners in research. While the responsibility to address these issues lies with researchers and their institutions, community partners need to recognize these inequitable dynamics, call them out, and offer appropriate solutions. While many researchers are actively shifting this paradigm of unequal power dynamics. It's critical to highlight good examples, set a high bar, and ensure that this becomes a standard practice.

Project design may leave community partners or advisory committee members without the decision-making authority to meaningfully steer the research towards more equitable practices and outcomes. Yet they hold critical knowledge and insights, and community partners must insist that their perspectives serve as accountability checkpoints throughout the research process. It is important to make it known to the researchers from the beginning that this is how you will approach the research process.

- Keep researchers accountable to conducting equitable, partnership based research by:
  - Requiring credit, acknowledgment, and compensation for your organization's participation. Ideally this is in the form of being listed as co-investigators/authors as opposed to just a one-off stipend. If needed, structure the partnership in a way that is not administratively burdensome (e.g. being listed as a subcontractor instead of a formal partner to avoid additional reporting).
  - If compensation is not possible, pursuing replacements such as researchers contributing their time and expertise to another project or providing a community partner with training or new skills.
  - Requiring transparent and democratic decision-making processes.
  - Requiring that researchers contract with local businesses (e.g. for catering a community engagement event).
  - Request training from researchers or other relevant partners to build skill sets like GIS mapping or data visualization.
  - Develop a Memorandum of Understanding that clearly outlines responsibilities and expectations.
  - Identify extractive or culturally insensitive practices and offer course correcting solutions.

- Get answers to questions such as:
  - How will you segment this data by race?
  - What method will you use to collect the data?
  - How will you triangulate this information? What other sources or methods will you use and compare in order to validate this work?
  - How many responses did you get and from whom?
  - What are limits to this perspective?

COMMUNITY PARTNER CHALLENGE 3	BEST PRACTICES AND RESOURCES

Lack of coordination and collaboration with researchers and other community partners.

Out of limited capacity, community partners may not regularly communicate their existing projects or research needs with others who are working on similar topics. This can lead to duplication of efforts and other inefficiencies.

Many researchers are indeed conducting cutting-edge, equitable, partnership-based research. Community partners who have positive experiences with certain researchers or institutions can play an important role in leveraging these partnerships by uplifting good examples and amplifying their impact.

- **Keep researchers and other community partners in the loop about your upcoming needs and projects to coordinate around potential collaboration** and partnership opportunities. Seek out fellow researchers who may hold specific skill sets that would complement your work.

  - For example, the Asian Pacific Environmental Network and The Greenlining Institute coordinated their climate resilience research[54] to complement one another.

- **Coordinate with other community partners** about their experiences, best practices, challenges and lessons learned regarding research and partnership.

- **Collaborate in research dissemination** to ensure that the findings get back to the community.

- **Consider writing letters of support for good research partners** when appropriate that can be included in grant proposals and tenure files.

EXAMPLE OF A COMMUNITY PARTNER-RESEARCHER COLLABORATION

The Greenlining Institute is partnering with researchers at the University of Oregon on a project examining equity requirements in shared mobility programs. Before approaching Greenlining with a potential research project, the University of Oregon researchers had already built a trusting relationship with Greenlining staff over the years; we regularly provided each other with updates, and uplifted each others' work. When a new research funding opportunity arose, the two parties worked to identify alignment in their existing work, pinpoint complementary skill sets and designate tasks accordingly. This was possible because the researchers were open to sharing power and financial resources with the community partners and advisory committee members. The partnership began by adapting the initial scope of the work to co-create one that reflected Greenlining's research priorities and aligned work. Additionally, because Greenlining made the case for how our existing work would be a value add, we were able to successfully advocate for a larger role and responsibilities in this project.

OPPORTUNITIES

The information below is also summarized from the Strategic Growth Council's 2019 Climate Change Research Symposium report[55] and outlines various opportunities, such as the strengths and skills that community partners can bring to the table, and examples of community-identified research needs and potential partnership approaches. The list of examples below is only a starting point and is by no means exhaustive nor applicable in every community. Research funders, institutions and individual researchers should foster their own conversations similar to those at the Strategic Growth Council Climate Change Research Symposium, where community partners can generate their own list of opportunities regarding research strengths, skill sets, needs and partnership models.

EXAMPLES OF COMMUNITY STRENGTHS, CAPACITIES AND SKILL SETS IN A RESEARCH PARTNERSHIP

- Local and indigenous experiential knowledge of history, best practices and challenges within a community.

- Deep understanding of the community's strengths, assets, gaps and current and future priorities.

- Strong partnerships and relationships to convene, mobilize, engage and build grassroots political power.

- Culturally diverse networks of individuals, coalitions and community leaders to disseminate and implement information, findings and recommendations.

- Youth leadership and engagement opportunities. See this example of youth engagement principles[56] and a case study.[57]

- Innovative, culturally-informed research that can lead to direct policy outcomes.

- The development of culturally competent surveys, interviews and other forms of data collection.

- Technology development hubs.

- Piloting of inclusive and culturally relevant community engagement, marketing, and communications and inclusion models. For example, the Harnessing Strategic Communications to Advance Civic Engagement[58] report.

- Small-scale strategies that can serve as models for others to scale and replicate, such as Green Raiteros.[59]

- The many ways that community partners can provide points of reflection and accountability throughout the research process.

