CPR^3 Request for Proposals

*This RFP is focused on **behavior change strategies** to improve relevance, acceptance, and uptake of pandemic-related recommendations, policies and interventions, including **public health communication** approaches.*

Collaborative for Pandemic Recovery & Readiness Research

UCSF

University of California San Francisco

CPR^3 background

The **California Collaborative for Pandemic Recovery and Readiness Research (CPR^3)** was funded by the California Department of Public Health (CDPH) in 2022. With the goal of building a robust, agile, and equitable infrastructure to support public health, community, and academic collaboration, CPR^3 will fund innovative research that relates to pandemic recovery and readiness across disciplines within the University of California (UC) system.

In alignment with California's SMARTER plan, CPR^3 aims to better understand the effects of the COVID-19 pandemic and the impact of the different public health, economic, and social interventions and policies that comprised the state's response and recovery measures. CPR^3 defines *recovery* and *readiness* as follows:

- **Recovery** | As a public health crisis, COVID-19 has had severe effects on health, in addition to vast social and economic consequences. Understanding the far-reaching impacts of the pandemic is the first step in *equitable recovery* – the ability for all individuals and communities to experience renewed and/or improved physical, mental, economic, educational, and social well-being in a post-COVID-19 society.
- **Readiness** | By building on lessons learned over the course of the COVID-19 pandemic, California can strengthen its *collective readiness to* respond to future surges, new variants, and emerging viruses with more resilience. This collective readiness includes not only strengthening mechanisms for surveillance and the ability to manage health impacts of an unfolding public health emergency in real-time, but also swift implementation of measures to mitigate potential health, economic, and societal impacts.

Generating evidence describing how the COVID-19 pandemic and subsequent response and recovery measures affected the lives of California's diverse populations will enhance future public health decision-making.

The following three principles guide CPR^3's portfolio:

- **Centering around equity.** The pandemic has impacted many communities disproportionately and has perpetuated long-standing inequities, many of which are rooted in structural and inter-personal racism. Low-income communities and communities of color, as well as individuals living in rural areas or working in high-risk settings, are among the hardest hit. CPR^3 is committed to exploring facilitators and barriers to equitable recovery and resilience across diverse individuals and communities.
- **Fostering innovative community-engaged research.** A multi-sectoral, transdisciplinary approach inclusive of diverse stakeholders is required to understand recovery and readiness given the complex intersectionality of health, social determinants, and economics. CPR^3 aims to strengthen this crosstalk so that lessons learned can be effectively disseminated among policymakers, public health officials, researchers, community leaders, and the public.
- **Strengthening academic and public health collaboration.** The UC system comprises ten campuses across the state. CPR^3 has a unique opportunity to build coordination and transdisciplinary collaboration across these campuses, such that insights and lessons learned can be shared with public health leaders in a timely and impactful manner.

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RFP priority area | Behavior change & public health communication strategies

CPR^3 is releasing multiple requests for proposals (RFPs) that focus on specific research priority areas related to pandemic recovery and readiness. The topic for this RFP is:

Behavior change strategies to improve relevance, acceptance, and uptake of pandemic-related recommendations, policies and interventions, including public health communication approaches

The public health response to the COVID-19 pandemic has depended on public support to improve efficient uptake of interventions and adherence to public health guidance (e.g., masking, stay-at-home orders, vaccination). Heterogeneity in the response to these recommendations and mandates calls into question the modes by which public health strategies influence health behaviors for the population as a whole and among communities of focus, such as rural or under-served populations and groups with limited uptake.

Thus far, the public health policy and communication response to the COVID-19 pandemic has largely lacked integration of behavior change and social sciences to support effective implementation (Sachs 2022). These limitations can especially be seen in the way the impact of public health communication, a central component of the pandemic control strategy, has been blunted not only by the evolving understanding of the SARS-CoV-2 virus and its transmission, but also by the proliferation of misinformation and politicization of public health information. This extremely complex landscape has resulted in heterogeneous policies (Hamad 2022), communication of inaccurate information and a resultant infodemic (WHO 2020), and erosion of trust in government and public health responses (Nasciemento 2022).

