California Initiative to Advance Precision Medicine (CIAPM) Request for Applications: Doctoral Student Representative Precision Medicine Research

Updated November 19, 2025 (**Updates are shown in red bold font below, and denoted with *Update***).

Summary

Key Dates

RFA Release:	October 15, 2025 (**updated Nov. 19, 2025**)
RFA Informational Webinar:	November 6, 2025, 3:00pm PST
Application Deadline:	January 30, 2026, 12:00pm PST
Notification of Awards:	April 2026 (earliest possible)
Awards Start:	May 2026 (earliest possible)
Awards End:	November 2028

Eligibility

1. The applicant must be a current PhD, DrPH, MD-PhD, or other doctoral-level student conducting research at a non-profit California academic research institution and in good academic standing. Applicants should have identified a specific research project and a faculty mentor(s) that will supervise and support the research. **Update: Institutions are the recipients of CIAPM funding and should ensure applicants and awardees from their institutions are in good academic standing, compliant with institutional policies and applicable law.**
2. Projects must take place in California, and data should focus on people that live in California but are not limited to only California populations.
3. Applicants who have been supported by CIAPM funding for doctoral research or with faculty mentors who have received CIAPM funding as the Lead PI or co-PI are ineligible to apply. Applicants who have been supported by CIAPM for undergraduate or postbaccalaureate research and are currently doctoral students are eligible to apply.
4. **Update: Applicants who are currently receiving full-time research funding for an individual grant award (e.g. through an active NIH F30/F31 or similar award) are ineligible to apply. Applicants who are currently on institutional training grants (e.g. through an active NIH T15/T32 or similar award) are eligible to apply.**
5. There is no limit to the number of applications from any single institution.
6. Awardees are required to pursue their research training on a full-time basis. If the awardee moves to a different California non-profit academic research institution during the award period, funding can follow the awardee, subject to CIAPM funding availability and discretion.

Project Budget

CIAPM will award $2.3 million to support approximately 15 doctoral students conducting representative precision medicine research in California over a 2.5-year term.

Selection Criteria

1. Significance
2. Potential for Public Benefit
3. Approach
4. Training Plan and Applicant Potential

5. Overall Impact

Please see potential additional selection considerations in the “Selection” section.

Contact Us

Applicants are encouraged to submit questions and consult with CIAPM staff to ensure their application is responsive to this RFA. Email ciapm@chhs.ca.gov with subject line “Doctoral Student Representative Research RFA.” CIAPM staff will strive to respond within 48 business hours; response times may be longer as deadlines approach.

Overview

The California Initiative to Advance Precision Medicine (CIAPM) will award approximately **$2.3 million** to support around **15 doctoral students** conducting representative precision medicine research projects in California over a **2.5-year project term**. *Precision medicine* calls for the modern application of scientific data and clinical practice toward the individualization of prevention, diagnosis, measurement, and treatment of disease and wellbeing. Recognizing that doctoral students are a critical component of the biomedical research enterprise in California, this funding opportunity aims to support doctoral student representative research within California that uses a precision medicine framework, includes underrepresented populations, who have been underrecognized or historically excluded, as research participants, and reduces health disparities, so that research benefits all people within California, and promotes health innovation for all California communities.

The applicant must be a current PhD, DrPH, MD-PhD, or other doctoral-level student conducting research at a non-profit California academic research institution and in good academic standing. **Update: Institutions are the recipients of CIAPM funding and should ensure applicants and awardees from their institutions are in good academic standing, compliant with institutional policies and applicable law.** Research projects must aim to make biomedical research more inclusive, and thus more applicable and beneficial to all Californians. The applicant must describe how their application will support representative research, incorporate a precision medicine approach to reduce health disparities, potentially including social determinants of health data and/or community-engaged research approaches, and enhance their own education and training. Projects must take place in California, and data should focus on people that live in California but are not limited to only California populations. Projects must demonstrate prioritization of recruiting, enrolling, and retaining participants who are from underrepresented populations.

The proposed research must include the creation of promotional materials that encourage participation of individuals from underrepresented populations in the research study, and that describe the importance of biomedical research in the context of the research question and populations engaged. The materials would potentially be disseminated by CIAPM in reports or on the CIAPM website, or in convenings to increase capacity among State and non-state employees to discuss and encourage participation in biomedical research with underrepresented communities.

All application materials will be accepted electronically by the California Health and Human Services Agency via the online CIAPM submission portal, according to the timeline below.

Timeline

RFA Release:	October 15, 2025 (**updated Nov. 19, 2025**)
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View for the Informational Webinar, which was held on November 6, 2025 at 3:00pm PT.

Background: Precision Medicine

Precision medicine holds promise to profoundly transform health, health care, and biomedical research. As envisioned in the National Academy of Sciences (NAS) 2011 report, *Toward Precision Medicine: Building a Knowledge Network for Biomedical Research and a New Taxonomy of Disease*, this approach aims to aggregate, integrate, and analyze vast amounts of data from research, clinical, personal, environmental, and population health settings to develop and deliver more precise preventive measures, diagnostics, and therapeutics. Precision medicine also considers the social determinants of health and the whole person, such as age, cultural background, disability status, ethnicity/race, gender identity, geographic location, religion or faith, sexual orientation, and socioeconomic status. Creating models of access for precision care for all communities is vital to reduce health disparities and positively impact clinical outcomes across subpopulations and all communities.