EXAMPLES OF COMMUNITY-IDENTIFIED PRIORITIES AND RESEARCH NEEDS

- Decision-making tools to determine healthy, sustainable and equitable solutions that meet communities' needs. For example, see the Mobility Equity Framework.[60]

- How to further include social science with a racial equity lens in research. For example, how behavior change occurs for consumers or renters, and how this varies across demographics.

- How to invest in communities without leading to displacement.

- How to successfully shift to a collective culture (e.g. shifting culture of car ownership to public transit versus individual solutions like electric cars).

- Economic analyses that center racial equity.

EXAMPLES OF RESEARCHER-COMMUNITY PARTNERSHIP APPROACHES

- Leverage funding opportunities by connecting research to direct action.

- Connect existing research to policy and funding mechanisms over a period of time. See these case study examples[61] of using community-based participatory research to effect policy change.

- Community partners can disseminate the research findings in an accessible manner.

- Construct research questions and scope together (specific instructions on how to do this in Step 5.)

- Partner on advocacy to carry out the solutions based on research findings. Examples include: A Preliminary Environmental Equity Assessment of California's Cap-And-Trade Program[62] and the Urban Displacement Project.[63]

- Community stakeholders can come to researchers with questions/problems they want addressed.

- Researchers can provide community stakeholders with advice on how to develop a valid study.

- Research-community partnerships should consider piloting new projects in disadvantaged communities first, which can then serve as models to scale from there. By designing projects that can work in the most disadvantaged areas, this increases the likelihood that they will be successful everywhere. This is especially important in rural and tribal communities whose needs are often left out of research and pilots. For example, a group of San Joaquin Valley[64] based organizations advocated for community-driven clean energy pilot projects, which have provided a roadmap for other communities.

3. INTERNAL EQUITY ASSESSMENT OF YOUR RESEARCH INSTITUTION, DEPARTMENT OR TEAM

This internal equity assessment serves as a thought exercise for researchers to gain a baseline understanding of their individual and organizational preparedness to conduct equity-based research. It is framed generally as "equity" as opposed to just "racial equity" to be applicable to assessing a wider definition of equity (e.g. gender equity, disability equity), and users may adapt it to be most relevant to their needs. Ideally, researchers should hire and fairly compensate outside experts to conduct an equity assessment of their institution. This is a standard practice that all organizations should invest in—for example, Greenlining hired a third party to conduct an equity audit of our organizational practices and to provide recommendations to move forward. A third party would be able to better execute an unbiased, accurate equity assessment and make more robust recommendations; we recognize that the sort of self-assessment we lay out below can be extremely

challenging for individuals or organizations to conduct themselves. However, if researchers are unable to pay an outside organization, then these sample equity self-assessment questions aim to provide a space for researchers to reflect on their individual behaviors, organizational culture and research strategies. The reflection portion aims to identify gaps and potential next steps to address those gaps. The questions below are sourced from Kapwa Consulting's[65] equity self-assessment, the Salzburg Brave Spaces Tool,[66] the Strategic Growth Council's 2019 Climate Change Research Symposium report,[67] Greenlining resources and reviewers of this report.

This equity-self assessment should be conducted with the involvement of all parties involved, including graduate students, interns or other relevant staff members.

ASSESSMENT

Individual

1 What is your understanding of institutional racism, power and systems change?

2 What is your understanding of how racism has influenced the foundation of the subject that you are studying?

3 What is your understanding of how racism has been propagated through research and academia?

4 In what areas of life do you hold privilege, and how might this impact your research?

5 What kinds of implicit bias do you hold? If unsure, take a Project Implicit test[68] to identify your implicit biases around gender, race, transgender, weight, age, ability and other demographics.

6 Which languages do you use when engaging with communities? Do you simplify technical language and jargon?

7 What is your organization's shared definition of equity, and which demographics are your targets?

8 Have you advocated for more equitable research practices within your organization?

Team or Organization

1 Conduct a demographic assessment of the researchers of your research institution, department, or team by race, gender, sexual orientation, age, income, cultural heritage, background/upbringing, educational attainment and ability.

- Which demographics sit in the positions of decision-making power?

- How are the perspectives of women, people of color, LGBTQ+ folks, people with disabilities, and other underrepresented groups heard, valued, and uplifted?

2 What is your team or organization's understanding of institutional racism, power and systems change?

3 What is your team or organization's understanding of how racism has influenced the foundation of the subject that you are studying?

4 What is your team or organization's understanding of how racism has been propagated through research and academia?

5 Does your organization's management and leadership support the use of an equity lens? If so, how?

6 What is your organization's shared definition of equity, and which demographics are your targets?

7 What is the unique role of your organization in the larger equity field, and how can your position advance, rather than duplicate, the work of others?

8 Who generally funds your organization's research and how does this influence your ability to advance equity?

9 Does your team have existing relationships with community partners? If so, which partners and whom do they represent?

10 Does your team have trust with the community?

11 Has your team developed a long term community partnership, or have your interactions with the community relied on the transactional "parachute researcher"[69] model?

12 Does your organization share decision-making power and resources with advisory committee members and community partners?

13 Has previous research or projects from your organization generated burdens (e.g. time/capacity, displacement, or increased costs), either directly or indirectly to marginalized populations?

14 Does your team or organization sufficiently budget for engagement activities, such as ability to pay interviewees for their time and expertise?

15 In seeking data, what sources of data are considered legitimate, and by whom? How was the data collection methodology derived? Are there credible sources that are being suppressed or dismissed because the power structure has deemed them unreliable?

