California Climate Action Seed and Matching Grants

Request for Proposals

University of California Office of Research & Innovation
Research Grants Program Office (RGPO)

Letter of Intent Due Date (*required*):	January 17, 2023 (by 12:00 noon Pacific Time)
CA Climate Action Seed Grants Due Date:	April 6, 2023 (by 12:00 noon Pacific Time)
CA Climate Action Matching Grants Due Date:	May 4, 2023 (by 12:00 noon Pacific Time)

More information, including Frequently Asked Questions (FAQs), is available on the California Climate Action Initiative website https://uckeepresearching.org/california-climate-action/.

Tip: Section 1, "Summary of Grant Program," should be reviewed carefully to ensure appropriateness of proposed ideas and eligibility of planned collaborators and partners.

Section 1.   Summary of Grant Program

Program Synopsis

The State of California has designated $100 million to the University of California (UC) Office of the President, per AB 179, for climate action research and innovation to address critical needs of the state. The UC Office of Research & Innovation will administer these funds through several peer-reviewed programs. This Request for Proposals (RFP) invites applications from the UC system, California State University system, and California private colleges and universities for research awards totaling $80M in two categories: the *California (CA) Climate Action Seed Grants* and the *California (CA) Climate Action Matching Grants*. These grants will support applied research and development projects focused on building capacity for climate resilience, adaptation, and mitigation across the State of California, with particular emphasis on the disparate impacts of climate on vulnerable communities.

Grant Program	Purpose of Grant	Award Size / Duration	Multi-Institution, Community Partners, &/or End-User	Matching Contributions (See Sec. 2 & Appendix C)
CA Climate Action Seed Grants	Advance high-impact applied research into actional outcomes for climate resilience, adaptation, and/or mitigation. Awarded funds will be leveraged to sustain and/or expand the project outcomes.	$500,000 – $2 Million for 2 years	Encouraged	Encouraged
CA Climate Action Matching Grants	Utilize awarded funds and concurrent matching non-state contributions to advance high-impact, large scale applied research into actionable outcomes for climate resilience, adaptation, and/or mitigation.	$2 - $10 Million for 2 years	Required	Required

Eligibility

The following eligibility criteria apply to both grant categories.

Organization Eligibility:

- The lead organization ("Applicant Institution") must be from the University of California system, California State University system, or California private colleges and universities.
- At least one *collaborating* California research institution is **required for the Matching Grant category** and **encouraged for the Seed Grant category**. Eligible collaborating organizations include other eligible Applicant Institutions as well as community colleges and non-degree granting research institutions. Collaborating research institutions from outside of California may participate in the project using non-state resources.
- At least one California-located or registered "community/end-user partner," as appropriate to the research scope, is **required for the Matching Grant category** and **encouraged for the Seed Grant category**. Community/end-user partners can include industry, state or local agencies, California communities, community organizations, labor, tribal groups, or other public and private organizations working to advance climate resilience, adaptation, or mitigation.

Principal Investigator Eligibility:

- All proposals must be submitted by a lead Applicant Principal Investigator ("Applicant PI") with PI status at an Applicant Institution.
- An individual may serve as Applicant PI on only one proposal in response to this RFP. However, the Applicant PI may serve as a co-PI on other proposals.

Project Eligibility:

- All research activities must be based in California.
- All proposals must address California climate action priorities and describe one or more actionable outcomes, interventions, products, or tangible benefits that will be produced within 1-3 years of receipt of funding. A partial list of resources can be found in Appendix A.
- All research must be open, with no restrictions on publication.
- Publications are required to comply with the University of California Open Access policy as well as state requirements (AB 2192 in 2018).

Competition Timeline

The following table is a summary of the competition timeline. More details are provided in Sec. 2.