As described in the report, Precision Medicine: An Action Plan for California, "precision health and medicine is not about one disease, or specific type of data, but more about the transition of medicine to unlocking new exciting insights and expanding our knowledge beyond what we currently know." The Action Plan also notes that education is a powerful strategy for advancing precision medicine in California and can serve as a vehicle to disseminate precision medicine into practice, research, and career development. Additionally, the NAS 2022 report, Improving Representation in Clinical Trials and Research: Building Research Equity for Women and Underrepresented Groups, states that large portions of the U.S. population, and those that often face the greatest health challenges, are less able to benefit from these discoveries because they are not adequately represented in clinical research studies. The field of precision medicine is well equipped to address these issues by supporting trainees that generate or leverage datasets to reduce health disparities and, in doing so, advance their own education and training. Building on these principles, this Request for Applications (RFA) seeks to support doctoral students in California to conduct representative precision medicine research.

Background: CIAPM

The California Initiative to Advance Precision Medicine (CIAPM) was established by the State of California in 2015 to support cutting-edge biomedical and health research that harnesses data to generate new insights, prioritize whole-person care, and advance community-driven solutions to reduce health inequities (Health and Safety Code, §§ 130300 - 130304). The mission of the Initiative, which is currently administered by the California Health and Human Services Agency (CalHHS), is to drive the development of innovative technologies and personalized strategies and to coordinate cross-sector partnerships for prevention, diagnosis, and treatment to improve

the health and well-being of all Californians. To date, CIAPM has funded 21 research projects designed to reduce health disparities in fields such as traumatic brain injury, multiple sclerosis, heart disease, mobile health, cancer, adverse childhood experiences, and depression.

Background: Representative Research

Historically, clinical research has been characterized by a lack of data representing the demographics of the disease or health condition under study. This lack of representation compromises the generalizability of clinical research findings to the total population, hinders innovation, limits access to effective medical interventions and treatments, and compounds health disparities in the populations underrepresented in clinical research. Additionally, advances in biomedical research might not be effective for people from underrepresented communities, who have been underrecognized or historically excluded in research studies, or may even be harmful. Populations underrepresented in research include, but are not limited to, racial and ethnic minoritized populations, older adults, pregnant and lactating individuals, LGBTQ+ populations, and persons with physical or developmental disabilities. Clinical research and clinical trials that better match the demographics of the disease or health condition of interest address the historical lack of representation in research and results in *representative research.*[1] Therefore, this RFA will support representative research within California that includes underrepresented populations and reduces health disparities, with the view that research benefits all people within California and promotes health innovation for all California communities.

Definitions of Key Terms

Underrepresented Populations: Populations whose demographic characteristics are not represented or who do not benefit from the research ecosystem and have been underrecognized or historically excluded in research studies, which can include, but are not limited to, people from racial and ethnic minoritized communities, older adults, pregnant or lactating people, LGBTQ+ populations, rural communities, youth, and/or people with physical or developmental disabilities.[1]

Representative Research: Research that better matches the demographics of the disease or health condition of study, often by including or focusing on underrepresented populations in research studies.[1]

Precision Medicine: An approach that aims to aggregate, integrate, and analyze vast amounts of data from research, clinical, personal, environmental, and population health settings to better understand health and disease and to develop and deliver more precise diagnostics, therapeutics, and prevention measures[2].

Health Disparities: Largely preventable differences in health outcomes that adversely affect populations and are closely linked with intergenerational social, economic, and/or environmental disadvantages.[3]

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[1] National Academies of Sciences, Engineering, and Medicine. 2022. Improving Representation in Clinical Trials and Research: Building Research Equity for Women and Underrepresented Groups. Washington, DC: The National Academies Press. https://doi.org/10.17226/26479.

[2] Precision Medicine: An Action Plan for California. https://ciapm.chhs.ca.gov/docs/reports/20190107-Precision_Medicine_An_Action_Plan_for_California.pdf

[3] National Institute of Minority Health and Health Disparities. What are Health Disparities? https://www.nimhd.nih.gov/about/what-are-health-disparities

Funding Opportunity for Doctoral Student Representative Precision Medicine Research

Doctoral students are a necessary component to sustain the biomedical research enterprise in California and the U.S. In the context of precision medicine, doctoral student education and training necessitate linking fields, for example, from clinical medicine to genomics, bioethics, engineering, environmental, and social sciences, to clinical informatics and community engagement.[2] Doctoral students are well-positioned to bridge interdisciplinary fields during the formative years of their career and are well-equipped to adopt and adapt the development of new tools and technologies in (and for) precision medicine. Additionally, doctoral student populations are more diverse than postdoctoral fellows or faculty,[4] and researchers from diverse backgrounds more often propose research topics related to population health and minoritized communities [5-6] and publish on research topics that often reflect their communities.[7] Therefore, representative precision medicine research is a critical field in which to invest doctoral student support. In doing so, representation in science is likely to lead to investigation of, and valuable findings on, health disparities and innovation.

This RFA for doctoral student representative precision medicine research within California also aligns with CalHHS's Strategic Priorities so that "All Californians have meaningful and timely access to care, live in healthy communities, and our zip codes no longer predict our health outcomes." Additionally, this RFA aims to leverage and develop our state's workforce by supporting California doctoral student research as a strategy to reduce health disparities and build a Healthy California for All.

Purpose: Doctoral Student Representative Precision Medicine Research

The 2011 NAS report[1] emphasizes the need to "prepare students pursuing research careers to function in a scientific landscape that increasingly requires multidisciplinary approaches to solve biomedical problems." Precision medicine offers the opportunity to support doctoral student representative research that develops insights from previous or newly generated datasets, training and educational opportunities that can leverage research, clinical, community expertise, and technological capabilities to reduce health disparities and work towards a healthier, more equitable society.

