George and Judy Marcus Innovation Fund
Marcus Program in Precision Medicine Innovation
2020 Call for Proposals

Call for Proposals Announced	October 16, 2020
Proposal Application Deadline	Monday, December 21, 2020
Announcement of Awards	January 2021
Project Timeline	1 year

The **Marcus Program in Precision Medicine Innovation (MPPMI)** seeks to fuel innovation in precision medicine by fostering creative, high risk, high impact team science projects supporting the precision medicine continuum. See MPPMI Program Overview on the program website. The MPPMI invites proposals again for our 2020 funding in three award categories, **Seeding Bold Ideas**, **Transformative Integrated Research,** and **ELSI in Precision Medicine.**

For proposals to the **Seeding Bold Ideas** and **Transformative Integrated Research** mechanisms, projects:
- should support translational precision medicine research with a strong basic science core;
- require two or more PIs (multi-PIs): at least one a basic scientist, and at least one a clinical, social/behavioral, implementation, computational or population scientist; existing or newly formed teams are both eligible;
- should employ high-risk thinking and approaches that will likely yield explicit "deliverables" (including discovery that the idea was wrong) after one year; and
- are encouraged to employ population health and health equity strategies or to integrate novel computational methods such as those that contribute to building the Information Commons or Knowledge Network.

In addition, with the complexities of new clinical and research technologies (e.g., gene-editing) and with novel use of personal health data (e.g., collectively, in the 'knowledge network'), we are now faced with new and unprecedented ethical, legal, social implication (ELSI), implementation, and policy matters. In order to fully realize the vision of Precision Medicine, innovative research addressing such social science issues is critical. To that end, we are the ELSI-focused grant mechanism within the Marcus Program in Precision Medicine Innovation (MPPMI) – **ELSI in Precision Medicine**.

For the **ELSI in Precision Medicine** mechanism, projects
- should address an innovative ELSI, implementation, health economics, or policy project, tethered deliberately to a precision medicine application (e.g., data stewardship and sharing, economics of precision medicine applications, precision medicine and health disparities, role of genetic exceptionalism in policy development, participant rights and engagement, etc.);
- require two or more PIs (multi-PIs);
- should employ high-risk thinking and approaches that will likely yield explicit "deliverables" (including discovery that the idea was wrong) after one year.

Human Subjects Research

To address the need for timely and efficient stakeholder input in research, the UCSF CTSI has established a Patient and Community Advisory Board (PCAB). The PCAB provides review and feedback for UCSF clinical and

translational research. Community stakeholders include patients, clinicians, community-based organizations, civic agencies, and other groups who have a stake in the outcomes of clinical research. Involving representatives from these groups early in the research process is important not just for socially responsive science, but also makes for more successful translational research by facilitating recruitment and retention of representative study participants, enhancing the feasibility of study interventions, and promoting successful dissemination of findings to target audiences. All investigators conducting human subjects research funded by a Marcus Award *MUST* seek PCAB review; Requesters should **use this link** and then click on the orange box. Such relevant projects will be awarded an additional $1,000 to cover the cost of PCAB review.

Diversity Supplement *NEW*

This supplement modestly augments awarded Marcus grant projects that have at least one PI from an under-represented minority (URM) group or that include under-represented (UR) populations in their research studies. The top two awarded SBI, TIR and ELSI applications (based on final review score) that meet either criteria will be awarded an additional $5,000 for SBI grants, $8,000 for ELSI grants, or $15,000 for TIR grants. Applications that meet either of these criteria will be asked to include a brief paragraph describing how the PIs plan to use such a supplement. Note that Diversity Supplements awarded to a URM faculty PI may be spent at the discretion of the URM researcher toward the aims of the proposal, and those awarded to a project that includes UR populations can be used broadly in support of the inclusion of those populations in their study. For example, these Supplemental funds might support assays on additional samples, or translation of study documents into alternative languages.

Award Amounts:

Marcus Program Seeding Bold Ideas Award (MP-SBI)

- Up to $75,000 for one year
- SBI awards enable initial exploration of untested concepts or hypotheses with great potential impact
- Funding 4-6 proposals

Marcus Program Transformative Integrated Research Award (MP-TIR)

- Up to $300,000 for one year
- TIR awards support new directions for established basic science-driven translational studies
- Funding 3-4 proposals

Marcus Program ELSI in Precision Medicine Award (MP-ELSI)

- Up to $150,000 for one year
- For ELSI awards only, 50% of the total grant budget ($75,000) may be applied to PI salary.
- ELSI awards support the development of necessary frameworks for ELSI, implementation, economic, and policy aspects of precision medicine.
- Funding up to 2 proposals

Eligibility:

- UCSF faculty, as well as UCSF Sandler Fellows and Physician Scientist Scholars Program awardees are eligible; and
- At least one of the multi-PIs on the team must have an Academic Senate appointment.