Informational Webinar (archived)	October 17, 2022
RFP Release	December 2022
Required Letter of Intent (LOI) Due Date	January 17, 2023 (by 12:00 noon Pacific Time)
Invitation to Full Application Announced	February 7, 2023
Seed Grants: Full Application Due Date **Matching Grants: Full Application Due Date**	Thursday, April 6, 2023 (by 12:00 noon Pacific Time) Thursday, May 4, 2023 (by 12:00 noon Pacific Time)
Seed Grants: Award Start Date **Matching Grants: Award Start Date**	August 1, 2023 September 1, 2023

Section 2.   Proposal Preparation and Submission Instructions

Table of Contents

2.1.   Grant Program Overview and Priorities

The CA Climate Action Research Grants are intended to spur innovative applied research that addresses California's climate goals, ensures that local communities are prepared and resilient, and prevents future disasters. This Request for Proposals (RFP) outlines two grant categories: **CA Climate Action Seed Grants** and **CA Climate Action Matching Grants**. Proposals for both grant categories must be synergistic with the State of California's climate action priority or priorities. The *California Climate Adaptation Strategy*, in particular, presents a holistic vision for the state with the following outcome-based priorities:

1. Strengthen protections for climate vulnerable communities
2. Bolster public health and safety to protect against increasing climate risks
3. Build a climate resilient economy
4. Accelerate nature-based climate solutions and strengthen climate resilience of natural systems
5. Make decisions based on the best available climate science
6. Partner and collaborate to leverage resources

There are several goals and actions under each priority area. Together, this set of priorities requires the participation of multiple disciplines and different types of partners. There are also many other state resources and strategic plans that highlight agency-specific priorities. Appendix A provides a partial list of these resources.

An important emphasis of both grant programs is near-term *outcome-based solutions for public impact*. (See Sec. 2.4.) To that end, proposal teams must consider thoughtful partnerships, broadly defined based on the proposed project, that will lead to high-impact solutions informed by collective insights and experiences. For example, disparate impacts of climate change, including related events such as wildfire, are well-known to disproportionately effect vulnerable communities. Engaging community partners on climate-related changes and/or events within their local or regional setting has

the highest probability of leading to adaptable and sustainable solutions. (See Appendix B.) For all projects, integrating social equity and climate justice is important and strongly encouraged.

2.2.   Competition Steps and Timeline

The steps and timeline for the competition are as follows:

Informational Webinar: A webinar was held on October 17, 2022, and it is [archived](#) on the [UC Climate Action](#) website. The presentation highlights some of the climate action priorities of the State of California, including important resources; opportunities for collaboration and for leveraging assets (e.g., laboratories, facilities, computing, etc.); and information about the competition. Applicants are encouraged to view the video to ensure that proposals are prepared with the appropriate focus.

Letter of Intent: Applicants are required to submit a letter of intent (LOI) by 12:00 noon PT on January 17, 2023 using the online *SmartSimple* application system. (More information on *SmartSimple* can be found in Sec. 2.6.) LOIs will be reviewed for compliance with program requirements and eligibility as well as for alignment with California climate goals and priorities. The LOI submission deadline will be strictly enforced, and *no application may move forward without an approved LOI*.

Invitation to Submit a Full Proposal: The Applicant PI will be notified by February 7, 2023 of their LOI approval and permission to move forward. LOI approval will grant access to the full application materials in *SmartSimple*. All proposals must be submitted in accordance with the instructions, templates, and guidelines, and they must conform to the requirements of the RFP. The Applicant PI and co-PIs are responsible for checking the program website for updates, clarifications, or changes prior to submitting the full proposal.