For this RFA, approximately **$2.3 million** will be provided to support around **15 doctoral students** conducting representative precision medicine research projects in California over a **2.5-year project term**. The applicant must be a current PhD, DrPH, MD-PhD, or other doctoral-level student conducting research at a non-profit California academic research institution and in good academic standing. Applicants should have identified a specific research project and a

[4] Kenneth D Gibbs Jr, Jacob Basson, Imam M Xierali, David A Broniatowski (2016) Research: Decoupling of the minority PhD talent pool and assistant professor hiring in medical school basic science departments in the US. eLife 5:e21393. https://doi.org/10.7554/eLife.21393.

[5] Travis A. Hoppe et al. Topic choice contributes to the lower rate of NIH awards to African-American/Black Scientists. Sci. Adv. 5,eaaw7238(2019).DOI:10.1126/sciadv.aaw7238.

[6] Gilpin, N. W., & Taffe, M. A. (2021). Toward an anti-racist approach to biomedical and neuroscience research. Journal of Neuroscience, 41(42), 8669-8672.

[7] D. Kozlowski, V. Larivière, C.R. Sugimoto, & T. Monroe-White, Intersectional inequalities in science, Proc. Natl. Acad. Sci. U.S.A. 119 (2) e2113067119, https://doi.org/10.1073/pnas.2113067119 (2022).

mentor(s) that will supervise and support the research. **Update: Institutions are the recipients of CIAPM funding and should ensure applicants and awardees from their institutions are in good academic standing, compliant with institutional policies and applicable law. The institution is responsible for the use and disposition of any funds awarded, consistent with the student's application.**

The applicant must describe how their application will support representative research, incorporate a precision medicine approach to reduce health disparities, potentially including social determinants of health data and/or community-engaged research approaches, and enhance their own education and training. Projects must take place in California, and data should focus on people that live in California but are not limited to only California populations. Projects must demonstrate prioritization of recruiting, enrolling, and retaining participants who are from underrepresented populations. Applicants should not propose to lead an independent clinical trial but can propose research experience within a clinical trial led by a mentor or co-mentor.

Update: Support, provided through reimbursement to the sponsoring institution, will be for full-time research and not exceed $62,000/year, which includes reimbursement for an institutional stipend not to exceed $40,000, tuition, fees, and institutional allowance (e.g. health insurance) not to exceed $18,000, and research/professional development costs not to exceed $4,000 (includes ~$1,500/award period for CIAPM convenings). **Update: Sponsoring institutions should ensure student support remains consistent with institutional and programmatic policies.** If an awardee moves to a different non-profit California academic research institution during the award period (e.g. through transfer or transition to a postdoctoral fellowship or similar position), funding can follow the awardee, through the execution of a new agreement with the State. A new agreement could involve an increase in compensation commensurate with policies of the new institution and subject to CIAPM funding availability and discretion.

Application Instructions: Process

All application materials must be submitted electronically by **January 30, 2026 at Noon (12:00 p.m. Pacific Time).** Applicants must submit, via the CIAPM web portal:

- **Update: Cover Page (page limit = 1)**
- Specific Aims Page (page limit = 1)
- Project Plan (page limit = 4)
- References (page limit: none)
- Training Plan (page limit = 3)
- Mentor & Institutional Sponsor Statements (page limit = 4)
- Biosketches/Resumes: Biographical sketches for the doctoral student applicant, mentor(s), and collaborator(s) (as applicable) (page limit = 5/biosketch, no overall page limit)
- **Update - Budget: Stipend and budget plan with justification for research/professional development funding (page limit = 1)**
- Human Subjects Research Requirements
- State Law Compliance

- Letter(s) of Recommendation (page limit = 1/letter, one letter required, one additional letter optional, no more than two letters total)

Detailed parameters for each of these documents are presented below. All application titles (awarded and non-awarded) will be listed publicly on the CIAPM website following the selection process, as per a statutory requirement.

Applicants are encouraged to submit questions and consult with CIAPM staff to ensure their application is responsive to this RFA. Frequently Asked Questions will be developed and updated periodically on the CIAPM website. CIAPM will hold an Informational Webinar on November 6, 2025 at 3:00pm PT.

An out-of-state expert selection committee will review the applications and provide recommendations for awards to CalHHS for final selections. Once final selections have been made, CalHHS will notify the ~15 awardees and all other applicants as early as April 2026, post a public announcement, and work with awardees to develop concrete metrics and goals to track the progress of the projects. The 2.5-year projects are anticipated to begin around May 2026.

Application Instructions: Eligibility

1. The applicant must be a current PhD, DrPH, MD-PhD, or other doctoral-level student conducting research at a non-profit California academic research institution and in good academic standing. Applicants should have identified a specific research project and a mentor(s) who will supervise and support the research.
2. **Update: Institutions are the recipients of CIAPM funding and should ensure applicants and awardees from their institutions are in good academic standing, compliant with institutional policies and applicable law. The sponsoring institution is responsible for the use and disposition of any funds awarded, consistent with the student's application.**
3. Projects must take place in California, and data should focus on people that live in California but are not limited to only California populations. Research projects must aim to make participation in biomedical research more inclusive, and thus more applicable and beneficial to all Californians.
4. Projects must demonstrate prioritization of recruiting, enrolling, and retaining participants who are from underrepresented populations, which includes concrete strategies to ensure equitable participation, address barriers to access, and foster trust.
5. Applicants who have been supported by CIAPM funding for doctoral research or with faculty mentors who have received CIAPM funding as the Lead PI or co-PI are ineligible to apply. Applicants who have been supported by CIAPM for undergraduate or postbaccalaureate research but are currently pursuing doctoral research are eligible to apply.
6. **Update: Applicants who are currently receiving full-time doctoral student research funding for an individual grant award (e.g. through an active NIH F30/F31 or similar award) are ineligible to apply. Applicants who are currently on institutional training grants (e.g through an active NIH T15/T32 or similar award) are eligible to apply. Sponsoring institutions should ensure student support remains consistent with institutional and programmatic policies, including for awardees on institutional training grants or similar funding.**
7. There is no limit to the number of applications from any single institution.