A limited number of ongoing studies are beginning to explore **characteristics of effective behavior change strategies and contextual factors necessary to enhance adherence to COVID-19-related public health measures**. Personal factors, such as individual perceptions around risk, vulnerability, and self-efficacy, play a strong role in behavior change, while supportive policies and availability of community and environmental resources (e.g., ventilation, outdoor spaces) may be required to facilitate adoption (Nan 2022). Moreover, strategies that address individual and community differences in health literacy, access to resources, and cultural beliefs are needed to support inclusive communication and engagement.

In California, several studies have examined the effect of behavior change and communication strategies to improve uptake of COVID-19-related interventions. For example, approaches to increase vaccine uptake and decrease hesitancy have ranged from financial incentives to text reminders, yielding mixed results (Dai 2021, Jacobson 2022, Lieu 2022). Given longstanding inequities driven by structural and social determinants, community-engaged and contextually tailored strategies that build trust and social cohesion are especially critical, but under-explored (AuYoung 2022). Additionally, a comprehensive synthesis or repository of the various existing public health campaigns and their effectiveness is lacking, further hindering knowledge sharing and scale-up of promising approaches for COVID-19 and any future public health emergencies.

Therefore, evaluation of behavior change strategies, including but not limited to how public health communication is delivered and received, is needed to improve adherence to recommendations, policies, and uptake of pandemic-related interventions. If generalizable, such knowledge could have far-reaching impact on our state's collective readiness for responding to future public health threats.

With a lens toward equitable pandemic recovery and readiness, this RFP aims to:

- Describe the spectrum of strategies (interventions, programs, or policies) that were used to promote individual- and community-level behavior change to increase adherence to COVID-19-related pharmaceutical and non-pharmaceutical public health interventions
- Evaluate the feasibility, acceptability, and effectiveness of behavior change strategies utilized by various entities across the state (e.g., government policies/mandates, political and public health officials, healthcare providers, schools, community and social networks, etc.)
- Identify best practices to optimize uptake of public health interventions and policies, particularly in the context of varying degrees of evidence/effectiveness, a complex communications landscape, and geographic, socioeconomic, and racial/ethnic diversity

Responsive applications to this RFP

CPR^3 will prioritize applications that:

- Focus on individuals and communities who: have historically limited uptake or acceptance of public health interventions and recommendations; have mistrust of the health system and medical research due to systems of racism and oppression, historical trauma and mistreatment; or are disproportionately impacted by the pandemic (e.g., individuals who live in rural or underserved settings, or have ongoing unmet social needs such as unstable income, housing, food insecurity, etc.)
- Have direct applicability to inform COVID-19 and future infectious disease pandemic interventions, programs and policies, with an emphasis on strengths, resilience and best practices at the individual, community and/or systems levels
- Have the potential to evaluate, inform or align with efforts conducted or currently underway by local health departments, schools, community-based organizations, etc.

Given the transdisciplinary and multi-sectoral nature of behavior change and communication science, a diverse array of methodologies and approaches will be considered, including but not limited to systematic reviews, meta-analyses, modeling, epidemiological studies, exploratory/pilot studies, qualitative research, and policy/economic evaluations. Social, behavioral, and implementation science methods and frameworks are particularly pertinent to this RFP.

