Chan Zuckerberg Initiative

REQUEST FOR APPLICATIONS Dynamic Imaging

The Chan Zuckerberg Initiative invites applications for challenge grants in the field of Dynamic Imaging. This Request for Applications (RFA) aims to advance technology directed at real-time visualization of biological processes at the level of cells and molecules.

OPPORTUNITY

Overview

The Chan Zuckerberg Initiative (CZI) invites applications in the field of dynamic imaging that will support the development of new tools or significant enhancements of existing tools to monitor biological processes in motion, across time, and across spatial scales. This grant program will provide 2.5-year challenge grants for projects with specified proof-of-concept milestones.

Scientific Scope

The long-term goal of this RFA, part of CZI's Frontiers of Imaging effort, is to drive technology development aimed at measuring cellular and molecular processes in real time in intact, living systems. Priority will be given to proposals for methods developed for imaging in intact tissues or primary cells rather than immortalized cell lines. This opportunity is specifically aimed at technology development; it is not intended to support question-driven basic or translational research, clinical trials, or drug development. Preliminary data is encouraged but not required.

Examples of research themes include:

- Development, detection and/or tracking of multiple labels (e.g. multi-spectral Raman microscopy, hyperspectral imaging, tracking of multiple single particles labeled with different probes);
- Development of new dynamic reporters (e.g. reporters for protease activity, kinase activity, cellular ion concentration fluctuations, protein-protein interaction, organelle specific chemical labeling, mechanical or electrical forces);
- Development of correlative methods for temporal studies (e.g. correlative light and electron microscopy with a dynamic imaging component);

- Adaptation of static methods for dynamic imaging (e.g. improvements of liquid cell electron microscopy), and;
- Hardware, software, algorithm or biological probe development to obtain high-resolution dynamic measurements in deep tissue or in large volumes (e.g. 4D/5D imaging at cellular resolution in whole organs, 4D/5D cell microscopy at super-resolution).

We particularly encourage applications from:

- Researchers in disciplines outside of biomedicine who bring new technology, resources, or frameworks to studying cellular and molecular processes;
- Women, underrepresented minorities, and members of underserved populations; and
- Early-career investigators, defined as principal investigators who have been in an independent faculty role for less than six years at the time of application, i.e. starting after their first position after August 2016.

Desired Outcomes

Successful outcomes for this RFA could include:

- Development of new chemical probes, biological tools, and hardware for imaging molecular and cellular processes over time;
- Development of new protocols for imaging cellular and molecular processes over time, and;
- Development of new computational techniques and algorithms for detection, tracking, and analysis of targets of interest.

Collaboration and Open Science

CZI seeks investigators who will contribute to a collaborative interdisciplinary network and the advancement of the dynamic imaging field.

- Investigators and members of their labs will participate in annual meetings of all funded groups, smaller meetings focused on specific biological or technical topics, and regular webinars.
- Investigators and CZI staff will work together to identify resources and technology that can drive the imaging field forward.
- Investigators will commit to rapid dissemination of all resulting data, protocols, code, reagents, and results prior to publication through resources such as protocols.io, GitHub, Addgene, and preprints. Please see the Policies section for additional details.

ELIGIBILITY

Applications may be submitted by domestic and foreign nonprofit and for-profit
organizations, public and private institutions, such as colleges, universities, hospitals,
laboratories, units of state and local government, companies, and eligible agencies of
the federal government. As part of the application process, for-profit organizations may
need to provide additional information on the charitable purposes of the proposal. Grants
are not permitted to individuals, only to organizations.