8. At the time of award, individuals are required to pursue their research training on a full-time basis, normally defined as 40 hours per week or as specified by the sponsoring institution in accordance with its own policies. For combined degree students, only the time devoted to full-time doctoral research leading to the doctoral research degree will be supported.
9. If the awardee moves to a different California non-profit academic research institution during the award period (e.g. through transfer, or transition to a postdoctoral fellowship or similar position), funding can follow the awardee, through the execution of a new agreement. A new agreement could involve an increase in compensation commensurate with policies of the new institution, subject to CIAPM funding availability and discretion.

Application Instructions: Required Sections

Proposed projects should not significantly overlap with CIAPM's current and former project portfolio. Information about projects funded by CIAPM can be found here: CIAPM Demonstration Projects.[8]

Applications must address all topics listed below, in PDF format, minimum Arial 11-point font, minimum 0.5-inch margins. The project plan section must include all sections listed below. Include the headings for each topic area in your application. Tables and figure legends may use a minimum 10-point Arial font. Figures may use a minimum 8-point Arial font. Tables and figures count towards the page limit. There is no page limit on the list of references, and references do not count towards the page limit.

Cover Page (Page Limit: 1)

Update - Include the following information:

- **Title of the application.**
- **Names and signatures of applicant (doctoral student) and mentor/co-mentors.**
- **The annual institutional stipend, tuition, fees, and institutional allowance (e.g. health insurance) amounts for the student. Sponsoring institutions should ensure student support remains consistent with institutional and programmatic policies, including for awardees on institutional training grants or similar funding.**
- **Name and signature of authorized institutional official (e.g. doctoral program director, department chair, Vice Chancellor of Research (VCR), Chief Executive Officer (CEO), Principal Grant Officer, or equivalent authorized institutional official).**

Note: The signature specified in the last item indicates that the institution agrees to administer an award resulting from this application. The sponsoring institution is responsible for the use and disposition of any funds awarded, consistent with the student's application.

Specific Aims Page (Page Limit: 1)

Provide the project title and the necessary context and background that lays the foundation for the research goals of the application. List and briefly describe the specific objectives or aims of the research training project, summarize the expected outcome(s) and potential impact. Ensure that the connection to precision medicine, representative research, and reducing health disparities is clear and interwoven through this section.

[8] CIAPM Demonstration Project Page. https://ciapm.chhs.ca.gov/activity/research/index.html

Project Plan (Page Limit: 4)

1. Advancing Precision Medicine and Representative Research

Describe how the proposed project advances both precision medicine and representative research. Please refer to the definitions listed on page 4, the Precision Medicine Primer, and CIAPM-funded research projects.[8]

The application must describe how the proposed research uses a precision medicine approach to include representative research and reduce health disparities. The precision medicine approach should include quantitative and/or qualitative data about a person and their lived experiences and may include social determinants of health and community-engaged research approaches. The applicant must demonstrate that the study population is, or includes populations, that are underrepresented in research studies in general (please see the definition of "Underrepresented Populations" in the "Definitions of Key Terms" section above), such as racial and ethnic minoritized populations, older adults, pregnant and lactating individuals, LGBTQ+ populations, persons with disabilities, intersecting identities among these communities, and people whose demographic characteristics better match the disease burden or health condition.

2. Project Plan

Describe the components of the proposed project, including specific aims and research strategy. Describe why the topic was selected and why the approach is impactful. Provide rationale for the project by outlining existing strengths, resources, and opportunities available.

3. Data

Each application should demonstrate its commitment to the use of robust data. The application must use an existing institutional, state-level, or national dataset or generate a new one which focuses on representative research, includes populations underrepresented in research, and uses a precision medicine framework.

Briefly describe the data set(s) you propose to use or create, the rationale for choosing the selected data to complete the research goals, and how the data set(s) may contribute to better outcomes. Also briefly describe the data ownership and data sharing plan, including the potential for sustainable data access and use, and the expertise and/or training plan to use the dataset while ensuring data security and confidentiality meet standards accepted by the State. For existing datasets, the application must describe the variables of interest and data use agreements (if required) to demonstrate appropriate data access.

Existing datasets could include but are not limited to precision medicine datasets that incorporate data from research, clinical, personal, environmental, and population health settings or state health datasets like the California Health Interview Survey and the California Health and Human Services Open Data Portal. For new datasets, the application must describe the variables and outcomes, and the feasibility to address the research question within the award period. Use and integration of multiple and/or integrated data sets is encouraged (e.g., electronic health records, mobile health device data, registries, and research databases), if possible.

4. Precision Medicine Asset

Describe the precision medicine asset(s) that will be developed as a result of this project, such as infrastructure and tools that will be built, including, but not limited to, new applications, collaborations, consortia, databases, datasets, intellectual property, models for responsible data sharing, participant communities and networks, patient cohorts, personnel competencies, resources, and software.

5. Impact for Patients and Participants

Describe opportunities for positive impacts for patients and other participants, in terms of encouraging representative research, reducing health disparities, and/or leveraging precision medicine approaches. If the application includes a community-engaged approach, describe strategies to engage patients, families, and communities for authentic and equitable partnership, such as developing opportunities to build trust, approaches to ensuring consent, or practical principles for data sharing, privacy, and security. Participation may look different depending on the methodology, topic, and the stage of the research.