REFLECTION & NEXT STEPS

Based on your responses to the questions above:

1 What are the top challenges or questions that you will face in conducting your research in an equitable way?

2 What are the top strengths and capacities that will help foster equity throughout your research?

3 What actions do you or your organization (internally and/or externally) need to take before beginning equity research?

- What actions can be more easily done in the short term? (e.g. hire more diverse candidates, undergo an equity training, apply a diversity, equity and inclusion lens[70] to your organization's mission and practices, dedicate portions of projects to equity etc.)

- What actions will require more long-term dedicated work from those who hold the most power? (e.g. improve diversity of the board, fund researchers and CBOs to work on equity projects.)

4 When forming partnerships and conducting research, which equitable practices from the section above can you incorporate into your work, and how?

5 In the context of an organization with significant equity shortcomings, is it still possible for you or your team to still conduct equity research in a meaningful way?

6 How must you show up with different stakeholders for this project to be successful?

7 What is uncomfortable for you?

8 What must you still learn how to do?

9 How will you work on this?

4. PARTNER WITH AND PAY A COMMUNITY PARTNER

The purpose of forming a partnership with an equity organization or community-based organization is to foster a mutually beneficial research relationship and to co-create the scope and purpose of the research. The structure of this partnership must move beyond research institutions seeking legitimacy, and instead should be centered on shared decision-making and research design. As part of an equitable, paid partnership we recommend the following:

- Develop a Memorandum of Understanding[71] or a Collaborative Stakeholder Structure[72] that describes the governance, organization and financial relationships of all of the partners involved in the project. For example, this should describe the roles and responsibilities, transparent decision-making processes, the ownership and dissemination of the research, and the process for including community-based organizations in decision-making. Another example is the Community Partnership Guide for Engaging with Academic Researchers.[73]

- Commit to staying in partnership through the entire research process, from project scoping to the dissemination of findings.

5. CO-CREATE YOUR RESEARCH QUESTIONS AND SCOPE OF WORK

The purpose of this worksheet is for the research team to think through how equity will show up from start to finish throughout the research project. Like the internal equity assessment, this worksheet is framed generally as "equity" and opposed to just "racial equity" in order to be broadly applicable. These questions may not be applicable to every project, and by no means is this an exhaustive list. Community partners should be empowered to add additional worksheet questions here. The answers of this worksheet should form the basis of your research's scope of work.

This worksheet must be filled out and co-created in a paid partnership with the community partner.

EMBED EQUITY IN THE MISSION, VISION, VALUES AND RESEARCH QUESTIONS

Policies and programs should explicitly state a commitment to equity and specifically identify the populations they seek to benefit. Write out the desired equity mission, vision and values specific to this research project.

1 Define how "equity" applies in the context of your project. Is this racial equity, social equity or another form of equity? Which specific populations are you targeting with this work and how will you identify them? For an example, see Greenlining's definition of racial equity below.

....

....

....

2 Describe the end vision of what you would like this project to achieve or contribute to. Ideally this vision expands beyond just the direct benefits of your specific topic area and intersects with other needed co-benefits such as health, economic opportunities, and community power and engagement.
Example: "We envision a world where low-income people of color enjoy pollution-free, prosperous and empowered communities."

....

....

....

3 Describe how equity will be centered in the mission/goals of this project. This should be a general statement of how you will achieve the vision outlined above. Example: "Our research will support policy change that will advance the health and economic well-being of low-income communities of color."

....

....

....

4 Write out the values of the research project. These values should describe how you will behave throughout this process. As a starting point, you may refer to the Greenlining values below that underpin our theory of change and begin to lay the groundwork for how to embed racial equity into research methodologies and processes. These values may not be applicable to every single topic area—researchers should refine and retool these values to fit the specific scope. These values should inform the way that practitioners exemplify their work. Keep these values in mind while completing each stage of the research, because this process is not only about the work itself, but how you do it.

....

....

....

EXAMPLE EQUITY VALUES

Racial Equity: Transforming the behaviors, institutions and systems that disproportionately harm people of color. Racial equity means increasing access to power, redistributing and providing additional resources, and eliminating barriers to opportunity, in order to empower low-income communities of color to thrive and reach full potential. Racial equity impacts intersect across gender, sexual orientation, ethnicity, immigration status and other identities.

Acknowledge Harm & Reconciliation: The recognition of past and present harms directed at people of color and other marginalized groups. Those institutions and individuals who have caused the harm must take responsibility, rebuild trust, and co-create a path forward towards equitable reconciliation.

Community Self-Determination: The empowerment of marginalized communities to meaningfully participate in decision-making to address their priorities, needs and concerns.

Community and Individual Resilience: The capacity for individuals, households, communities and regions to adapt to changing and disruptive conditions while maintaining and regaining functionality and vitality in the face of stress or disturbance. It is the capacity of a system to deal with change positively and to use shocks and disturbances to spur renewal and innovative thinking. The goal is to be both strong and flexible—not only able to bounce back but to bounce forward.

Lasting Partnerships: Long-lasting and meaningful partnerships between residents and stakeholders of a community are key to building trust and power together. These partnerships are built on the foundation of welcoming environments, trusting relationships, overcoming differences of opinions, recognizing each partners' equal expertise and ownership, and increasing input from diverse perspectives.

Systems Change: The dismantling of the root causes of racial injustice such as the systems of White supremacy and unchecked capitalism and the rebuilding of a world that is equitable, cooperative, regenerative, democratic, non-exploitative, and inclusive—all while placing community at the center.

5 Using your answers from the four questions above, begin to describe how equity will show up in your specific research questions, with particular attention paid to developing qualitative research questions. See examples here.[74]

....