- There may be more than one application submitted by each organization.
- Each application should designate one Principal Investigator (PI) as the Coordinating Principal Investigator (Coordinating PI). The Coordinating PI will act as the administrative contact between CZI and all PIs on the grant (Co-PIs). The Coordinating PI must submit the application on behalf of all PIs. The Coordinating PI must be affiliated with the institution submitting the application, and grant funds will be awarded to that institution, which will take responsibility for distributing funds to any other institutions. Note that institutions outside the U.S. may not subcontract to U.S. institutions, so please be mindful when selecting the Coordinating PI/institution.
- Each application should have a minimum of one PI (Coordinating PI), but may designate
 up to three total PIs (one Coordinating PI and up to two Co-PIs).
- Pls may only serve as the Coordinating Pl on one application, but may serve as a Co-Pl
 on applications different from the one they submitted.
- Co-PIs may serve as a Co-PI on multiple applications.
- Pls/Co-Pls on one application may be employed at the same or at different institutions.
- Pls and Co-Pls must hold a PhD, MD, or equivalent degree.
- PIs and Co-PIs must each run laboratories in which they control their budget, their space, and their research. Independence in an academic setting is typically demonstrated by a full-time faculty appointment, a tenure-track position, allocated space, a start-up package, and institutional commitment as defined or verified in a letter from a department chair or equivalent. Independence may be defined differently in other organizations. Note: an upload of the letter or proof of independence is not required at the time of application.
- CZI encourages applications from underrepresented populations, women, and early-career scientists.
- Meta employees, including employees of any subsidiary Meta entities, as well as employees of Chan Zuckerberg Initiative, LLC, are not permitted to apply.
- CZI reserves the sole right to decide if an applicant and applicant organization meet the eligibility requirements.
- CZI reserves the right to request budget changes prior to award.
- We welcome applications from any country, provided the proposed work is compliant with the United States Treasury Department's Office of Foreign Asset Control (OFAC) sanctions program. Prior to award, all grant applications will be reviewed for compliance with the United States Treasury Department's Office of Foreign Asset Control (OFAC) sanctions program, the United States Department of Commerce's export administration regulations, the Foreign Corrupt Practices Act (FCPA), any other applicable U.S. laws and regulations, and any corresponding laws and regulations in the country where the applicant is based. All grant agreements will also require the grantee to comply with these laws and regulations. For additional information please refer to: the <u>U.S. Treasury Department's resources</u>, the International Trade Administration's <u>website on US Export Controls</u>, and the Department of Justice's website on the FCPA.
- While applicants from all countries are welcome to apply, because of required ongoing
 compliance with U.S. sanctions and export controls, an applicant's funding eligibility may
 need to be reassessed if the applicable laws and regulations change at any time. As a
 result, even if an applicant is eligible to receive funding at the time the application is

reviewed, the applicant's status may change later in the process or during the course of the grant term.

CZI suggests that you consult your home institution to determine eligibility to apply for this grant and your institutional policy on indirect costs. For questions about eligibility for this award or the application process, please contact us in advance of the proposal deadline at sciencegrants@chanzuckerberg.com. Deadline extensions will not be granted.

APPLICATION REQUIREMENTS

All applications must be completed and submitted through CZI's online grants management portal at https://apply.chanzuckerberg.com. It is recommended that applicants familiarize themselves with this portal well in advance of the application deadline. Detailed application instructions are available on the Chan Zuckerberg Initiative website, as well as in the grants management portal.

Key Dates

June 21, 2022 Application portal opens

August 23, 2022 Applications due by 5 p.m. Pacific Time (PT)

January 2023 Earliest notification of decisions (subject to change)

March 1, 2023 Expected start date (subject to change)

Award period and start date: Awards will be 2.5 years (30 months) in duration with an expected start date of March 1, 2023.

Budget: Because hardware, software, and protocol development projects that may be supported by this RFA likely require different resourcing levels, a budget limit has not been set on a per project basis. Proposed budgets should reflect the project scope. Indirect costs cannot exceed 15 percent of direct costs.

SELECTION PROCESS

The Chan Zuckerberg Initiative's <u>core values</u> center around people, technology, collaboration, and open science. We adhere to those values in both proposal selection and evaluation of progress.

CZI will evaluate all applications for scientific merit through independent expert review. Final decisions will be made by CZI staff in consultation with our scientific advisors. There is no expectation of any specific number of awards, and the Chan Zuckerberg Initiative reserves the sole right to not recommend the funding of any applications. CZI does not provide feedback on decisions for unfunded proposals.

Selection of awardees will be based on:

- The quality of the proposal, and the expertise and capacity of the group for addressing the proposed project.
- Significance and potential impact of the project.
- Potential of the awardee to contribute to and benefit from a collaborative interdisciplinary network.