6. Promotional Materials Creation Plan

Describe the plan to create promotional materials that encourage participation in the research project by underrepresented populations and that discuss the importance of biomedical research in the context of the research question and populations engaged. Describe how the materials will be designed collaboratively with partners to ensure cultural relevance, accessibility, and ethical messaging. Please describe how the materials will inform, engage, and recruit underrepresented populations while maintaining transparency and trust.

These materials must be suitable to be shared with CIAPM and among State and non-State employees in activities or convenings to increase capacity to discuss and encourage participation in biomedical research with underrepresented communities. Activities or convenings may include trainings or workshops engaging State and non-State employees.

Applicants may refer to the following questions in preparing the promotional materials creation plan:

A. Who is the audience for the promotional materials; who are appropriate participants in discussions of engaging underrepresented communities in biomedical research?
B. How may the materials be created in a culturally sensitive/informed way, preserve the privacy of underrepresented communities, and maintain scientific rigor and accuracy?
C. What is an effective format and forum/venue for the materials to maximize engagement among State and non-State employees to discuss and encourage participation in biomedical research within underrepresented communities?

7. Anticipated Challenges and Proposed Solutions

Describe potential barriers to the project's success, especially those that could delay the launch, progress, or completion (e.g., human subjects, health literacy barriers, cultural or language access barriers, or mobile patient populations), and describe potential solutions to these challenges. Please consider challenges related to historical abuses in research and mistrust of academic institutions among underrepresented populations who have been underrecognized or historically excluded, how this is related to recruitment and retention, and describe potential solutions.

References (Page Limit: None)

List references cited in the project plan.

Training Plan (Page Limit: 3)

The applicant must describe their education/training goals and how the mentoring team, any other key personnel, and the funding award will help them achieve their goals. A strong mentoring team is well-aligned with the research goals of the application and the training and education goals of the applicant. CIAPM strongly encourages depth and breadth of expertise within the mentoring team, including for example, expertise in dataset or data types being used, health disparities, and community-engaged research, if applicable. The training plan may include a description of how the applicant's background and lived experience informs their research interests and training plan.

Mentor & Institutional Sponsor Statement (Page Limit: 4)

The mentor(s) should describe their mentoring approach and the specific mentoring plan for the applicant to ensure career advancement within the precision medicine research workforce in California. The mentoring plan should be tailored to the overall training goals outlined by the applicant and go beyond simply providing access to research environments. The statement should be well-aligned, complement the applicant's training plan, and be specific about the resources, support, and mentorship that will be provided. The statement should also discuss the applicant's potential for completing the proposed project during the award period successfully, the applicant's main areas for development during training, their potential to benefit from the research training plan, and the potential for a productive career in the precision medicine research workforce within California. Lastly, the statement should describe the research training environment and **update: how the training environment and institution will** meet the needs of the applicant to achieve their goals. The statement should include specific opportunities for professional development, intellectual interactions, and development and publishing of rigorous scientific products, centralized research facilities, resources, and/or equipment. The statement should be signed by the applicant and mentor/co-mentors.

Biosketches/Resume (Page Limit: 5 pages/biosketch, no page limit)

Provide biosketches, in NIH format (see NIH Grants page for templates and examples), for each scientific team member, with the applicant listed first, followed by the mentor(s). Provide resumes for non-scientific team members, if applicable. Include a cover page that lists the name, title, organization, project role, and expertise for each of the team members. A template for this cover page is given in the table below. Individual biosketches and resumes for a particular team member must not exceed five pages. The cover letter, biosketches, and resumes must be combined into one PDF (no page limit for the entire PDF).

Project Team Biosketch and Resume Cover Page Table

(Add more rows as needed.)

Name	Title	Organization	Role in Project	Expertise

Budget (Page Limit: 1)

Provide a budget plan that includes institutional stipend, tuition, fees, and health insurance, and activities for research/professional development, according to institutional policies. Please include a brief description for research/professional development activities. CIAPM will reimburse the institutional stipend not to exceed $40,000/year, tuition, fees, and institutional allowance (e.g. health insurance) not to exceed $18,000/year, and $4,000/year for research/professional development (includes ~$1500/award period for CIAPM convenings). **Update: Sponsoring institutions should ensure student support remains consistent with institutional and programmatic policies.**

Please also include whether you anticipate moving to a different California academic research institution during the award period (e.g. through transfer or transition to a postdoctoral fellowship or similar position) so that CIAPM can anticipate the need for a potential increase in compensation commensurate with policies of the new institution, subject to CIAPM funding availability and discretion.

Human Subjects Research Requirements

Applicants should not propose to lead an independent clinical trial but can propose research experience within a clinical trial led by a mentor or co-mentor.

Applications must designate whether Human Subjects Research is proposed by completing the form shown in Appendix B. If the proposed research involves human subjects, please see Appendix B for further instructions. If the proposed research does not involve Human Subjects Research, the “Protection of Human Subjects” section is not required, and a brief sentence should be provided in the application stating no human subjects involved.

State Law Compliance

Applicants must certify that funded projects will follow state and federal law to protect privacy, personal health information, and rights of human subjects, as applicable. Please complete the form shown in Appendix C.

Letter(s) of Recommendation (page limit = 1/letter, 1 required, no more than 2 letters accepted)

One letter(s) of recommendation is required, and one additional letter is optional. No more than two letters will be accepted, and each letter should be one page. The letters should be from individuals not directly involved in the application, but who can speak to the applicant’s potential and are familiar with the applicant’s background, qualifications, education/training, and interests.

Application Instructions: Submission

Applications must be submitted electronically through the online CIAPM submission portal on or before January 30, 2026 at Noon (12:00 p.m. Pacific Time).