Illustrative examples of research topics responsive to this RFP:

- Identification of behavior change strategies that are effective for key populations, such as racial/ethnic minorities, elderly adults, parents, front-line workers, etc. that account for individual and systemic barriers and facilitators to health information access, processing, and decision-making
- Characterization of public health messaging strategies (e.g., engagement with community leaders and community-based organizations, use of social media, etc.) that positively impact social trust, cohesion, and confidence in public health and government officials
- Evaluation of strategies that enhance knowledge, attitudes, or uptake of public health recommendations that could be scaled, including those that improve health literacy, address medical mistrust, increase access to accurate information, and refute misinformation

Topics not responsive to this RFP:

- Basic science related to SARS-CoV-2
- Clinical research solely related to COVID-19 symptoms, MIS-C and post-infection sequalae

- Vaccine and diagnostic development
- New randomized controlled trials or longitudinal cohorts*
- Studies excluding Californian geographies

** Nested studies that leverage existing or ongoing randomized controlled trials or longitudinal cohort studies will be considered if they are responsive to the RFP topic area and are feasible to execute within the award period.*

By accelerating research in California, CPR^3 aims to generate evidence to enhance future interventions, investments, and policies to build a stronger, more informed path to recovery and to better prepare for future challenges.

Award types

Award type	Direct cost ceiling	Deadline for submission
Pathfinder award	$100,000	Application due April 17, 2023 by 6pm PDT
Catalyst award	$200,000	
Implementation/scale award	$300,000	

Three award types are available:

- **Pathfinder award:** The purpose of this award is to support formative or exploratory research, which can lay the groundwork for future independent funding. This may include, for example, pilot studies, evidence syntheses, secondary data analyses, or high-risk high-reward projects to support innovation and breakthrough research.
- **Catalyst award:** The purpose of this award is to enhance research that is on the critical path for practical application to the communities it aims to serve. We expect these applications to demonstrate existing preliminary data and/or research infrastructure. This may include but is not limited to: expansion of a project's recruitment or geographical reach; enhancement to community engagement approaches; extension to additional research collaborators or sectors.
- **Implementation/scale award:** This award will support implementation research and scale-up of interventions and programs that have existing evidence of efficacy and/or effectiveness. The application must show evidence of potential for scale, such as involvement of advocacy/community organizations, or opportunities to translate research into policy.

Across all award types:

- Given CPR^3's funding timeline, the project duration for all award types is one year from the notice of award. Funds should be spent by June 30, 2024, after which time no-cost extensions may not be possible.
- New/early-stage investigators, existing PIs, or established PIs pursuing a new direction are welcome to apply. See individual and institutional eligibility section below.
- We welcome applications from all disciplines, including, but not limited to epidemiology, behavioral and social sciences, public health, health policy, economics, anthropology, data science, etc.
- We strongly encourage multidisciplinary and team science approaches, either within a single UC campus and/or between multiple UC campuses.
- We strongly encourage collaborations between academia-community partners, as well as multi-sectoral approaches. Collaborators should actively participate in the co-development of the project's study design, implementation, and dissemination.

Timeline

Activity	Date
RFP released	March 6, 2023
Applications due	April 17, 2023 by 6pm PDT
Review window	April 18 to May 31, 2023
Funding decisions made/award notification	June 16, 2023
Awarded funds must be spent	June 30, 2024

Application process

Applications must be submitted electronically by the deadline listed above via this Qualtrics application. The application template can be found on the CPR^3 How to Apply page. Please note that character counts are inclusive of spaces.

Application requirements:

- **Title** (up to 200 characters)
- **Technical abstract** (up to 2000 characters): Provide a brief background, rationale and purpose for the project for a technical audience.
- **Lay summary** (up to 2000 characters): Provide a brief background, rationale and purpose for the project for a non-academic audience.
- **Impact statement** (up to 750 characters)**:** Describe how the project will help advance equitable pandemic-related recovery and/or readiness in the state of California. If applicable, identify public agencies and/or other stakeholders involved in your project, and explain how your research will be or could be used by external partners.
- **Keywords** (up to 3): List up to 3 keywords/phrases highlighting research or subject area, methodology, etc.
- **Specific aims** (1 page, submitted as a PDF): Succinctly describe the problem, gap in current knowledge, and propose your solution. Include up to 2-4 brief aims and outline your key steps to fulfill these objectives.
- **Project plan** (up to 3 pages, submitted as a PDF):
    - Background and significance
    - Preliminary studies, evidence of feasibility, and/or description of the investigative team, if applicable
    - Methods, including study design, participants, data collection, analysis plan, approvals needed, etc.
    - Timeline, including key milestones and/or deliverables
- **Budget and budget justification** (each submitted as a PDF): see section below
- **Biosketches** (submitted as individual PDFs): Include biosketches of the PI, and if applicable, co-PIs and co-investigators, following NIH's current format. If a co-investigator is from a non-academic or non-research entity, a CV or resume will be accepted in lieu of a NIH biosketch.
- **Letters of support**, if applicable (submitted as a single PDF): Each letter must detail the collaborator's willingness to participate, role, and the team's approach to ensure collaboration and project progress. Please include at least one letter of support from each collaborating institution.