POLICIES

- Funds from this award are intended to support research activities. Grants are made to
 institutions on behalf of the named award recipients, and reasonable flexibility on how
 these funds are utilized is allowed, provided that funds are used to support research
 activities related to the project. A detailed budget is required.
- For awarded projects, financial statements and progress reports will be due at the
 conclusion of each grant year. Specific deliverable requirements will be outlined in the
 award notification. Grantees of funded projects will be required to participate in regular
 meetings, including annual scientist meetings. Travel support for these meetings will be
 provided by CZI separately from the requested grant funds.
- Grantees may obtain funds for their research from other funding sources, provided that there is no conflict with meeting the terms of the CZI award.
- Unused research funds may be carried over to the following year, and requests for no-cost extensions will be considered at the end of the overall project period and upon receipt of an annual report.
- Indirect costs cannot exceed 15 percent of direct costs. Indirect costs may not be
 assessed on capital equipment or subcontracts, but subcontractors may include up to 15
 percent indirect costs of their direct costs. Non-charitable entities must include a clear
 allocation and explanation for any indirect costs included in a proposed budget.
- International grantees must use all grant funds exclusively for activities conducted outside the United States of America.
- Ethical conduct: CZI advocates the highest standards for the ethical conduct of research. In addition to requirements of their own countries, grantees should adopt procedures for the use of animals in research and for the ethical treatment of human subjects and tissue donors, including obtaining their written informed consent. CZI regards the policies of the National Institutes of Health as a strong model for such procedures.
- Data, publication, and dissemination policies: To accelerate scientific discovery and
 collaboration, CZI supports a consent, sharing, and publication policy for open and rapid
 dissemination of proposal results, including methods, data and reagents, and a policy for
 software development that maximizes accessibility, reuse, and shared development.
 Under rare circumstances, exceptions to the above may be considered where there are
 specific situations that make meeting these goals impossible or counterproductive to the
 project.
 - Software code: CZI requires sharing of software code developed by its grantees generally to be made publicly available on GitHub (or a similar public service). All new code must be released under a permissive open source license (MIT, BSD 2-Clause, BSD 3-Clause, or Apache v2.0). All pre-existing and derivative code

should be licensed under the most permissive license possible, given the licensing terms of the pre-existing code. All analysis packages must be released through the appropriate language-specific package manager (e.g., PyPi for Python, Bioconductor and CRAN for R) with documentation, example data, and interactive demos (e.g., Jupyter notebooks), and the use of Docker or similar container technologies to ensure portability and reproducibility. Software code supported by CZI should be archived for Iong-term digital preservation and Ioigitality, when applicable.

- Content and data sharing: CZI is committed to developing and using platforms that disseminate data openly and freely. Any datasets either curated or generated through the proposal should be made publicly available and easily accessible through an appropriate data repository, when applicable, under an Open Definition conformant license. Ideally data sets would not include personally identifiable information, but if they do, consent to sharing the data should be obtained. Metadata, documentation, and intended use cases, as appropriate should be made available under an Open Definition conformant license, preferably CC0 or CC BY/CC BY SA for content that requires explicit attribution.
- Publications: To encourage rapid dissemination of results, any publications related to this funded work must be submitted to a preprint server (such as bioRxiv, medRxiv, arXiv, or any appropriate preprint repository), at or before the first submission to a journal. Experimental protocols should be made publicly available through a protocol sharing service, such as protocols.io. CZI requests that scientific publications, preprints, and presentations that result from this award acknowledge support from this funding.
- Reagent sharing: Resources and reagents developed with this funding support should be available for rapid dissemination to the community, where possible in an accessible community repository, such as Addgene (for plasmids/DNA reagents/viruses) and Jackson Labs (for model systems lines), etc. This requirement applies to cell lines, transgenic organisms, plasmids/clones, antibodies, and other reagents.
- Consent: All human tissues should be adequately and fully consented to permit full sharing of the resulting data and any resulting tools, in accordance with laws and regulatory requirements. Any desired exceptions to this policy must be identified at the time of application, and such requests may affect the application's chance of success. We are aware that there may be circumstances where broad consent may be challenging, and in some cases consent may be subject to revocation; we encourage investigators to discuss these cases with CZI scientific staff.
- Intellectual property rights: CZI does not require assignment of ownership to any data, published results, or any other intellectual property that results from the work funded by these grants, but will have the same rights generally granted to others in the permissive licenses described above. CZI supports and promotes policies that enable results and technologies to have the broadest reach and impact. To this end, all newly developed software should be made available through permissive open source licenses as described more fully above. Other

technology and intellectual property rights (such as patents) should be made freely available for all academic and non-commercial use, and where intellectual property rights are commercialized, they should generally be subject to non-exclusive commercial licenses that enable broad availability and dissemination.