Selection: Selection Committee

A selection committee will recommend applications to be awarded. The committee will be comprised of out-of-state subject matter experts representing the breadth of topics included in the applications. Committee members will be subject matter experts in precision medicine, representative research, health disparities, and doctoral student fellowships. Nominations for the selection committee will be considered from the State Legislature, California Precision

Medicine Advisory Council, public, and research communities and can be sent to CIAPM@chhs.ca.gov. Selection committee members shall be deemed to be free of conflicts of interest in any application and will be screened according to previous CIAPM procedures. The names of selection committee members will be provided on the CIAPM website. The selection committee will use a process consistent with CIAPM procedures for reviewing the applications and making award recommendations, ensuring that applications are evaluated in a manner that is fair, equitable, timely, and free of bias.

Selection: Selection criteria

The selection committee will review and assess applications based on the criteria listed below, organized within five scoring categories.

1. Significance

Does the project appropriately apply approaches of precision medicine to address an important problem or a critical barrier to progress in representative research? Is there a strong rationale for the project? If the aims of the project are achieved, to what extent will the field of precision medicine benefit? Are the health disparities that the project seeks to address significant in scope, degree, and topic area?

Reviewers will consider the following selection criteria:

- Overall impact to advance precision medicine.
- Potential to reduce health disparities.
- The potential to develop or use currently available tools, measurements, and data, including publicly available data.

2. Potential for Public Benefit

Does the application advance the field of research, clinical practice, or other relevant paradigms? Is there a tangible public benefit addressed by the project and does the project have the potential to benefit Californians?

Reviewers will consider the following selection criteria:

- Potential to reduce health disparities.
- The innovative concepts, approaches, methodologies, instrumentation, data sources, assets, training and education, and/or engagement strategies to advance representative precision medicine research that benefits Californians.
- The potential of the applicant to create promotional materials that describe the importance of precision medicine research in the context of the research question and populations engaged.
- The potential of the project and applicant, through creation of promotional materials and convenings, to increase capacity among State and non-state employees to discuss and encourage participation in biomedical research with underrepresented communities and strengthen conversations and relationships between agencies and between agencies and non-State organizations.

3. Approach

Are the overall strategy, methodology, and analyses well-reasoned and appropriate to accomplish the aims of the project? Has the applicant presented strategies to ensure a robust

and unbiased approach, as appropriate for the work proposed? Are the use of datasets and data types within representative precision medicine research appropriate? Are potential problems and alternative strategies presented? Is the project feasible? If the project involves human subjects and/or clinical research, are the plans to address the protection of human subjects from research risks and the inclusion/exclusion criteria justified in terms of the scientific goals and research strategy proposed?

Reviewers will consider the following selection criteria:

- The depth and breadth of data available in the focus area, for example the extent to which the proposed dataset is reflective of underrepresented groups or the disease burden.
- Integration of social determinants of health and/or culturally relevant approaches.
- The prospects for efficient and effective data integration and analysis.
- The feasibility of the project within the proposed timeframe.
- Sharing data and/or protocols (as appropriate), including the potential for sustainable data access and use and approaches to protect privacy and personal health information.

4. Training Plan and Applicant Potential

How have relevant activities and experiences contributed to the applicant's scientific development and preparation for the training plan? Are the application and training plan well-aligned to support the applicant during the funding period? Does the applicant demonstrate potential for success in a biomedical research career? Is the mentor/mentoring team well suited to mentor and support the applicant? Do the applicant, mentor/mentoring team, and collaborators (if appropriate) have complementary and integrated expertise?

Reviewers will consider the following selection criteria:

- Potential of the applicant to complete project aims and training plan.
- Potential of the mentor/mentoring team to mentor and support the applicant during funding period.
- Expertise of the applicant, mentoring team, and collaborators, including with the dataset, data types, equity in precision medicine research, and with the proposed study population or community.
- Diverse expertise and backgrounds of team members, including those underrepresented in research.
- Feasibility of training plan and preparation for the biomedical workforce.

5. Overall Impact

An assessment of the potential impact of the project, considering the significance, potential for public benefit, approach, and training plan and applicant potential. For example, does the project describe a promising approach to reduce health disparities in California with representative precision medicine research and effective training of the applicant? An application does not need to be strong in all the above categories to be judged likely to have a major impact.

The awards shall include, but are not limited to, awards to public institutions in both northern and southern California.

Additional selection considerations may include:

- Where the project is located and which populations are studied within California to balance geographic and institutional diversity of awarded institutions and topics.
- Research that has experienced recent funding cuts, terminations, or uncertainty about future commitments.
- The extent to which the project differs from current and former CIAPM-funded projects. Information about CIAPM's project portfolio can be found here: CIAPM Demonstration Projects.[8]
- Proposed research on topics related to nutrition, chronic disease, behavioral health, or women's health.

Scoring:
Scores will be used to guide the review process. CIAPM uses the NIH scoring system, which utilizes a 9-point rating scale (1 = exceptional; 9 = poor) for both Overall Impact Scores and individual review criteria scores. Scores are not provided to the applicants, but applicants will receive a summary of written feedback from reviewers.

Selection: Results

The selection committee will report on the justification for selecting the projects that are awarded funding and will provide a list of titles of applications that were not selected on the CIAPM website, as required by statute. Therefore, do not include in the project title any proprietary or confidential information or details that could identify the applicant, unless there are no reservations against being identified.

Resources: Precision Medicine Primer

Precision medicine (sometimes referred to as personalized medicine) places humans at the center of health care. With modern technology and big data, precision medicine integrates all information about an individual to create a clearer picture of one's health status. This can include everything from the mechanisms that drive disease, to the social and built environments that affect our physical and mental well-being. More information about precision medicine can be found in CIAPM's Precision Medicine Primer.