- **Other supporting documents**, if applicable (submitted as a single PDF): This may include, for example, bibliography/references cited, IRB approvals, Data Use Agreements, Memorandum of Understanding, etc.
    - Given that funds must be spent by June 2024, feasibility of obtaining IRB and other approvals, executing subcontracts, etc. within this timeline should be demonstrated.
    - If required, a PI waiver will be requested as a separate PDF.
    - If the PI is an early-stage investigator or trainee requiring mentorship, a letter of support from a primary research mentor will be requested as a separate PDF.

Formatting:

- Arial font size 11
- Single spaced with one blank line between sections
- Margins no less than 0.5 inches

Individual and organizational eligibility

- Individuals with PI status at any UC campus are eligible to apply. PIs must have a departmental mechanism to receive funding.
- Early-stage investigators at a career level beyond postdoctoral training (or equivalent) and less than five years as an independent investigator (e.g., Assistant Professor or equivalent) are encouraged to apply.
- Applicants who do not yet hold PI status at their UC institution may apply for this funding mechanism as a PI if they include assurance from their institution that such status would be granted if the application were selected for funding. PI waivers will be accepted on a case-by-case basis.

Other eligibility requirements:

- Lead PI applicant may submit to only one award within this RFP but can be listed as a co-investigator for other submissions provided that the projects are distinctly different.
- Applicants may apply to parallel CPR^3 RFP opportunities provided that each application has unique specific aims.
- Applicants who have previously applied for CPR^3 funding are eligible to apply provided that the new application has unique specific aims.
- Applicants are encouraged to work with other UC campuses, community-based organizations, and/or advocacy organizations that bring complementary perspectives. Named collaborators must furnish a letter of support, as described above.
- While the lead/submitting PI must be from a UC institution, up to two additional co-PIs and up to five co-investigators can be included in the application. These individuals do not need to be affiliated with a UC campus.
- Proposed research activities must take place in California. If other settings or non-California based entities are included in the proposal, clear justification is required.

Applicants from all UC campuses are highly encouraged. This RFP is not limited to UC campuses with health-specific programs. All types of disciplines – e.g., social science, economics, public health, policy, epidemiology, data science, etc. – are encouraged, as long as the proposed research is responsive to the RFP.

Community engagement and equity

CPR^3 will focus on research of greatest importance and relevance to the many diverse groups that comprise California. Research to address the experiences and needs of individuals and communities who have been disproportionately impacted by the pandemic will be prioritized. Where applicable, applicants must clearly articulate how their research will consider social and structural determinants, such as racism, power, and privilege, to address inequities in pandemic recovery and readiness.

We encourage projects that demonstrate:

- Relevance to the community it aims to serve
- Practical application of research findings
- Well thought-out opportunities for community involvement in the design, implementation, and dissemination of the work – with clear opportunities for co-learning and reciprocity

Robust partnerships with community-based organizations and/or advocacy organizations that bring perspectives often under-represented in academia are highly encouraged. If community collaborators are named, letters of support must be included in the application.