 Applications selected through this process will either be funded by the Chan Zuckerberg Initiative Foundation (CZIF) or recommended for funding through the Chan Zuckerberg Initiative Donor-Advised Fund (DAF) at the Silicon Valley Community Foundation (SVCF).

CONFIDENTIALITY

All submitted applications will be kept confidential, except (1) as necessary for our evaluation or to comply with any applicable laws; and (2) to the extent that the application is made public or available to others without a duty of confidentiality through no fault of CZI. Notwithstanding, successfully funded proposals may be made publicly available and/or shared with other grantees or collaborators. Unfunded proposals will remain confidential as provided herein; however, information, including brief summaries of the proposed projects, project metrics, and the types of organizations that have applied for funding, may be made publicly available in aggregate form. Application materials will not be returned to applicants.

RFA CONTACT

For administrative and programmatic inquiries, technical assistance, or other questions pertaining to this RFA, please contact sciencegrants@chanzuckerberg.com.

IMPORTANT DOCUMENTS

<u>Application Instructions</u> <u>Institutional Approval Form</u>

Chan Zuckerberg Initiative

APPLICATION INSTRUCTIONS Dynamic Imaging

Some helpful information as you get started:

- This document contains:
 - General guidance on using the portal
 - How to submit an application
 - Application details specific to this Dynamic Imaging RFA
- Please review the <u>Request for Applications</u>.
- The Chan Zuckerberg Initiative uses SurveyMonkey Apply (SMApply) as its grants
 management portal. All applications must be submitted through this portal
 (https://apply.chanzuckerberg.com). SMApply is configured to work best using the Google
 Chrome browser. It is recommended that you familiarize yourself with this portal well in
 advance of any deadlines. Deadline extensions will not be granted.

Key Dates:

June 21, 2022 Application portal opens

August 23, 2022 Applications due by 5 p.m. Pacific Time (PT)

January 2023 Earliest notification of decisions (subject to change)

March 1, 2023 Expected start date (subject to change)

Application Specifics:

- Eligibility: Please refer to the <u>RFA announcement</u>.
- Award Period: Awards will be 2.5 years (30 months) in duration with an expected start date of March 1, 2023.
- Award Amount: Because hardware, software, and protocol development projects that
 may be supported by this RFA likely require different resourcing levels, a budget limit
 has not been set on a per project basis. Proposed budgets should reflect the project
 scope. Indirect costs cannot exceed 15 percent of direct costs.
- Number of Principal Investigators (PI and Co-PIs): Each application should have a
 minimum of one PI (Coordinating PI), but may designate up to three total PIs (one
 Coordinating Principal Investigator and up to two Co-Principal Investigators (Co-PIs)).
- Institutional sign-off is required.

GETTING STARTED

Account setup: The applicant (Coordinating PI) must first set up an account in the CZI online grants portal at https://apply.chanzuckerberg.com/. Only the Coordinating PI needs to set up an account.

To set up an account:

- 1. Go to https://apply.chanzuckerberg.com/.
- 2. Click the green Register button in the upper right corner.
- 3. Complete the requested fields and then click the green Create Account button.
- 4. Click the green Continue button to proceed to the site.

Please note you will need to verify your account through the auto-email that you receive after registering. You will not be able to submit an application until your account is verified.

Personal data: Where we ask for personal data of individuals in grant applications, please only submit personal data that you have a right to provide. We will use and store any personal data collected through the application process for grant-related purposes (e.g., administering the grant, analyzing and improving our grant practices). The Chan Zuckerberg Initiative Foundation and Chan Zuckerberg Initiative, LLC (collectively "CZI") will be the "data controllers" for any such personal information, and the data may be stored on servers outside of your home country, including within the United States. If you have any questions or concerns regarding our privacy practices or collection or use of personal data, you can contact us at privacy@chanzuckerberg.com.

Navigating the portal: Once you have set up an account, you can log into the grants portal at https://apply.chanzuckerberg.com/. Using the links in the upper right corner, you can access available programs (which includes RFAs for all CZI areas, not just Science) and any applications you have in preparation or previously submitted. Use the information ("i") link to get help with the portal. To access your account information, click on your name in the upper right. Your application will pre-populate with the name and email listed in your account information so if you need to edit it, click on your name in the upper right corner to make any necessary changes.