Full Proposal Submission: Full proposals should be submitted through the Applicant PI's campus Contracts and Grants or Sponsored Projects Office. Proposals must be submitted in *SmartSimple* by 12:00 noon PT on April 6, 2023 for seed grants and by 12:00 noon PT on May 4, 2023 for matching grants. The Applicant PI is responsible for following campus rules, procedures, and timelines for submitting a multi-institution proposal and for coordinating proposal development and submission with any participating institutions/entities. The proposal submission deadline will be strictly enforced, and *SmartSimple will not allow submissions after the deadline.*

Proposal Review and Selection: The Research Grants Program Office in the UC Office of Research & Innovation will manage a competitive peer review, scoring, and ranking of proposals based on the criteria and requirements outlined in this RFP. Proposals will be reviewed by multi-disciplinary panels comprised of reviewers selected for their subject matter expertise, community/end-user knowledge, and experience with large collaborative programs. Panel composition and proposal assignments will be made to ensure a fair and balanced review and to address any conflicts of interest. Applicants should prepare their proposals in language accessible to a general scientific audience. Final selection and funding decisions are at the discretion of the UC Office of the Vice President for Research & Innovation.

2.3.   Letter of Intent Preparation (required)

A letter of intent (LOI) is required for both grant categories. The Applicant PI must specify whether they are applying for a Seed Grant or Matching Grant. Then they must complete the appropriate application materials in the RGPO *SmartSimple* portal.

Letter of Intent Content. LOI submissions must include the following information:

- Proposal title (100 characters or less)
- Identification of Applicant PI and three-page biosketch/CV upload
- Identification of Co-PIs, Co-Investigators/senior personnel, and other participating personnel and/or organizations, institutions, or agencies, and a three-page biosketch/CV for each
  - Identify at least one other California academic/research institution collaborator (required for Matching Grant; encouraged for Seed Grant).
  - Identify at least one community/end-user partner (required for Matching Grant; encouraged for Seed Grant). See Appendix B.
- Specific California climate priority or priorities the research will address, with links to supporting agency documents or reports (required). See Appendix A.
- Actionable outcome(s) expected from the project
- Abstract/Project Summary addressing the proposed scope of research and activities, rationale, and potential impact and expected outcomes (2400 characters max)
- Brief plans for required programmatic components, including collaboration plan, plan for engaging communities and other end-users, and approach to leveraging available climate related resources, or infrastructure.
- Keywords: Research Categories and Identifiers to be selected from a drop-down menu.
- **Seed Grants only**: Specific plan for leveraging the Seed Grant during or immediately after grant period (specific grant or other funding source or opportunity)
- **Matching Grants only**: Anticipated contributions for matching commitments (cash and/or in-kind). See Appendix C.

2.4.   Full Proposal Preparation

Both grant categories provide up to two years of funding and up to three years to demonstrate impact. **Seed Grants** support smaller, more targeted early stage applied research projects that *i)* advance the state's climate goals and *ii)* leverage the funds to position the project to obtain additional extramural funds and in-kind support. **Matching Grants** support large-scale, collaborative applied research projects that will produce actionable outcomes in the short term and leverage concurrent matching support to realize scale or achieve maximum impact.

There are many resources to guide research teams on how to focus their work on scalable public-value impact. Four examples are the following:

1. The Heilmeier Catechism (or the DARPA questions): These questions have stood the test of time. Basically, what are you trying to do; how do you measure success; and who will care?

2. "Optimizing Public Benefits from State-Funded Research," Policy Matters, California Senate Office of Research, March 2018.

3. "Public Impact Research," APLU Report, Nov. 2019.

4. V. Ramanathan, et al., Executive Summary of the Report, "Bending the Curve: 10 Scalable solutions for carbon neutrality and climate stability," University of California, 2015.

2.4.1   Highlights: The CA Climate Action Grant Programs

- *CA Climate Action Seed Grants*

  o $500,000 -$2,000,000 total costs over two years, including 10% cap on indirect costs (IDC).

  o Proposals must describe the following:

    ▪ Applied climate action research addressing specific CA climate action priorities.

    ▪ Actionable outcomes within 1 –3 years.

    ▪ Specific plans for leveraging this grant to sustain or further develop the project with additional funding during or after the term of the award.

    ▪ Any complementary expertise of research collaborators from the lead or other academic / research institutions in California that will enhance the proposal outcomes.

    ▪ Optional: Plans for engaging community/end-user partners that have the potential to utilize, benefit from, license or invest in the research outcomes.