Dissemination and data requirements

CPR^3 is committed to disseminating research findings as widely as possible to promote public benefit and impact. Open access publication is required by either depositing the final accepted manuscript in alignment with UC Open Access policies, or by publishing open access. Funds can be included in the budget to cover publisher open access fees, and discounts may be available with several publishers. Awardees must also acknowledge the funding source when disseminating results publicly (i.e., conferences and publications). Acknowledgement language will be provided in the award letter.

After publication, CPR^3 encourages awardees to share appropriate data sets with self-service online public data repositories, such as those recommended by the NIH. While most repositories are free, some charge deposit fees which can be included in the proposed budget. CPR^3 may guide awardees to appropriate data repositories; further information will be provided in the award letter.

Project reporting

The scientific abstract and lay summary provided in the application will be posted on the CPR^3 website upon award, along with a short description of the project team.

In order to enhance coordination and collaboration, awardees will be asked to join a grantee works-in-progress virtual meeting (date TBD). It is envisioned that each awardee will present a works-in-progress presentation at least once during the grant period.

Awardees will be required to provide a final report within 60 days of project completion (template will be provided), as well as a 1-page summary brief targeted to a specific audience (e.g., lay community, policymakers, health providers). This product may be posted on the CPR^3 website upon project completion.

As appropriate, awardees may be asked to participate in community presentations, as well as meetings with CPR^3 program staff and/or CDPH. These meetings, for example, may serve to review research objectives, share interim or final analyses, and/or discuss potential for translation to policy.

Budget guidelines

The projected total amount of funding available for this RFP is up to approximately $1.25 million, though this is subject to change pending submissions received and prior CPR^3 RFP funding decisions.

Budget maximums reflect total costs only. Budgets should include the following categories:

- Personnel, salaries, and wages including fringe benefits
- Supplies and materials
- Services (includes consultant agreements)
- Travel/meeting expenses
- Equipment
- Subcontracts
- Other direct costs, such as communications, open access publication fees, campus-specific expenses (e.g., GAEL and IT Field Services charges), etc.

An example budget template can be found on the CPR^3 How to Apply page.

Budget requirements:

- When submitting, PIs should follow their campus policy for Sponsored Projects Office review and approval of proposals.
- Funds must be managed and spent in compliance with UC and State of California policies and regulations. Award recipients are responsible for working with their Controller's office to ensure fiscal compliance and proper reporting.
- These funds should be administered and managed in alignment with the California Model Agreement Contract from CDPH.
- F&A (indirect) costs are not allowed in the budget given that the CPR^3 grant does not collect indirect costs from its funder, CDPH. However, in order to support some administrative activities associated with project implementation, awardees can charge up to 8% of the total budget for line items related to these activities (e.g., salary/percent effort to cover post-award grants management and administration).
- Funds can be used to support a pre- or postdoctoral trainee, including stipend, supplies, coursework, and conference attendance related to the proposed project.
- Existing, matching funds or in-kind contributions are encouraged and must be noted in applications. The PI must disclose any other funding for a project substantially similar to the proposed work.
- If IRB is required, awardees will be asked to provide approval before funds can be spent on human subject activities.
- If awarded, grants will need prior approval for budget reallocations in the event of:
    - Changes in purchase of capital equipment (>$5k)
    - Changes to intended subcontractors
    - >25% of total award budget reallocation
- Carry-forward of funds is not encouraged and will be permitted only with prior approval. Funds should be spent by June 30, 2024, after which time no-cost extensions may not be possible.
- Overdrafts are not permitted and are the responsibility of the award recipient and corresponding department/unit.

- Projects must be fully invoiced using the intercampus request for reimbursement (IRR) mechanism no later than 60 days after the end of the award period for each project. Invoices submitted after this date will not be paid.

Subcontracts/subawards: We encourage partnership/collaboration between the submitting UC institution and other entities (such as other UC campuses, local health jurisdictions, or community-based organizations). If awarded, only the submitting UC institution will be funded directly. All other collaborating institutions will be subawards on the primary award whereby no indirect costs are included (see above guidance).