Submission: As a single PDF, via email to rdoinfo@ucsf.edu no later than Monday, December 21, 2020, 11:59 pm PST. **NOTE: Include contact PI last name in the file name and put *Marcus Award* in the Subject Line.**

<u>**Selection Process:**</u>

A diverse faculty committee with appropriate expertise and understanding of precision medicine goals will select the awardees and establish funding levels.

<u>Review Criteria</u>
(**1-4 *must* be met for each;** address additional criteria explicitly to the extent that they apply to your proposal)

Seeding Bold Ideas Award and **Transformative Integrated Research Award** proposals should:

1. Address an innovative precision medicine approach grounded in a basic science problem or question;
2. Address the potential for tangible benefit to patients, including the likelihood that the study will have an immediate impact;
3. Address the potential for data integration, bridging basic and translational research;
4. Describe the multidisciplinary composition and expertise of team members;
5. Give attention to particular challenges of computational needs, interoperability, health disparities, privacy, participant engagement, consent, security, ethical and/or regulatory issues;
6. Include potential downstream use of tools, measurements, approaches, and data, including open public accessibility of generated data and publications; and/or
7. Include the potential to scale, including potential to leverage the >15 million EHR from across the UC Health centers.

ELSI in Precision Medicine Award proposals should:

1. Address an innovative ELSI, implementation, health economic, or policy project, and describe how it is tethered deliberately to a precision medicine application;
2. Address the potential for tangible benefit to patients, including the likelihood that the study will enable more effective and timely implementation of precision medicine applications;
3. Describe the multidisciplinary composition and expertise of team members;
4. Include the potential downstream use of tools, measurements, approaches, and data, including open public accessibility of generated data and publications; and/or
5. Include the potential to scale.

Proposal Instructions (Arial 11 font; 0.5 inch margins)

1. <u>Cover Page (1 page limit):</u> Cover page with name of award program, deadline, title of proposal, scientific disciplines represented in the collaboration, amount of funding requested, Principal Investigator names, academic titles, departments, current contact phone numbers, and email addresses. Identify the contact PI and the UCSF department that will manage the award, along with the accounting manager/contact name, their email address, and their phone number.
2. <u>Project Description (2 page limit):</u> Project Description to include sections on Rationale/Background; Proposed Research and Approach; Innovation; and Impact. Preliminary data not required. Figures must be included within these 2 pages.
3. <u>Competitive Renewal Statement (if applicable, additional 1 page to Project Description):</u> *If this proposal is a request for Year 2 follow-on funding of a 2019 project award*, please complete a Competitive Renewal Statement in which you describe the research results obtained with Year 1 funding, including the extent to which Year 1 goals were achieved and/or any issues encountered; and describe the relationship between the aims of the Year 1 funding proposal and those proposed for Year 2.
4. <u>Diversity Supplement (if applicable; brief paragraph not part of Project Description page limit):</u> If the proposed project is led by an under-represented minority faculty OR includes under-represented

populations in the experimental design, then the project is eligible for a modest supplement. The URM faculty PI supplement may be spent at the discretion of the URM researcher toward the aims of the proposal and the UR populations supplement can be used broadly in support of the inclusion of those populations in the study. Please provide a brief paragraph describing how you would use the supplement

5. <u>References (not part of page limitations)</u>
6. <u>Budget and Budget Justification (1 page limit</u>): Funds may not support faculty salary.
7. <u>Regulatory Compliance (not part of page limitations)</u>: Please answer the following questions.
   a. Does your project involve human subjects?
      i. Yes, CHR/IRB Approval # is
      ii. Yes, CHR/IRB Approval Pending
      iii. Yes, CHR/IRB Approval Planned
      iv. No, CHR/IRB Not Applicable
   b. Does your project involve human stem cells?
      i. Yes/No
   c. Does your project involve animal subjects?
      i. Yes, IACUC Approval # is
      ii. Yes, IACUC Approval Pending
      iii. Yes, IACUC Approval Planned
      iv. No, IACUC Not Applicable
8. <u>Biosketch (not part of page limitations; 5 page maximum per biosketch)</u>:
   Use this version: <u>Biosketch Version F</u>. Include biosketches for all PIs of a multi-PI application, and any other key personnel such as Co-Investigator(s).
9. <u>Current & Pending Support (not part of page limitations)</u>: All current and pending intramural and extramural research support information for each PI, following the <u>NIH format</u>.

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