- **CA Climate Action Matching Grants**

  o $2,000,000 -$10,000,000 total costs over two years, including 10% cap on indirect costs (IDC).

  o Proposals must describe the following:

    ▪ Applied climate action research addressing specific CA climate action priorities.

    ▪ Large-scale interdisciplinary applied climate action research projects that will produce actionable outcomes in the short term and leverage concurrent matching support to realize scale or achieve maximum impact.

    ▪ Actionable outcomes within 1 –3 years.

    ▪ The complementary expertise of the research collaborators from the lead or other academic / research institutions in California that will enhance the proposal outcomes.

    ▪ Plans for engaging community/end-user partners that have the potential to utilize, benefit from, license or invest in the research outcomes.

    ▪ An evaluation plan for monitoring the research, implementation, and dissemination activities.

- Documented commitment of required matching resources, cash and/or in-kind, from non-state sources (e.g., federal, foundation, industry, or other private entities). See Appendix C.
- Description of how a project may be positioned to scale for broader adoption.

2.4.2   Project Description

A. The full proposal must use the templates provided in *SmartSimple.* The project description is limited to 15 pages, excluding references cited (11-pt. Times New Roman or Calibri font, 1" margins, single-spaced). The following sections must be included:

1. **Abstract/Project Summary** (max 2400 characters)**:** Provide a concise summary of the research project in non-scientific terms that would be understood by a lay audience. Include the specific CA climate priority or priorities being addressed, with links to supporting agency documents or reports; collaborators and community/end-users engaged in the project; and the actionable outcome(s). Avoid discipline-specific jargon or technical terms. If the project is funded, the abstract will become public information.

2. **Project Personnel Table:** Applicants must update the Project Personnel Table from the LOI with any changes in personnel, including research collaborators and community/end-user partners, and attach a three-page biosketch/CV for each named Project Personnel. If any Project Personnel has Other Support (i.e., all current or anticipated sources of research funds), then that information should be appended to the three-page CV.

3. **Participating Institutions & Organizations:** List all participating institutions and organizations, including collaborating academic/research institutions and community/end-user partner organizations. Note that at least one collaborating California research institution is required for the Matching Grant category and encouraged for the Seed Grant category. Also note that at least one California-located or registered community/end-user partner organization, as appropriate to the research scope, is required for the Matching Grant category and encouraged for the Seed Grant category. Briefly describe the role of each institution/organization.

4. **Proposed Research Activities and Specific Aims:** State the specific California climate priority or priorities being addressed, with links to supporting agency documents or reports. List the goals, specific milestones, and the short- and long-term climate action outcomes the proposed research will address. Describe how the research activities will generate measurable, tangible outcomes with potential to help California respond to climate change risk and contribute to the well-being of California's citizens and communities. Briefly describe how the proposed project is built upon prior research or pilot projects. State the expected impact the project will have in relation to the California climate action priority or priorities. Projects that address the needs of vulnerable or underserved populations to improve climate justice are especially encouraged. (See Appendices A and B.)

5. **Timeframe, Milestones, and Evaluation Metrics:** Identify the research timeline, benchmarks, and milestones. Describe the methods that will be used to assess the effectiveness of the project. Provide a plan for monitoring the research, implementation, and dissemination activities. The proposal must include specific outcomes and metrics to be achieved in the

project period. Concrete, measurable, longer-term outcomes also may be included if applicable and whether and how these outcomes will be tracked by the project team.

6. **Organizational Structure - Research Team, Collaboration, and Mutual Benefit:** Identify the project leadership and collaborating academic/research institution(s). In addition, describe the community/end-user partners, their expertise, and the unique facilities, resources, or infrastructure (if applicable) that will be brought to bear on the research project. Describe the organizational mechanisms and collaborative approaches that will ensure genuine multi-institution and community/end-user engagement. This section should include a description of the following 1) the organizational structure of the team; 2) the complementary strengths of the team members and available facilities that will frame a cohesive applied research program; 3) the specific contributions that each of the participating entities are expected to make to the project in terms of community/end-user knowledge, research expertise, and access to communities, facilities, resources, data, and equipment; and 4) the overall plan for the team to harness these components for maximum impact.