Forgotten username or password: If you have forgotten your username or password, please navigate to the grants portal at https://apply.chanzuckerberg.com/ and click on the **Log In** link located in the upper right corner. Click the "Forgot your password?" link and then enter the email address associated with your SMApply account. You will then receive an email with information to reset your password. Please note that your username is your email address.

Other questions: If you have other questions about using the portal, please use the information ("i") link in the upper right corner of the window. Here you will find a link to FAQs about using the portal, as well as links to submit specific help requests. If you have specific questions about the RFA, please contact us at sciencegrants@chanzuckerberg.com.

SUBMITTING AN APPLICATION

To submit an application:

- 1. Go to https://apply.chanzuckerberg.com.
- 2. Log in.
- 3. Click the green View Programs button that is displayed or click on the Programs link in the upper right corner. This will bring you to a listing of all programs/RFAs that CZI is hosting in SMApply. To **find the Dynamic Imaging RFA**, you may need to scroll down.
- 4. Find the program/RFA you are interested in and click the green **More** button.
- 5. Click the green **Apply** button in the upper right and complete all sections (details below).
 - a. You will first be prompted to enter the title of your application, after which you will have access to the application tasks to complete. Project title is limited to 60 characters, including spaces. If you need to edit your project title, click on the My Applications link in the upper right and click the green Continue button on the application you wish to edit. Once the application page opens, click on the three dots to the right of the application title (next to the Preview link) and select Rename from the dropdown menu.
 - b. The application is made up of several sections called tasks that are listed in a menu on the left side of the page. To **open a task**, click on the one you would like to work on. You can edit and complete tasks in any order. You may need to scroll down to see the remaining tasks.
 - c. Once you **complete a task**, click the green **Mark as Complete** button within the task. All tasks must be marked as complete before submitting. To **edit a task** after marking it as complete, click the three dots in the upper right of the task and select edit, which will re-open the task.
 - d. Your application will autosave every few seconds, but you can also click the Save & Continue Editing on each task as you go along to **save your application**.
 - e. For tasks that require a PDF upload: If you need to **delete and replace a PDF** after you have uploaded it, click on the three dots to the right of the file under the Attach File section within the task and select Remove from the dropdown menu.
 - f. To download your application, click on the three dots in the upper right corner of the application page and select download. If you are within a task, first click on the Back to application link in the upper left. Please be aware of any pop-up blockers in your browser that may prevent downloading your application.
 - g. To access an application that you have previously saved, click on the My Applications link in the upper right and click the green **Continue** button on the application you wish to edit.
- 6. Once all tasks are completed, click the green **Submit** button **to submit your application**.
 - a. If the button is grayed out, it means your application is not yet complete; please be sure all required fields and uploads are complete within each task and that you have clicked the **Mark as Complete** button within each task.
 - b. To **download your application**, click on the download link in the upper right corner. Please be mindful of **any pop-up blockers** that may be active in your

- browser that prevent/hide downloads.
- c. Review your application in the window (or in the PDF that you have downloaded). If you want to make changes, navigate back to your application and reopen/edit any tasks that need editing. It is strongly recommended that you download your application as a PDF (instructions above in 5f and 6b.) to review your application before clicking submit.
- d. Once you are ready to submit, click the green Submit Your Application button on the left side of the window. You will need to confirm your submission by clicking the green Submit button in the pop up window. Once your application has been submitted, it cannot be edited. Please be sure that your application is complete BEFORE submitting. If you inadvertently submit your application and it is before the deadline, please contact sciencegrants@chanzuckerberg.com.
- 7. Once your application is submitted, you will **receive an auto-email** confirming submission within a few minutes. If you do not receive a confirmation email within a few minutes, please check your spam folder. If you still did not receive your confirmation email, please email sciencegrants@chanzuckerberg.com.
- 8. If you would like to view your application after you have submitted it, it can be accessed through the My Applications link in the upper right corner.

The application consists of the following sections (called tasks in the grants portal):
Coordinating PI Details, Equal Opportunity & Diversity, Organization Details for Coordinating PI,
Project Details, Project Proposal, Budget, Active Grant Support, Biosketches for Coordinating PI and
Co-PIs, and Letters of Commitment.