Resources: Asset Inventory

To facilitate collaborations and identification of data sets and assets, CIAPM created the California Precision Medicine Asset Inventory, an online, searchable, interactive mapping tool that includes private, public, and nonprofit entities working within areas relevant to precision medicine and community health. Researchers, patient advocacy and community organizations, health care providers, companies, and others are invited to submit their basic information to be included in the inventory using the Asset Inventory Entry Form and use the inventory to search for potential collaborators.

Resources: Guidance on Community-Engaged Research

To support applicants who want to use community-engaged research approaches, CIAPM has developed guidance and a list of resources (see Appendix A) for researchers, communities, clinicians, and other project partners to encourage high-quality, interactive, and proactive collaborative models, where patients are represented in the governance, design, conduct,

dissemination, and evaluation of CIAPM-funded research projects. We encourage applicants to review this guidance before, during, and after the development of their applications. A summary of the main takeaways is provided below:

1. Building Trust in Partnerships

When trust is established, community members and populations feel empowered to participate in the research process by offering their input, their lived experiences, and expertise on matters that have directly impacted them. Authentic relationships are essential in leading to greater transparency, communication, and shared decision making so that community partners feel comfortable in engaging and providing additional perspectives and knowledge about the culture and history of a community and/or population.

2. Engagement with Community-Based Organizations and Communities to Add Value

When seeking a community partner, researchers should look for individuals or organizations that share similar goals and missions, have the capacity to engage in research, and are prepared to participate in a research project. Community partners bring valuable knowledge of local history, cultural understanding, and language preferences which are essential for engaging diverse communities and populations in ways that reflect their values and perspectives.

3. Community Engagement Efforts Boost Buy-in and Research Success

Research interventions should be tailored to the needs of the community in order to make research more impactful and engaging to a diverse range of individuals.

4. Inclusion of Community Partners During Dissemination

Effective dissemination plans are necessary to involve both communities and researchers and facilitate and nurture bidirectional relationships. Dissemination efforts include distribution of results in accessible languages and formats and continued collaboration efforts between community partners.

5. Challenges in Implementation

Community-engaged research requires intentional efforts to continuously reflect and reevaluate to measure progress, identify areas of improvement, and align with community priorities, which could change over time. Challenges to community-engaged research include different structures, hierarchies, priorities, and incentives between academy and community, which can lead to barriers in developing, engaging, and implementing targeted community-engaged interventions and approaches.

Terms and Conditions of Funding Awards

Update: Institutions with applicants selected for funding will be asked to enter an agreement with CalHHS. Terms and conditions will be based on University Terms and Conditions (UTC-220) for UC/CSU/CSU-auxiliary institutions. All agreements will include the following terms:

- **Update - Funds: Institutions with applicants selected for funding will be asked to enter an agreement with CalHHS. The sponsoring institution is responsible for the use and disposition of any funds awarded, consistent with the student's application. Sponsoring institutions should ensure student support remains consistent with institutional and programmatic policies and ensure awardees from their institution remain in good academic standing, compliant with institutional policies and applicable law. The mentor**

should be an active investigator in the area of the proposed research and faculty at the sponsoring institution who will directly supervise the student's research.

- **Start Date:** Initiate work within 30 days of agreement execution.
- **Use of Data:** Share data and research findings in a manner consistent with institutional and state open-access standards.
- **Protection of Privacy and Health Information:** Applicants are expected to follow state and federal law to protect privacy, personal health information, and rights of human subjects.
- **Progress Reporting:** Submit biannual progress reports using a CIAPM-provided template. Submit status updates and materials for inclusion in CIAPM's annual report to the Legislature, a final report at the end of the project period, and assist CIAPM in the drafting of reports to the Legislature, including evaluation reports which may be prepared after the award's end.
- **Cohort Meetings:** Meetings with cohort of awarded applicants focused on professional development and raising awareness about participation in research among subpopulations who are underrepresented in biomedical research studies.
- **Project Check-Ins:** Regular check-ins with CIAPM staff.
- **Symposia:** Potential in-person symposia.
- **Promotional Materials Creation:** Creation of promotional materials describing the importance of biomedical research in the context of the research question and populations engaged to be shared with CIAPM and through activities or convenings. These materials must be suitable to be shared with CIAPM and among State and non-State employees to discuss and encourage participation in biomedical research with underrepresented communities. Activities or convenings may include trainings or workshops engaging state and non-state employees.

RFA Administration and Contact

Applicants are encouraged to submit questions and consult with CIAPM staff to ensure their application is responsive to this RFA.

During the solicitation process, questions may be directed to:

> The California Initiative to Advance Precision Medicine
> California Health and Human Services Agency
> 1215 O Street Sacramento, CA 95814
> Email: ciapm@chhs.ca.gov (Use subject line "Doctoral Student Representative Research RFA")

Applicants may submit questions via email or mail before the stated deadline. As necessary, CIAPM staff will update a list of Frequently Asked Questions on the CIAPM website.

Any oral communication with CIAPM staff concerning this RFA is not binding on the State and will in no way alter a specification, term, or condition of the solicitation. Therefore, all communication must be directed in writing, as indicated above.

If an ambiguity, conflict, discrepancy, omission, or other error is discovered in the solicitation at any time prior to a deadline, the applicant may notify CIAPM staff in writing and request modification or clarification of the RFA. CIAPM, at its discretion, may provide modifications or clarifications either by an addendum to the RFA or by a written notice to all parties who participate in the RFA.