7. **Community/End-User Engagement Plan (Optional for Seed Grants):** Identify California communities and/or end-user partners that will enhance and/or benefit from the project. Describe how the project team, with their collaborators, intend to engage these community/end-user partners in the project to advance the impact of the outcomes in meaningful ways. Include the intended community engagement methods and techniques and the specific roles of all participants throughout the process. Emphasis should be given to reciprocal knowledge exchange, solution-oriented alternatives, and the communication of research analysis and findings in ways that can be understood by communities and/or end-users. Sufficient funds to support these activities must be included in the project budget, either as subcontracts to partner organizations or as direct line items in the primary budget. Partnership Agreements in the form of Memoranda of Understanding or similar documents are strongly encouraged before the project begins. See Appendix B.

8. **Leveraging Plan:** Describe a specific plan to sustain the project beyond the duration of the grant, including the specific sources of funding that will be sought during or immediately after the project period. **For Seed Grants**: Identify one or more specific opportunities for follow-on funding to sustain and expand the project beyond the two-year funding window. Describe how the seed project will lead to a proposal for these funds during and after the project period. **For Matching Grants:** Document the commitment of acquired and/or planned matching contributions (including cash and/or in-kind resources) for the project. Explain how matching contributions will enhance the impact of the project. See Appendix C.

9. **Itemized Budget and Justification:** Provide a detailed budget, by project year, accompanied by brief line-item justifications in relation to the activities and potential impact. Research and training support for students and postdoctoral scholars is encouraged. Budgets should reflect the efficient use of resources to maximize outcomes and minimize administrative costs. Include itemized budgets and justifications for collaborating research institution(s) and participating

partner organization(s). Also include any matching contributions in the budgets and budget justifications. See Appendix C.

10. **Letter(s) of Commitment:** Letter(s) of commitment identifying specific resources (if any) that will be required to complete the proposed research. Any community/end-user partners not receiving funding from this grant should describe their specific role in the project in a letter of commitment, including engagement of personnel and resources. Letters documenting any firm commitments of matching resources, signed by institutional officials, are required for Matching Grant applications. (Note: Not all matching commitments need to be firm at the time of application.) Letters must identify project commitments, including cash and/or engagement of personnel or other in-kind contributions specifically dedicated to this project. *General letters of support from non-participating entities will not be accepted.* See Appendix C.

B. Additional Notes:

1. Proposals must describe any human subject (IRB), animal use, or biohazard issues and the approach to compliance (one-page template).

2. Full Application templates and detailed *SmartSimple* instructions will be made available to applicants with accepted LOIs. See Sec. 2.6.

2.5. Review and Scoring Criteria

Letter of Intent Review Criteria:

LOIs will be reviewed for responsiveness to this RFP in three areas: 1) eligibility and completeness; 2) compliance with program requirements; and 3) alignment with specific California Climate Action funding priorities. Applicants will be notified of the LOI decision. All LOI decisions are final. Feedback and comments will not be provided on the LOI.

Seed and Matching Grants Review Criteria:

The following review criteria generally apply to both grant categories. The scoring criteria to be used in the review process will be based on a 1-5 scale for each criterion, with 5 being the most meritorious. All weights are equal except where specified – i.e., "2x" indicates that the criterion score carries double the weight.

- **Responsiveness to the Grant Category (2x weight):** Does the project address one or more California climate action research priorities? Are research gaps clearly articulated? Are policy/regulatory and other barriers, if applicable, also articulated? Does the applicant articulate what difference the project would make? From a research perspective, how would the project potentially advance the state-of-the-art?