- Coordinating PI Details: Complete all fields in this task; all fields are required. The information entered should be for the Coordinating Principal Investigator (Coordinating PI), who will be the person submitting the application on behalf of the team. The Coordinating PI will take responsibility for managing the group collaboration and be the administrative point of contact for CZI and any partners. Information about the Co-Principal Investigator(s) on the proposal should be entered where requested in the Project Details part of the application.
 - Name and email (auto-filled): To edit your name or email, please do so in your account information by clicking your name in the upper right corner and clicking My Account in the dropdown menu.
 - o Degrees.
 - Organization, Title/Position, Department or equivalent.
 - Career status: Select early-career (0 to 6 years), mid-career (6+ to 10 years), or neither. Note: Early- or mid- career status is not required to be eligible for this RFA.
 - Early-Career Definition: In the context of this RFA, an early-career investigator is someone who has been in an independent position (or equivalent) for zero to six years at the time of application, i.e. have started their first independent position between August 23, 2016 and August 23, 2022.
 - Mid-Career Definition: In the context of this RFA, a mid-career investigator is someone who has been in an independent position (or equivalent) for more

than six to 10 years at the time of application, i.e. have started their first independent position between August 23, 2012 and August 22, 2016.

- Short narrative biography of the Coordinating PI (maximum of 100 words).
- ORCID iD: Enter in format XXXX-XXXX-XXXX. ORCID iDs are unique, digital identifiers that distinguish individual scientists and unambiguously connect their contributions to science over time and across changes of name, location, and institutional affiliation. ORCID iDs will be used to streamline reporting in our applications and grant reports to reduce the burden on grantees. For more information, please visit https://orcid.org/register. (Please contact us at sciencegrants@chanzuckerberg.com if you wish to opt out).
- Equal Opportunity & Diversity: CZI Science supports the science and technology that will make it possible to cure, prevent, or manage all diseases by the end of this century. Everyone is affected by disease, yet different communities are affected by or experience disease in different ways. Moreover, due to systemic barriers, the scientific enterprise itself is not a place where all voices and talents thrive. We believe the strongest scientific teams encompassing ourselves, our grantees, and our partners incorporate a wide range of lived experiences and perspectives that guide them to the most important unsolved problems. To enable our work, we incorporate diverse perspectives into our strategy and processes, and we also seek to empower community partners to engage in science.

We request demographic information associated with applications submitted to CZI in response to our open calls. Based on our learnings, we take steps to broaden or adjust our strategies to improve our reach and to help ensure members of underrepresented or marginalized groups in science are aware of CZI opportunities and able to apply. Please note that answering all questions below is voluntary, and demographic information will not be used to make final grant funding decisions. All responses will be shared only with limited personnel, who will use that information only for the purposes described in this paragraph.

If you have any additional questions about why we ask this, what we do with the data, or to share suggestions for improvement, please reach out to sciencegrants@chanzuckerberg.com.

The information below may be entered for the Coordinating PI. Please note that completing the below is voluntary, and demographic information will not be used to make final grant funding decisions.

- What is your race/ethnicity? (optional)
- What is the year of your last academic degree? (optional)
- What is your gender? (optional)
- Are you transgender? (optional)
- Are you a member of the LGBTQ community? (optional)
- Do you have one or more disabilities? Please specify (optional)

The information below may be entered for the Co-Principal Investigators listed (if any and up to two maximum) in the Project Details section. **Please note that completing the below is**

voluntary, and demographic information will not be used to make final grant funding decisions. Please also let your Co-Principal Investigators know if you choose to enter the below in case they object to your providing that information to CZI.