Appendix

Appendix A: CIAPM Guidance on Authentic Research-Community Partnerships

A significant mission of CIAPM is to reduce health disparities through the lens of precision medicine, leveraging the research and education infrastructure within California. Aligning research efforts with the needs of Californian communities through authentic research-community partnerships is an important approach for representative precision medicine research. Although community-engaged research approaches are not a requirement of this RFA, they can be included as part of the application and project plan. This guidance aims to provide resources for researchers, communities, clinicians, and other project partners to encourage high quality, interactive, and proactive collaborative models, where patients and families are represented in the governance, design, conduct, dissemination, and evaluation of CIAPM-funded research demonstration projects.

Resources for authentic research-community partnerships

Successful CIAPM demonstration project proposals will exemplify a thoughtful strategy to develop and facilitate authentic cross-sector partnerships. The following resources are freely available and recommended:

- Foundational Expectations for Partnerships in Research. Patient-Centered Outcomes Research Institute. February 2025. Download.
- "Community Partnership Guide for Engaging with Academic Researchers", Written by Amal Saleh, Brian Saelens, Maxine Hayes, the Health Equity Community Advisory Committee, and Tumaini R. Coker, published in May 2022 in the *Progress on Community Health Partnerships,* 2022;16(1):129-134. Download
- Community Partnered Participatory Research: Learnings from an Interview with Ms. Andrea Jones and Dr. Kenneth Wells*,* Evidence for Action. (2022, April 26). Download
- "Community-Based Participatory Research During the COVID-19 Crisis: Lessons for Partnership Resiliency," Written by Elaine K. Donnelly, Robin Toof, and Linda Silka; published September 2021 in the *Journal of Higher Education Outreach and Engagement*, 25(3): 91-106; Download
- "Patient and Public Involvement in Research: Enabling Meaningful Contributions," Written by Sarah Ball, Amelia Harshfield, Asha Carpenter, Adam Bertscher, and Sonja Marjanovic; published in 2019 by RAND Corporation; Download
- "Applying a community-based participatory research framework to patient and family engagement in the development of patient-centered outcomes research and practice," Written by Simona C. Kwon, Shiv Darius Tandon, Nadia Islam, Lindsey Riley, and Chau Trinh-Shevrin; published October 2018 in *Translational Behavioral Medicine*, 8;8(5):683-691; Download
- "Precision Medicine Initiative Cohort Program – Building a Research Foundation for 21st Century Medicine Report," published September 17, 2015, p. 38-44. Download
- Principles of Community Engagement, Third Edition, Written by the Agency for Toxic Substances and Disease Registry (ATSDR), in partnership with collaborators at the Centers for Disease Control and Prevention (CDC), National Institutes of Health (NIH), and other organizations; published January 2025 by the Agency for Toxic Substances and Disease Registry; Download
- "Community Engagement in Research: Frameworks for Education and Peer Review," Written by Syed M. Ahmed and Ann-Gel S. Palermo, published August 2010 in the *American Journal of Public Health*, 100(8): 1380-1387; Download

- “Chapter 1. The vision, valley, and victory of community engagement.” Written by Loretta Jones, Kenneth Wells, Keith Norris, Barbara Meade, and Paul Koegel; published Autumn 2009; *Ethnicity & Disease*, *19*(4 Suppl 6), S6–7. Download

Appendix B: Protection of Human Subjects

You will need to know whether your research needs an IRB review in the case that your proposal is awarded CIAPM funding. Please use this simple questionnaire to determine whether your proposed project falls under the category of Human Subjects Research, as defined by the NIH[9].

If your project is awarded and requires IRB approval, your project's mentor is required to submit the necessary paperwork for IRB review within one month of the contract execution date. Exempt Research requires IRB review and acknowledgement, and Non-Exempt Research requires IRB review and approval (see Question 2 below). CIAPM does not require IRB submissions prior to application of RFAs.

1. Does your proposed work involve Human Subjects Research? If you are unsure, please use the NIH Human Subjects Research Decision Tool. Yes ☐ No ☐

   If you answered "Yes," please complete the following questions. If you answered "No", then no further response is required in this section.

2. Does your work qualify as "exempt"? Yes ☐ No ☐

   To answer this question, consider the results of the NIH Human Subjects Research Decision Tool (linked above) and the six categories listed in Federal Regulations Code §46.104 under "Exempt Research."

   2a. If you answered "Yes" to question 2, your project requires IRB review and acknowledgment, rather than an IRB review and approval.

   - Has IRB acknowledgment been obtained from your institution? Yes ☐ No ☐
     - If Yes: IRB acknowledgement date:
     - If No: I agree that an application will be submitted to my IRB within one month of contract execution. Yes ☐

   2b. If you answered "No" to question 2, your project requires IRB review AND approval.

   - Has IRB approval been obtained from your institution to support your CIAPM-funded project? Yes ☐ No ☐
     - If Yes: IRB approval date:
     - If No: I agree to that an application will be submitted to my IRB within one month of contract execution. Yes ☐

3. Are you proposing a clinical trial? Yes ☐ No ☐

4. Does the project involve children? Yes ☐ No ☐

   ☐ If you answered "Yes," please check the box to confirm that the project complies with additional HHS Regulations related to involving children in research.

[9] Review the NIH definition of "human subjects"

Appendix C*:* State Law Compliance Checklist

Please confirm that the project complies with California Law, including the following code sections relevant to research and child abuse and neglect reporting (check each box to confirm compliance):

- ☐ Health and Safety Code on Human Experimentation §24170 - 24179.5
- ☐ Penal Code on Biomedical and Behavioral Research §3500
- ☐ Child Abuse and Neglect Reporting Act §11164-11174.3