Application review process

Funding decisions will consider scientific merit, public health and societal relevance, and programmatic responsiveness. The review process will be modelled on the NIH procedures for peer review. This process is designed to ensure that applications are evaluated fairly, equitably, timely, and free from bias.

The review process consists of 3 stages:

1. **Screening:** The CPR^3 team will pre-screen applications to ensure completeness, eligibility, and compliance to proposal and budget requirements. The team will manage potential conflicts of interest (COI), oversee the administrative aspects of the peer review process, and assign reviewers.

2. **Peer review:** CPR^3 will form a Technical Review Committee (TRC) comprising individuals who represent subject matter or methodologic expertise, policy, community and public health. Each TRC member will:
    - Declare COI with specific applications
    - Review up to 4 applications each, depending on the number of applications received, such that each application will have at least 2 reviewers
    - Assign a numerical score to each review criterion along with a brief summary statement.

    The TRC chair will facilitate a virtual peer review meeting, whereby discussion will focus on scientific/technical merit, feasibility, and appropriateness of budget. Recommendations for funding will be made at this meeting.

3. **Advisory council**: With guidance from CPR^3's Scientific Steering Committee and relevant state agencies, final award decisions will be made to reflect scientific merit, program responsiveness, and representation across UCs. The CPR^3 RFP budget will be reviewed, with the goal of funding a balanced portfolio that represents diversity (e.g., in topic areas, methods, setting, populations, investigator type, etc.) and has significant potential for policy impact.

TRC composition: An RFP-specific TRC will be assembled that includes key perspectives, such as subject matter/methodological experts and key stakeholders representing public health, policy and community members. At least one CPR^3 team member will participate in each TRC to provide administrative/programmatic grounding. Reviewers will be asked to complete a COI disclosure report.

Scoring: Below is an overview of the review criteria that TRC members will follow. Scores will be used to guide the review process. CPR^3 will use the NIH scoring system, which utilizes a 9-point rating scale (1 = exceptional; 9 = poor).

Criterion	Description
Research	▪ Does the project address an important problem or a critical barrier to progress in pandemic recovery or readiness in California? Does it have potential to enhance future interventions, investments, and policies related to pandemic recovery and readiness? ▪ Are the methods, study design and analysis appropriate? ▪ Is the context appropriate for the stage of research and award type (e.g., on the critical path for application or potential for scale for the catalyst and scale award, respectively)? ▪ Does the application challenge and seek to shift current research, practice, or other relevant paradigms? Does it seek to address the refinement, improvement, or new application of existing approaches?
Community engagement and equity	▪ Does the application demonstrate community engagement across the project duration, for example, in the topic selection, planning, approach, communication and dissemination? ▪ Does the project address the potential to positively impact those disproportionately affected by the pandemic? If appropriate, does the research articulate efforts related to anti-racism and equity frameworks?
Investigative team	▪ Is the proposed team well-suited to the project and its implementation? If the PI is an early-stage investigator, do they have appropriate experience, training and/or mentorship plans? If an established PI, do they have a track record of success, for example, evidence of effective partnership or collaboration, publication record? ▪ If collaborative, is there complementary and integrated expertise among the team members? Does the application demonstrate overall support from collaborators, reciprocity, and opportunities for co-learning?

Each reviewer will be asked to provide an overall impression score and summary that reflects their evaluation of the application. Other considerations will be factored in, such as appropriateness of the proposed budget and project feasibility within the award period. In this overall impression summary, reviewers will be asked to: (1) describe the overall proposal in a few sentences; (2) document general notes, special concerns, or issues for discussion; and (3) make a funding recommendation that might either reflect or contradict the overall score.

For applications that may be bolstered by collaboration with other proposals received, CPR^3 may reach out to the PI and provide suggested feedback.

Contact information / FAQs

Please find a list of frequently asked questions on the CPR^3 FAQ page.

We encourage applicants to contact the CPR^3 team at cpr3@ucsf.edu to discuss any questions.