- **Actionable Outcomes / Public Impact (2x weight):** Do actionable outcomes align with project objectives and needs of identified end-users? Is there potential to impact public policy? Will the project engage and/or benefit specific vulnerable populations/communities that have been historically underserved by environmental research yet most impacted by climate change? If applicable, is there a high-quality, scalable plan for community/labor workforce development or re-

training? Does the proposal include good opportunities for undergraduate and graduate students to prepare them for climate-related careers?

- **Approach:** Are the conceptual framework, design, methods, and analyses well-developed, well-integrated and appropriate to the aims of the project? Does the approach include timeline-driven solution(s) with clear metrics and tangible outcomes? Does the applicant acknowledge potential problem areas and consider alternative strategies?

- **Multidisciplinary-PI / Multi-Institutional Research Team:** Is the collective scientific expertise of the team suitable for the proposed project? Does the collaboration enhance the reach and impact of the project beyond what can be achieved by individuals? Are the collaborators well-integrated to leverage complementary resources and expertise? Is there a strong collaboration plan?

- **Engagement with Community/End-User Partners (required for Matching Grants):** Are the community/end-user partners appropriate? Does the applicant propose a sound approach to community engagement? Is there community/end-user support for the project? Will there be sustainable and tangible benefits left with the community? Are there MOUs, at least in draft form at the time of submission, documenting the agreements with the community/end-user partners?

- **Leveraging:** Will the research framework and/or preliminary results of this project leverage and/or lead to external funding from other sources, such as federal agencies, state agencies, industry, non-governmental organizations, etc. Is there a plan for sustaining and/or growing the funding after the grant period? **For Seed Grants**: Is there a specific leveraging opportunity identified and is there a credible plan for seeking it? **For Matching Grants**: What matching contributions are committed or anticipated, and how well do they support the goals of the project?

- **Budget**: Is the budget request for the project appropriate? Is there research or budgetary overlap with other active awards?

2.6. Submission Guidelines: The RGPO *SmartSimple* Portal

All applications under this funding opportunity must be submitted through the RGPO *SmartSimple* portal. *SmartSimple* will be accessible on or around December 19, 2022. Registration of institutions new to Research Grants Program Office (RGPO) programs requires several days and the cooperation of the authorized organizational representative's office prior to application submission.

Applicants are encouraged to begin the letter of intent, proposal preparation, and online submission process early, in case technical issues are encountered in the online *SmartSimple* portal. The proposal must be initiated and submitted by the Applicant Principal Investigator. UC PIs must apply through their campus sponsored projects office. Additional personnel who may assist in proposal development may be given access by the Applicant PI once the submission is initiated.

Information on how to submit a letter of intent and the full proposal are available in the "*SmartSimple* Submission Instructions" in the online *SmartSimple* system.

Eligibility and submission deadlines will be strictly enforced. All required fields in *SmartSimple* must be completed prior to submission. Failure to complete all components or otherwise comply with provided

instructions or failure to submit a complete application may result in administrative declination of the proposal without review.

2.7.   UC Program Contacts

The CA Climate Action Seed and Matching Grant funding opportunity is managed by the UC Office of Research and Innovation (R&I). The R&I office is led by Vice President for Research and Innovation, Theresa Maldonado, and Associate Vice President for Research and Innovation Scott Brandt. The Research Grants Program Office within R&I administers the proposal submission, peer review, and grant oversight.

Due to the high level of interest, research teams are encouraged to visit the UC California Climate Action website and to carefully read the RFP before preparing the letter of intent and full proposal: https://uckeepresearching.org/california-climate-action/

Check the **Frequently Asked Questions** at: https://uckeepresearching.org/faq/

Please submit any questions online at https://uckeepresearching.org/connect-california-climate-action/ or by email at climate@ucop.edu.

Appendix A: California Climate Action Priorities and Resources

Proposals must address one or more of California's climate action priorities, as highlighted in some resources below. Detailed information is provided on the specific goals and actions aligned with the state's priorities. This partial list is intended as only a guide. Applicants may propose activities that align with other documented state climate action priorities not listed here. However, those resources must be identified in the letter of intent and the full proposal.

