

Request for Proposals: NHGRI Genome Technology Program Opportunity Funds: 2022

The goal of the NHGRI Opportunity Funds (OF) program is to promote novel small-scale work that has the potential to enable substantially new or more effective ways of advancing development of innovative genomic technologies.

Proposed scope and objectives:

The OF program is intended to expand the potential impact of the NHGRI Genome Technology Development portfolio by providing support to promising new ideas with strong potential to enhance the approaches and capabilities for studying the structure and function of the genome. Examples of projects considered responsive for OFs include but are not limited to:

- Early-stage technology concepts without preliminary data, particularly for proof-of-principle studies that could generate preliminary data for larger funding opportunities.
- Activities to advance the dissemination of methods, software, or other tools from the developer's lab to other investigators. OF proposals in this area should have a clearly defined plan for demonstrating successful application in one or more un-affiliated laboratory AND production of standard protocols, distribution plans, etc. that would support more streamlined adoption by other labs by the end of the funding period.
- Development and validation of standard processes or materials that advance the field by aiding in the objective evaluation of performance of a new technology or application.

Review of OF proposals will consider their potential to positively impact the field of genome technologies through development, deployment, and adoption of innovative approaches to genome analysis.

Collaborative proposals are particularly encouraged and will be given preference for funding.

The proposed scope of work should be distinct from currently funded activities. Proposal of minor refinements to currently funded technology development projects, especially for newly funded projects, will be considered non-responsive. Proposals focused primarily on data acquisition or data mining will be considered non-responsive (i.e., beyond what is needed for development, deployment, and adoption of technology or approach).

Key Dates:

Call for Proposals posted: September 12, 2022

Proposals due: Thursday, October 20, 2022, 5:00 PM local time

Successful applicants notified to begin subaward process: early January 2023

Earliest project start date: Mar 1, 2023

Project period: Mar 1, 2023 - Feb 28, 2024

Eligibility:

Grantees for the [Novel Nucleic Acid Sequencing Technology Development](#), [Transformative Nucleic Acid Sequencing Technology Innovation and Early Development](#), [Novel Synthetic Nucleic Acid Technology Development](#), and [Technology Development for Single-Molecule Protein Sequencing](#) RFAs, along with the [Novel Genomic Technology Development](#) PARs and [NOSI](#) (R01s, R21s, and R43/R44s) participate in TDCC activities. As of September 2, 2022, active

PIs to awards from those announcements and those within one year past the end of their original award period are eligible to apply.

Each PI may not submit more than one independent OF proposal as the contact PI, but may participate in more than one collaborative proposal submission.

A proposal may include a collaboration with an “outside” PI (not otherwise OF eligible) if appropriate and necessary for the scope of work that is proposed. The OF-eligible PI must be the contact PI. Collaborations that enhance [diverse perspectives](#) are encouraged.

Application Process:

Applications should use the [PHS398](#) forms and should be submitted by an authorized organization representative. For collaborative proposals, one contact PI/organization should submit a complete proposal package. Collaborating PIs/institutions should submit only items 1, 7, and 8 from the list below with a cover memo indicating the contact PI for the overall proposal. An authorized organization representative must submit the information from each institution that will receive funding

1. PHS398 Form Page 1.
2. PHS398 Form Page 2.
3. Research Plan (5-page limit) with the following sections:
 - a. Specific Aims
 - b. Relevance to OF effort. Explain how the proposed project(s) will enhance the development of innovative genomic technologies, and how the proposed project is distinct from other work proposed/funded in the applicant’s lab(s).
 - c. Approach. Describe the research plan including methods, preliminary data [not required], anticipated results, limitations, and timeline with associated milestones
 - d. Benefit of the collaboration. Describe the organization of the collaborative program and the added value of collaboration with proposed partners, if appropriate.
 - e. Resource sharing plan. Include a description of how the results, methods, technologies, and/or data will be made available to the broader scientific community.
 - f. Rigor and Reproducibility. Address elements of scientific rigor, biological variability, data reproducibility, etc.
4. Literature cited
5. Human Subjects/Vertebrate Animals/Stem Cells/Biohazards
 - a. Address these issues as appropriate or include a statement that they are not applicable.
 - b. Indicate current status of your IRB/IACUC/IBC application(s), if applicable.
6. NIH-format biosketch for each PI (5-page limit)
7. Budget (PHS398 Form Page 4: Detailed Budget for Initial Budget Period) and budget justification. A separate budget and budget justification should be provided for each partner in the collaboration. If budget for a non-US institution is included, provide a foreign justification.
8. PHS398 Checklist Form Page.

Award Budgets:

The total amount of funds available through the OF program is \$750,000. The distribution of OF funds will be based on scientific merit, budget justifications, and availability of funds. It is anticipated that 4-6 awards will be made in the current grant year, with the maximum budget not to exceed \$200,000 total costs per award. For collaborative proposals, a separate budget for each partner in the collaboration must be submitted using PHS398 forms. Application budgets should reflect the actual needs of the proposed projects.

Award Period:

Awards will be for no more than one year.

Review Criteria:

The proposal will be evaluated on the following criteria: 1) Significance: how the proposed project would enhance development, deployment, and adoption of innovative genomic technologies and methods; novelty and potential impact of a successfully executed project. 2) Approach: technical merit and feasibility, including plans for validation and/or benchmarking of newly developed technologies; 3) Benefit of joint collaboration (if relevant); 4) Plan for defined milestone(s) and deliverables.

Review and Award Process:

An external peer review committee will review all proposals. NHGRI Program Staff will make final decisions on proposals to be funded and award budgets based on the breadth of institute priorities, scores and critiques provided by the review committee, and available funds. OF awards will be made as subawards of the Technology Development Coordinating Center (TDCC) grant via The Jackson Laboratory. Applications considered for funding will be required to submit any additional information (IACUC, IRB and IBC approvals, etc.) prior to issuance of the subaward. In the case of collaborative proposals, separate subawards will be made to each partner.

Reporting Requirement:

OF recipients will be required to provide updates on expenditures to the TDCC and updates on progress to NIH staff and the TDCC for tracking. An interim report will be due eight months after the start date. A final report will be due 60 days after the funding period ends. The final report should detail the work undertaken, summarize the results obtained, and describe next steps for the project based on what was learned.

Submission Instructions:

Final proposals must be submitted by an authorized organization representative via email to tdcc@jax.org by 5:00 PM local time on October 20, 2022. Proposals received after this deadline will not be reviewed.

Contact Information:

Applicants are encouraged to contact the TDCC for additional information. If you have questions about the proposal requirements, please email tdcc@jax.org.