- Do any of the Co-Principal Investigators self-identify as one of the following? Woman,
 Man, Non-binary/Third gender, Prefer not to state, Prefer to describe (optional)
 - If yes, how many of the listed Co-Principal Investigators self-identify as one of the above gender identities? Please do not include requested information on a per person basis; we are looking for aggregated information (optional)
- Do any of the Co-Principal Investigators self-identify as one of the following? Two or More Races, Black and/or African American, Asian, White, Hispanic or Latinx, Middle Eastern or North African, Native Hawaiian or Other Pacific Islander, American Indian or Alaska Native, Prefer not to state, Prefer to describe (optional)
 - If yes, how many of the listed Co-Principal Investigators self-identify as one of the above race/ethnicities? Please do not include requested information on a per person basis; we are looking for aggregated information (optional)
- Organization Details for Coordinating PI: Complete all fields in this task; all fields are required. The information entered should be for the organization of the Coordinating Principal Investigator (Coordinating PI), who will be the person submitting the application on behalf of the team. The Coordinating PI must be affiliated with the organization listed, and grant funds will be awarded to this organization, which will take responsibility for distributing funds to the institutions of the other team members.
 - Organization name/Street address/City/State/Country/Website.
 - <u>Type of organization:</u> Academic, Other Nonprofit, Industry/company, Government, or Other. If Industry/company is selected, an additional set of questions will need to be completed in the portal to determine eligibility.
 - <u>Tax ID</u>: Enter your organization's Employer Identification Number (EIN), as assigned by the Internal Revenue Service in the 9-digit format (XX-XXXXXXX; 10 characters total).
 Foreign organizations or others who do not have an EIN should enter 44-4444444.
 - Organizational/Administrative Contact: List the name and contact information for the administrative contact to discuss additional information needed, if selected for award.
 - First name, Last name, Title/Position, Email.
 - Signing Official: List the name and contact information for the person authorized to sign on behalf of your organization.
 - First name, Last name, Title/Position, Email.
 - <u>Press Contact / Public Relations Official:</u> List the name and contact information for the person to discuss press releases and media.
 - First name, Last name, Title/Position, Email.
 - Institutional Approval Form: Upload as a single PDF. This form should be reviewed and signed by a person authorized to sign on behalf of your institution agreeing to the stated institutional and investigator requirements and commitments on data, resource sharing, and publication policies, as well as endorsing/verifying your application materials and confirming their ability to receive funding for the proposal. In the event of an award, all funds will be awarded to the Coordinating PI institution as the prime institution, and the Coordinating PI institution will be responsible for ensuring

compliance of all of the terms, including compliance of all partners/subcontract institutions. These policies are non-negotiable so this form should only be signed if the organization is able to comply with the terms as stated. While CZI does not require sign-off by all of your partner institutions, please refer to what your institution requires. Note: digital signatures are permitted as long as the document is not encrypted or password-protected.

- **Project Details:** Complete all fields in this task; all fields are required.
 - <u>Project Title (auto-filled):</u> Project title is limited to 60 characters, including spaces. If you need to edit your proposal title, navigate to your application summary page, click on the three dots to the right of the application title (next to the Preview link) and select Rename from the dropdown menu.
 - <u>Project Purpose</u>: Summarize your research project; limited to one sentence (maximum of 200 characters including spaces). Please use a third-person voice.
 - Example: To develop a comprehensive, validated atlas of the human kidney at single-cell resolution open to the entire scientific and clinical community.
 - <u>Abstract/Project Summary</u>: Describe your project in brief (maximum of 250 words).
 Please use a third-person voice (<u>example</u>).
 - <u>Milestones</u>: Summarize the main milestones for your project (list format, maximum of 250 words). Please use a third-person voice.
 - <u>Diversity, Equity, and Inclusion (DEI) Statement</u>: Advancing DEI is a core value for CZI, and we are requesting information on your efforts in this area. Please describe how your proposal or your team seek to promote diversity, equity, and inclusion in this project (maximum of 250 words).
 - <u>Type of Project:</u> Designate if the project is a hardware, software, and/or protocol development project. Check all that apply.
 - Amount Requested: Enter total budget amount requested in USD, including indirect costs; this number should match the total described in the Budget section. Enter whole numbers only (no dollar signs, commas, or cents).
 - <u>Co-Principal Investigators</u>: Indicate the number of Co-Principal Investigators, not including the Coordinating PI (maximum of two). **Do not include the Coordinating PI in this section**. For each Co-PI, please provide:
 - Co-PI name, Title/Position, Degrees, ORCiD ID (format: XXXX-XXXX-XXXX), Email, Career status
 - In the context of this RFA, an early-career investigator is someone who has been in an independent position (or equivalent) for zero to six years at the time of application, i.e. have started their first independent position between August 23, 2016 and August 23, 2022, and mid-career as someone who has been in an independent role (or equivalent) for more than six to 10 years at the time of application, i.e. have started their first independent position between August 23, 2012 and August 22, 2016.
 - Organization Name, Country, Website
 - Type of organization (drop down menu: Academic, Other Nonprofit, Industry/company, Government, Other).