....

....

EMBED EQUITY IN THE PROCESS

The processes of the project should deeply engage community partners and members so as to learn about their priorities, needs and challenges. This should inform the development and implementation of the project.

Engagement

1 How will you design a process to collaborate with the target populations that engages and empowers them in a meaningful, personable, authentic and culturally appropriate manner?

....

....

....

2 How will you design a process that is accessible to people who do not speak English, lack access to technology, or who have disabilities and need accommodations?

....

....

....

3 How will you build in flexibility within your project timelines based on community needs and changing conditions?

....

....

....

4 What best practices for community engagement will you implement?

....

....

....

5 How will you build relationships with key stakeholders? (e.g. listening tours, getting to know each other over coffee, etc.)

....

....

....

6 How will you maintain relationships with key stakeholders? (e.g. monthly check-ins)

....

....

....

7 How will you share as much decision-making power as feasible?

....

....

....

Data Analysis

1 How will you work to bring an equity lens to data analysis?[75] (e.g. disaggregating data by demographics and other identities, identifying and confronting your implicit biases and assumptions, or exposing root causes or social determinants.)

....

....

....

2 How will you involve community partners in the data selection, collection and review of the data?

....

....

....

3 How will you collect qualitative data through your engagement process?

....

....

....

Assured Benefits

1 In addition to merely paying your community partners, what mechanisms will you use to assure additional benefits to the target populations? (e.g. providing technical assistance or capacity building; providing jobs, extra financial resources or investments)

....

....

....

2 Your research project *itself* can be a pipeline to employment and economic opportunity. Consider how you might be able to include underrepresented community members as part of your research team and provide them with professional development opportunities.

....

....

....

Disproportionate Impacts

1 Will the results of your research generate burdens (e.g. time/capacity, displacement and increased costs), either directly or indirectly to target populations? If yes, how will you address and mitigate them?

....

....

....

Capacity Building

1 How will your research provide for local capacity building? (e.g. through funding, expanded knowledge base, provide support or mentorship for underrepresented students and researchers, or building community partners' capacity to independently carry out research in the future.)

....

....

....

Systems Change

1 As researchers with institutional power, how will your work challenge or shift power structures that have led to inequitable research processes? (e.g. encouraging community partners to co-lead projects, hiring a diverse team the reflect the target community)

....

....

....

2 How can you leverage your positionality to change how equity is incorporated into the entire research field? (e.g. encouraging research funders to require equitable community partnerships in their grant guidelines, sharing your learnings with other researchers, challenging your institution to standardize equitable approaches, mentoring scholars whose lived experiences inform their innovative approaches.)

....

....

....

Relationship Building

1 How will your research foster the building or strengthening of effective, long-term relationships and trust between researchers, diverse communities and government?

....

....

....

2 How will your research align with and support existing community priorities, creating an opportunity to leverage resources and build collaborative partnerships?your learnings with other researchers, challenging your institution to standardize equitable approaches, mentoring scholars whose lived experiences inform their innovative approaches.)

....

....

....

ENSURE EQUITY OUTCOMES

The processes of the project should deeply engage community partners and members so as to learn about their priorities, needs and challenges. This should inform the development and implementation of the project.

Shared and Multiple Benefits

1 What are the intended direct and measurable outcomes of this research? These outcomes are not just related to the end result of the study, but also the outcomes throughout the process of how the research is conducted.

....
....
....

2 How are you including health, economic or other objectives in your research?

....
....
....

3 How can the impact of your research decrease inequality in income or wealth?

....
....
....

4 How can the benefits of your research be targeted in progressive ways to reduce historical or current disparities?

....
....
....

5 How will your research efforts support economic opportunities for your target communities through jobs, training, workforce development or contracting opportunities (outside of your research team)?

....
....
....

6 How will your research support internal diversity, equity and inclusion workforce opportunities within your organization?

....
....
....

7 How will you acknowledge the contributions of your community partners, continue to uplift their work, and connect them to new opportunities?

....
....
....

8 How do you expect the research to be used? For policy change, or just to learn more about a topic?

....
....
....

MEASURE & ANALYZE FOR EQUITY

The project should regularly evaluate the equity successes and challenges to improve the effort going forward.
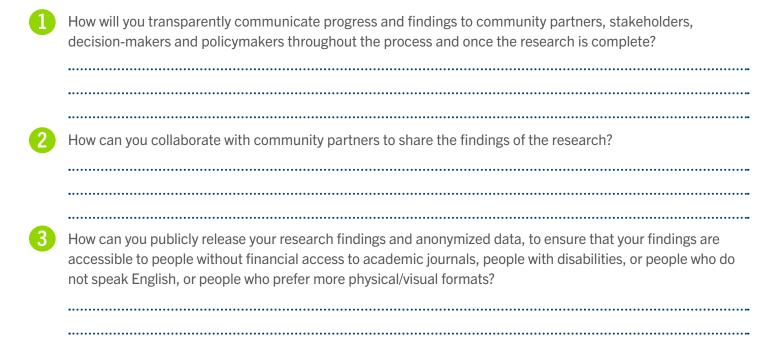
Accountability

1 How will you evaluate the future equity impact of your research? Who is involved in the equity metric selection, data collection and review?

....
....
....

2 How will you debrief with community partners at the end of the project to understand what went well and what could have been improved?

....
....
....

3 How will your research have appropriate accountability mechanisms to ensure that the target communities will equitably benefit and not be disproportionately harmed?

....
....
....

4 How can you ensure that your research is actually put into practice and will benefit the impacted communities?

....
....
....