- **California Climate Adaptation Strategy:** https://www.climateresilience.ca.gov/

California Natural Resources Agency. Links together the state's existing and planned climate adaptation efforts, showing how they fit together to achieve California's six climate resilience priorities.

- **The Pathways to 30×30 Strategy:** https://www.californianature.ca.gov/pages/30x30

California Natural Resources Agency. Describes how California will successfully implement the goal of conserving 30% of California's lands and coastal waters by 2030.

- **California Air Resources Board 2022 Scoping Plan:** https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents

California Air Resources Board. Assesses progress toward the statutory 2030 greenhouse gas target, while laying out a path to achieving carbon neutrality no later than 2045.

- **California's Fifth Climate Change Assessment:** https://opr.ca.gov/climate/icarp/climate-assessment/

Governor's Office of Planning and Research. Contributes to the scientific foundation for understanding climate-related vulnerability throughout California.

- **California Climate Dashboard:** https://calepa.ca.gov/climate-dashboard/

California Environmental Protection Agency. Describes programs, policies, and investments that California is making to combat climate change.

- **California Climate Solutions:** https://calepa.ca.gov/climate-solutions/

California Environmental Protection Agency. Provides an overview of California's Climate Solutions.

- **Defining Vulnerable Communities in the Context of Climate Change:** https://opr.ca.gov/docs/20180723-Vulnerable_Communities.pdf

Integrated Climate Adaptation and Resiliency Program. Resource guide to use when first considering how to define vulnerable communities in an adaptation context.

- **UC Research and Innovation Climate Action Webinar (October 17, 2022):** https://www.youtube.com/watch?v=tKCou3BQ4YQ

Additional information available can be found at this website:
https://uckeepresearching.org/california-climate-action/

Appendix B: Tips and Guidance for Engaging with Community Partners

Research partnerships that are formed to engage communities authentically reap many benefits and may introduce some challenges. Among the potential rewards are increased relevance of the research, increased community support of and participation in the research, improved methodologies and interpretation of data, and improved sustainability of interventions. The challenges of research partnerships include the need for additional knowledge and expertise historically excluded from research, as well as time and resources from researchers and partnering organizations.

Community engagement is best viewed as a *continuum of research practice*, as shown in the figure below. This continuum ranges from traditional early-stage consultation and perhaps modest involvement to collaboration and holistic full empowerment through participation and mutual learning and benefit. Simply providing information or resources to communities is not sufficient for this RFP.

The continuum of research practice shown here illustrates the varying levels of community engagement, from consultation with partners to full holistic, integral empowerment.

Community engagement in research is an expertise of its own and is better NOT undertaken by individuals with no experience/expertise unless there is a team approach for sufficient support and collaboration. *The damage that can result from inadequate attention to respectful partnership values and practices can reverberate for decades in soured academic-community relations*. Thus, it is recommended that PIs inexperienced in partnered scholarship and/or community engagement recruit and compensate collaborators who can bring the skills needed to promote harmonious and results-driven community engagement processes. Many institutions have qualified faculty, centers, institutes and sometimes university-wide offices and centers devoted to community engagement. Some of those are listed on the UC Climate Action website.

Issues that should be addressed in the proposal (and ideally in a Memorandum of Understanding or other partnership agreement document) include:

1. Who/what is the intended community or communities that is/are being engaged? Communities can be defined as any group of individuals sharing a cultural, racial, ethnic, social, and/or political identity; and/or common geographical location/place. Community can also be entities that share a common interest or practice such as health care providers, service agencies, businesses, churches, etc.

2. How do the aims of this grant align with/relate to the mission and goals of the proposed partnering entities?

3. How will both the research and specific community knowledge be integrated and acknowledged/attributed in the research? Is there mutually beneficial learning for the

academic partners and intended populations, groups, and/or communities? Identify specific areas of such learning.