- Tax ID: Enter your organization's Employer Identification Number (EIN), as assigned by the Internal Revenue Service in the 9-digit format (XX-XXXXXXX; total of 10 characters). Foreign organizations or others who do not have an EIN should enter 44-4444444.
- Project Proposal: Upload your project proposal as a single PDF; font must be 11 point or larger and margins must be at least one-half inch (top, bottom, left, and right) for all pages (letter size required). Include the following sections:
 - Proposal Body: (maximum of 2500 words, which includes 250 words for the Abstract)
 - Abstract: Copy your Abstract/Project Summary entered in the Project Details section here.
 - Background: Describe the current state-of-the-art technology you are working on.
 - Project Goals: Detail the technology goals of the project.
 - Significance: Describe the scientific significance if the technology goals are met.
 - Project Plan: Describe clearly the research and development strategy to be employed, main milestones, expected outcomes, deliverables, and associated timeline.
 - <u>Figures</u> (optional): Limited to two pages, inclusive of legends. Figure legends do not count towards the word count.
 - References Cited in your Proposal: No word/page limit; include complete source references.
- Budget: Upload in PDF format; font must be 11 point or larger and margins must be at least one-half inch (top, bottom, left, and right) for all pages (letter size required); no page limit. Provide a detailed description of the costs to be funded by this grant at a high level and in tabular form, outlining costs for personnel (including names, if known), supplies, equipment, travel, meetings/hackathons/sprints, subcontracts, other costs, and up to 15 percent indirect costs (excluding equipment and subcontracts).
 - Indirect costs are limited to up to 15 percent of direct costs. Indirect costs may not be
 assessed on capital equipment or subcontracts, but subcontractors may include up to
 15 percent indirect costs of their direct costs. Non-charitable entities must include a
 clear allocation and explanation for any indirect costs included in a proposed
 budget.
 - Budget should be requested in U.S. dollars.
 - Note that institutions outside the U.S. may not subcontract to U.S. institutions, so
 please be mindful when selecting the Coordinating Pl/institution.
 - International grantees must use all grant funds exclusively for activities conducted outside the United States of America. Travel expenses to the United States (including round-trip tickets) should not be covered from the requested grant funds. Any attendance at CZI meetings in the U.S. will be covered by CZI outside of requested grant funds.
 - Application budgets must reflect the actual needs of the proposal. The Chan
 Zuckerberg Initiative will work closely with successful applicants to arrive at a mutually
 acceptable budget after review.

- Active Grant Support: Upload in PDF format; font must be 11 point or larger and margins
 must be at least one-half inch (top, bottom, left, and right) for all pages (letter size required); no
 page limit. List all active grant support for Coordinating PI and Co-PIs (source, project title,
 description, dates of funding, total award amount (directs + indirects)).
- Biosketches for Coordinating PI and Co-PIs: Upload the biosketches in PDF format for the
 Coordinating PI and for each of the Co-PIs. Biosketches can be uploaded in a combined single
 PDF or one PDF for each Co-PI; maximum of five pages per biosketch; NIH format or similar.
 Do not include any biosketches for any additional collaborators beyond the Coordinating PI
 and Co-PIs, as listed.
- Letters of Commitment: Upload a signed letter from each Co-PI briefly describing the role
 and contribution of the Co-PI to the overall team and project. Letters should be in PDF format
 (letter size) and can be uploaded in a combined single PDF or one PDF for each Co-PI. A
 letter is not needed from the Coordinating PI, but since this section is required, please upload a
 blank sheet if there are no Co-PIs in order to complete this section and submit your application.
 Note: digital signatures are permitted as long as the document is not encrypted or
 password-protected.

The formatting and component requirements, including word and page limits indicated above, will be enforced by the review team. Any submitted materials that exceed the word and page limits or do not follow the requirements will not be considered during the application review process.

QUESTIONS?

For administrative and programmatic inquiries pertaining to this RFA, please contact sciencegrants@chanzuckerberg.com. For technical assistance with SMApply, please contact support@smapply.io or while logged into SMApply, click on the information "i" link in the upper right corner and submit a help request ticket.