5 How will you integrate accountability checkpoints to measure outcomes throughout the research project?

....
....
....

6 How will you course correct and make changes if the equity goals are not achieved?

....
....
....

Capacity Building

1 How will you measure whether the project has increased your community partners or equity advisory committee's understanding of the research topic and process?

....

....

....

2 How will you measure the increased community connectivity to resources, networks or access to key decision makers at the local, regional, state or national level?

....

....

....

Communication

1 How will you transparently communicate progress and findings to community partners, stakeholders, decision-makers and policymakers throughout the process and once the research is complete?

....

....

....

2 How can you collaborate with community partners to share the findings of the research?

....

....

....

3 How can you publicly release your research findings and anonymized data, to ensure that your findings are accessible to people without financial access to academic journals, people with disabilities, or people who do not speak English, or people who prefer more physical/visual formats?

....

....

....

CONCLUSION

Dismantling White supremacy and challenging the status quo in the research field requires a dedication to reimagining what the research field looks like and how it operates. This looks like deeply examining power and decision-making structures, the demographics of your team, leadership and funding sources. Pushing the envelope means pushing yourself, your team and your institution to deeply scrutinize and call out existing practices that are not equitable and to identify solutions. This is an uncomfortable process, but these hard, uncomfortable conversations plant the seeds for growth and the advancement of racial equity.

Transformative change requires researchers and research institutions to not just share power, but to be willing to give up some power and redistribute resources. Giving up power means valuing community partners as equal partners with real decision-making power and not just a token "equity stamp of approval." Redistributing resources means fairly compensating community members and partners for their time and expertise.

Research must be utilized for purposes beyond just studying for the sake of publishing, and instead as a form of community development[76] that catalyzes long-term change well beyond any grant period or publishing date. Researchers, research institutions and research funders must take a step farther to commit themselves as key players in advancing systemic change and as allies in the fight for racial equity. Research must first be grounded in equitable relationships and power dynamics with community partners, in order for research to fulfill its potential to advance racial equity.

ABOUT THE GREENLINING INSTITUTE

Founded in 1993, The Greenlining Institute envisions a nation where communities of color thrive and race is never a barrier to economic opportunity. Because people of color will be the majority of our population by 2044, America will prosper only if communities of color prosper. Greenlining advances economic opportunity and empowerment for people of color through advocacy, community and coalition building, research and leadership development. We work on a variety of major policy issues, from the economy to environmental policy, civic engagement and many others, because economic opportunity doesn't operate in a vacuum. Rather than seeing these issues as being in separate silos, Greenlining views them as interconnected threads in a web of opportunity.

ABOUT THE AUTHOR

Hana Creger, Environmental Equity Program Manager

Hana works on the development and implementation of policies leading to clean transportation and mobility investments that will benefit low-income communities of color. She was the lead author of the Mobility Equity Framework, a tool that can be used to maximize equity outcomes and community engagement in transportation planning and decision-making. Hana was also the lead author of Autonomous Vehicle Heaven or Hell? Creating a Transportation Revolution that Benefits All, a report outlining policy recommendations to ensure mobility, health and economic benefits to marginalized communities. She serves on a number of advisory committees for cities, agencies, universities and nonprofits for projects relating to shared mobility and autonomous vehicles. Hana holds a B.A. in sustainability from San Diego State University.

EDITORIAL

Bruce Mirken, Media Relations Director, The Greenlining Institute
Ashley Myrriah Johnson, Digital Strategy Manager, The Greenlining Institute
Nadia Kim, Communication Coordinator, The Greenlining Institute

PHOTOGRAPHY

Cover	Pages 2, 8, 27, 30, 31	Page 6
WOCinTech Chat	**JJ Harris**	**Eugenics Society Exhibit (1930s). Image from Wellcome Library.**

DESIGN

Yousif Shakir, Graphic Designer and Illustrator, Oakland

REFERENCES

1. *Garcia, A., et al. (2012). Community-Based Participatory Research: A Strategy for Building Healthy Communities and Promoting Health through Policy Change.* PolicyLink.
Retrieved from https://www.policylink.org/sites/default/files/CBPR.pdf on August 7, 2020.

2. *Centers for Disease Control and Prevention. (2020). Tuskegee Study.*
Retrieved from https://www.cdc.gov/tuskegee/timeline.html on August 21, 2020.

3. *Johnson, A., et al. 2020. Syllabus: A History of Anti-Black Racism in Medicine. Black Perspectives.*
Retrieved from https://www.aaihs.org/syllabus-a-history-of-anti-black-racism-in-medicine/ on August 21, 2020.

4. *Newkirk, V. (2016) A Generation of Bad Blood. The Atlantic.*
Retrieved from https://www.theatlantic.com/politics/archive/2016/06/tuskegee-study-medical-distrust-research/487439/ on August 6, 2020.

5. *Lumen Learning. (n.d.) Eugenics in the United States.*
Retrieved from https://courses.lumenlearning.com/culturalanthropology/chapter/eugenics-in-the-united-states/ on August 6, 2020.

6. *Lumen Learning. (n.d.) Eugenics in the United States.*
Retrieved from https://courses.lumenlearning.com/culturalanthropology/chapter/eugenics-in-the-united-states/ on August 6, 2020.

7. *Sklar, D. (2016). American Eugenics and German Nazism. Jewish Currents.*
Retrieved from https://jewishcurrents.org/american-eugenics-and-german-nazism/, on August 22, 2020.