4. How do the aims advance the scientific knowledge base and relate to the research program of the investigators?

5. What are the projected policy, practice, and/or community impacts of the proposed research plan?

6. For which aspects of the research plan will the partners and academic investigators be in a consultative and/or co-deciding role such that the research benefits from the bi-directional, reciprocal expertise of academic collaborators and partners (specify roles and initial ideas)

   a. Generation of research aims/questions
   b. Design and measures
   c. Data ownership and interpretation
   d. Authorship
   e. Dissemination that is accessible and/or policy impact/advocacy

7. Will the community/end-user partners be compensated for their participation? Is there a conflict resolution mechanism in place to address disagreements?

8. If the proposed project is with an existing partnership, what is the evidence for this partnership's ability to continue to work together in a collaborative and effective way that advances the partnership's mission

9. If this application represents a new partnership, what steps will be taken to identify common goals, build trust and clear communication to forge an effective and respectful partnership that advances the mission of the partner(s) and the research program?

10. Although this funding cycle is brief, the goal is to support work that has the potential to be sustained rather than a "one-off" project. What are the initial ideas for potential next steps to sustain this work after the grant cycle (in terms of funding and/or through integration into the ongoing work with partnering organization(s), investigator(s), or institution(s).

Further resources are available on UC Climate Action website

Appendix C: Guidelines for Budget Preparation and Matching Contributions

A detailed budget, by project year, must be prepared and accompanied by brief line-item justifications in relation to the proposed activities and potential impact of the proposal. The budget should reflect the efficient use of resources to maximize outcomes and minimize administrative costs. Include itemized budgets and justifications for collaborating research institution(s) and participating partner organization(s). Also include any matching contributions in the budgets and budget justifications. The guidance for allowable costs, non-allowable costs, and indirect costs is as follows:

Allowable direct costs. Salaries, fringe benefits, student tuition and fees, supplies, dissemination and publishing, consultants, honoraria, sub-contracts, equipment (individual unit cost more than $5,000), and project-related travel. Research activities must take place in California, and costs are expected to be incurred in California.

Non-allowable Costs. Funding provided by this opportunity may not be used to cover patient care costs, clinical trials, patent execution costs, fundraising costs, or any costs prohibited by California state policy. California industries and for-profit entities may participate in the project and make matching project contributions, but they may not request funds from the CA Climate Action Seed or Matching Grant proposal budget.

Indirect costs. Indirect cost recovery is capped at 10 percent on a modified total direct costs (MTDC) basis and is included in the award amount cap.

Matching Contributions

CA Climate Action Matching Grant budgets are required to include at least 10% of the requested award amount in matching contributions. Note: Not all matching commitments need to be firm at the time of application. CA Climate Action Seed Grant applications *may* include matching contributions but are not required to do so.

Allowable Matching Contributions. The following guidance applies to all matching contributions.

Matching Contributions may include

    a. Cash or in-kind contributions that cover or offset direct costs of the research project, and/or

    b. Activities or in-kind contributions from a new or existing synergistic project that directly supports and/or extends the impact and outcomes of the proposed CA Climate Action project.

"Cash" contributions are any non-state funds provided to cover allowable direct costs of the project.

"In-Kind" contributions are supplies, personnel time, services (including patent prosecution), or equipment provided without charge that directly advance a project activity or outcome.

In-kind contributions must be essential to the project and assigned a value commensurate with the value to the project. The value of these contributions is based on the actual market value (where

available) or on reasonable cost valuation. For example, the value of donated personnel time is calculated based on the individual's actual pay and benefit rate, whereas the cost of a service or use of equipment is based on a reasonable cost for that service or equipment if it were to be procured.

Matching Sources

Matching contributions may be provided by any of the participating institutions or by non-participating third-party entities. Any firm matching contributions must be guaranteed by a letter of commitment. Additional matching contributions above the minimum required—including cash, in-kind contributions, and unrecovered indirect costs—are allowed and encouraged, but not required. Unrecovered indirect costs cannot be used to meet the *minimum* matching requirement.

Valuations of in-kind matching contributions must be attested to annually by the fiscal officer and designated signing official for the organization making the contribution.