8. *Scientific American. (2018). Clinical Trials Have Far Too Little Racial and Ethnic Diversity.*
Retrieved from https://www.scientificamerican.com/article/clinical-trials-have-far-too-little-racial-and-ethnic-diversity/ on August 6 2020.

9. *Eschner, K. (2020). Collecting Missing Demographic Data is the First Step to Fighting Racism in Healthcare. Popular Science.*
Retrieved from https://www.popsci.com/story/health/racism-data-gaps-public-health/ on August 6, 2020.

10. *Crimp, D. (2011), Before Occupy: How AIDS Activists Seized Control of the FDA in 1988. The Atlantic.*
Retrieved from https://www.theatlantic.com/health/archive/2011/12/before-occupy-how-aids-activists-seized-control-of-the-fda-in-1988/249302/, on August 6, 2020.

11. *Fabbri, A., et al. (2018). The Influence of Industry Sponsorship on the Research Agenda: A Scoping Review. National Center for Biotechnology Information.*
Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6187765/ on August 6, 2020.

12. *Bernstein, J. (2020). The Built-In Biases in Economics that Feed Systemic Racism. The Washington Post.*
Retrieved from https://www.washingtonpost.com/outlook/2020/07/07/built-in-biases-economics-that-sustain-system-ic-racism/ on August 6, 2020.

13. *California Strategic Growth Council. (2019). 2019 Climate Change Research Symposium Report*.
Retrieved from https://sgc.ca.gov/programs/climate-research/docs/20200422-Climate_Change_Symposium_Report.pdf, on July 15, 2020.

14. *Raval, Amee. (2019). Mapping Resilience. APEN.*
Retrieved from https://apen4ej.org/wp-content/uploads/2019/10/APEN-Mapping_Resilience-Report.pdf,
on July 28, 2020.

15. *National Science Foundation. (2020). Civic Innovation Challenge.*
Retrieved from https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=505728 on July 28, 2020.

16. *Cuyahoga Arts and Culture. (2019). White Dominant Culture and Something Difference.*
Retrieved from https://www.cacgrants.org/assets/ce/Documents/2019/WhiteDominantCulture.pdf
on August 10, 2020.

17. *Bero, L. (2019). When Big Companies Fund Academic Research, the Truth Often Comes Last.The Conversation*.
Retrieved from https://theconversation.com/when-big-companies-fund-academic-research-the-truth-often-comes-
last-119164, on August 8, 2020.

18. *Fabbri, A., et al. (2018). The Influence of Industry Sponsorship on the Research Agenda: A Scoping Review. National Center
for Biotechnology Information.*
Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6187765/ on August 6, 2020.

19. *Levinthal, D. (2015). Spreading the Free-Market Gospel. The Atlantic.*
Retrieved from https://www.theatlantic.com/education/archive/2015/10/spreading-the-free-market-gospel/413239/,
on August 10, 2020.

20. *UCLA Luskin Center for Innovation. What We Do.*
Retrieved from https://innovation.luskin.ucla.edu/what-we-do/, on August 8, 2020.

21. *Mass Communication Theory. (2011). Writing Good Qualitative Research Questions.*
Retrieved from https://masscommtheory.com/2011/05/05/writing-good-qualitative-research-questions/,
on August 12, 2020.

22. *Andrews, K., et al. (2019). How to Embed a Racial and Ethnic Equity Perspectives in Research. Child Trends.*
Retrieved from https://www.childtrends.org/wp-content/uploads/2019/09/RacialEthnicEquityPerspective_ChildTrends_
October2019.pdf, on August 17, 2020.

23. *Liboiron, M. (2018). Community Peer Review: A Method to Bring Consent and Self-Determination into the Sciences. Pre-
prints.*Retrieved from www.preprints.org/manuscript/201806.0104/v1 on August 11, 2020.

24. *Goode, R., et al. (2019) Summary Report from Tribal and Indigenous Communities within California.
California Energy Commission.*
Retrieved from https://www.energy.ca.gov/sites/default/files/2019-11/Statewide_Reports-SUM-CCCA4-2018-010_Tribal-
CommunitySummary_ADA.pdf, on August 11, 2020.

25. *DataVizDC. (2020). How to Not Use Data Like a Racist. YouTube.*
Retrieved from https://www.youtube.com/watch?v=1ymCmauANUc, on August 11, 2020.

26. *Racial Equity Tools.(n.d.) Data Collection Methods.*
Retrieved from https://www.racialequitytools.org/evaluate/collecting-data/data-collection-methods,
on August 19, 2020.

27. *Andrews, K., et al. (2019). How to Embed a Racial and Ethnic Equity Perspectives in Research. Child Trends.*
Retrieved from https://www.childtrends.org/wp-content/uploads/2019/09/RacialEthnicEquityPerspective_ChildTrends_
October2019.pdf, on August 17, 2020.

28. *Davis, L. and Fry, R. (2019). College Faculty Have Become More Racially and Ethnically Diverse, But Remain Far Less So Than Students. Pew Research.*
Retrieved from https://www.pewresearch.org/fact-tank/2019/07/31/us-college-faculty-student-diversity/, on August 19, 2020.

29. *Moreno, J., et al. (n.d.). The Revolving Door for Underrepresented Minority Faculty in Higher Education. Campus Diversity Initiative.* Retrieved from https://www.slcc.edu/inclusivity/docs/the-revolving-door-for-underrepresented-minority-faculty-in-higher-education.pdf, on August 19, 2020.

30. *Ginther, D., et al. (2011). Race, Ethnicity, and NIH Research Awards. National Institutes of Health.*
Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3412416/, on August 8. 2020.

31. *Finkelstein, M. et al. (2017). Taking the Measure of Faculty Diversity. TIAA Institute.*
Retrieving from https://www.tiaainstitute.org/sites/default/files/presentations/2017-02/taking_the_measure_of_faculty_diversity.pdf, from August 4, 2020.

32. *Harris, A. (2019). The Death of an Adjunct. The Atlantic.*
Retrieved from https://www.theatlantic.com/education/archive/2019/04/adjunct-professors-higher-education-thea-hunter/586168/, from August 17, 2020.

33. *Trejo, J. (2017). A Reflection on Faculty Diversity in the 21st Century. National Institutes of Health.*
Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5662248/, on August 2, 2020.

34. *College and Research Libraries News. (n.d.). Library Publishing and Diversity Values.*
Retrieved from https://crln.acrl.org/index.php/crlnews/article/view/9446/10680, on August 14, 2020.

35. *Goode, R., et al. (2019) Summary Report from Tribal and Indigenous Communities within California. California Energy Commission.*
Retrieved from https://www.energy.ca.gov/sites/default/files/2019-11/Statewide_Reports-SUM-CCCA4-2018-010_Tribal-CommunitySummary_ADA.pdf, on August 11, 2020.

36. *Karuk-UC Berkeley Collaborative. (n.d.). A Guiding Policy for Collaborative Projects and Research Initiatives with the Karuk Tribe.* Retrieved from https://nature.berkeley.edu/karuk-collaborative/?page_id=165, on August 22, 2020.

37. *The Climate Science Alliance. (n.d.). Connecting Wildlands and Communities.*
Retrieved from https://www.climatesciencealliance.org/cwc-about, on August 11, 2020.

38. *Indigenous Peoples Council on Biocolonialism. (n.d.) Indigenous Research Protection Act.*
Retrieved from http://www.ipcb.org/publications/policy/files/irpa.html, on August 12, 2020.

39. *Ghanbarpour, S. (2018). Applying a Language Justice Approach to Participatory and Culturally Responsive Evaluation.*
Retrieved from http://comm.eval.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=716385cd-c94f-f7c8-1003-8cb7532ca631&forceDialog=0, on August 13, 2020.

40. *Smith, R. (2006). The Highlight Profitable but Unethical Business of Publishing Medical Research.*
Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1557876/, on August 14, 2020.

41. *Director of Open Access Journals. (n.d.)*
Retrieved from https://doaj.org/, from August 14, 2020.

42. *University of California (n.d.). eScholarship Publishing.*
Retrieved from https://osc.universityofcalifornia.edu/for-authors/open-access-publishing-at-uc/escholarship-publishing/,
on August 2, 2020.

43. *California Strategic Growth Council. (n.d.). Climate Change Research Program.*
Retrieved from https://sgc.ca.gov/programs/climate-research/docs/20191115-CCRP_Round_3_Solicitation.pdf,
August 3, 2020.

44. *California Strategic Growth Council. (n.d.). Climate Change Research Grant Program.*
Retrieved from https://sgc.ca.gov/meetings/council/2019/docs/20190827-Item7_Staff_Report-CCR.pdf
on August 6, 2020.

45. *California Air Resources Board. (n.d.). Community Inclusion Guidance.*
Retrieved from https://ww3.arb.ca.gov/msprog/step/step_community_inclusion_guidance.pdf, on August 16, 2020.

46. *Clean Mobility Options. (n.d.). Clean Mobility Options Voucher Pilot Program.*
Retrieved from https://www.cleanmobilityoptions.org/, on August 2, 2020.

47. *Robert Wood Johnson Foundation. (n.d.). RWJF Lobbying Guidelines: Policy Research and Technical Assistance.*
Retrieved from https://anr.rwjf.org/templates/external/RWJF%20Lobbying%20Guidelines-Policy%20Research.pdf,
on August 2, 2020.

48. *American Evaluation Association. (2018). Applying a Language Justice Approach to Participatory and Culturally Responsive Evaluation.*
Retrieved from http://comm.eval.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=716385cd-c94f-f7c8-1003-8cb7532ca631&forceDialog=0#:~:text=Language%20justice%20is%20an%20alternative,self%20expression%2C%20and%20equal%20participation., on August 12, 2020.

49. *California Natural Resources Agency. (2020). Online Environmental Engagement - Building out Skills Together.*
Retrieved from https://resources.ca.gov/Newsroom/Page-Content/News-List/Online-Environmental-Engagement,
on August 2, 2020.

50. *Garcia, A., et al. (2012). Community-Based Participatory Research: A Strategy for Building Healthy Communities and Promoting Health through Policy Change.* PolicyLink.
Retrieved from https://www.policylink.org/sites/default/files/CBPR.pdf on August 7, 2020.

51. *YPAR Hub. (n.d.). Youth Participatory Action Research.*
Retrieved from http://yparhub.berkeley.edu/learn-about-ypar/, on August 11, 2020.

52. *Community Toolbox. (n.d.). Section 10 Conducting Research to Influence Policy.*
Retrieved from https://ctb.ku.edu/en/table-of-contents/advocacy/advocacy-research/influence-policy/main
on August 2020.

53. *Community Toolbox. (n.d.). Toolkits.*
Retrieved from https://ctb.ku.edu/en/toolkits on August 10, 2020.

54. *APEN. (n.d.). Mapping Resilience.*
Retrieved from https://apen4ej.org/mapping-resilience/ on August 2, 2020.

55. *California Strategic Growth Council. (2019). 2019 Climate Change Research Symposium Report.*
Retrieved from https://sgc.ca.gov/programs/climate-research/docs/20200422-Climate_Change_Symposium_Report.pdf,
on July 15, 2020.

56. *Hawke, L., et al. (2018). Engaging Youth in Research Planning, Design and Execution: Practice Recommendations for Researchers. Wiley Online Library.*
Retrieved from https://onlinelibrary.wiley.com/doi/full/10.1111/hex.12795, on August 13, 2020.

57. *Iwasaki, Y., et al. (2015). Reflections on the Opportunities and Challenges of Youth Engagement: Youth and Professional Perspectives. Semantic Scholar.* Retrieved from https://pdfs.semanticscholar.org/b664/a535588f9a08db0c-cd80e9c06379418632b1.pdf, on August 15, 2020.

58. *Cheng, A., et al. (2020). AAPIs Connect: Harnessing Strategic Communications to Advance Civic Engagement. AAPI Civic Engagement Fund*. Retrieved from https://aapifund.org/report/aapis-connect/, on August 14, 2020.

59. *Curry, M. (2018). Greenlining the Heart of the Central Valley. Streetsblog Cal.*
Retrieved from https://cal.streetsblog.org/2018/10/25/greening-the-heart-of-the-central-valley/, on August 2, 2020.

60. *Creger, H., et al. (2018) The Mobility Equity Framework. The Greenlining Institute.*
Retrieved from https://greenlining.org/wp-content/uploads/2019/01/MobilityEquityFramework_8.5x11_v_GLI_Print_End-notes-march-2018.pdf, on August 15, 2020.

61. *Garcia, A., et al. (2012). Community-Based Participatory Research: A Strategy for Building Healthy Communities and Promoting Health through Policy Change.* PolicyLink.
Retrieved from https://www.policylink.org/sites/default/files/CBPR.pdf on August 7, 2020.

62. *Cushing, L., et al. (2016). A Preliminary Environmental Equity Assessment Of California's Cap-and-Trade Program. PERE Publications.* Retrieved from http://dornsife.usc.edu/PERE/enviro-equity-CA-cap-trade, on August 5, 2020.

63. *Urban Displacement Project. (n.d.). What is the nature of gentrification and displacement in global cities?*
Retrieved from https://www.urbandisplacement.org/, on August 13, 2020.

64. *The Greenlining Institute. (2018). New Energy Projects to Bring Clean Indoor Air to Rural CA Homes.*
Retrieved from https://greenlining.org/press/2018/new-energy-projects-to-bring-clean-indoor-air-to-rural-ca-homes/, on August 12, 2020.

65. *Kapwa Consulting. (n.d.)*
Retrieved from https://www.kapwaconsulting.com/, on August 13, 2020.

66. *Sisk, A., et al. (2020). Confronting power and privilege for inclusive, equitable, and healthy communities. The BMJ Opinion.*
Retrieved from

67. *California Strategic Growth Council. (2019). 2019 Climate Change Research Symposium Report.*
Retrieved from https://sgc.ca.gov/programs/climate-research/docs/20200422-Climate_Change_Symposium_Report.pdf,
on July 15, 2020.

68. *Project Implicit. (2011). Harvard.*
Retrieved from https://implicit.harvard.edu/implicit/, on August 22, 2020.

69. *Aizenman, N. (2016). Scientists Say It's Time To End 'Parachute Research.'* Retrieved from

70. *Carter, C., et al. (n.d.). How to Apply a Diversity, Equity, & Inclusion Lens to Strengthen Evidence Building in the Social Sector.* Retrieved from https://static1.squarespace.com/static/58d9ba1f20099e0a03a3891d/t/5ef351ae-9cd88370a4039874/1593004462942/DEI+Evidence+Matrix+NPO-Facing+Product.pdf, on August 15, 2020.

71. *Institute of Translational Health Services. (n.d.). Community Partnership Guide for Engaging with Academic Researchers.* Retrieved from https://www.iths.org/wp-content/uploads/Community-Partnership-Guide-for-Engaging-with-Academic-Researchers-v1.0.pdf, on August 12, 2020.

72. *The Strategic Growth Council. (2019). Transformative Climate Communities Program Round 3 Program Guidelines FY 2019-2020.* Retrieved from https://www.iths.org/wp-content/uploads/Community-Partnership-Guide-for-Engaging-with-Academic-Researchers-v1.0.pdf, on August 2, 2020.

73. *Institute of Translational Health Services. (n.d.). Community Partnership Guide for Engaging with Academic Researchers.* Retrieved from https://www.iths.org/wp-content/uploads/Community-Partnership-Guide-for-Engaging-with-Academic-Researchers-v1.0.pdf, on August 12, 2020.

74. *Mass Communication Theory. (2011). Writing Good Qualitative Research Questions.* Retrieved from https://masscommtheory.com/2011/05/05/writing-good-qualitative-res, on August 16, 2020.

75. *Andrews, K., et al. (2019). How to Embed a Racial and Ethnic Equity Perspectives in Research. Child Trends.* Retrieved from https://www.childtrends.org/wp-content/uploads/2019/09/RacialEthnicEquityPerspective_ChildTrends_October2019.pdf, on August 17, 2020.

76. *Perea, Flavia. (2016). Investing in People, Advancing Equity: A New Model of Community Collaborative Research. Harvard.* Retrieved from https://scholar.harvard.edu/files/flaviaperea/files/phcm_investing_in_equity_report.pdf, on August 2, 2020.