Data Science and Services Project Award

Funding

Period of Performance: May 1, 2023 - April 30, 2024

Amount: \$30,000

Number of Awards Available: 1

Application Deadline: November 4, 2022, 4:00 pm ET

Additional Funding Information: Awards are cost-reimbursable and are issued to the institution, not the individual. Network member organizations in Region 1 are eligible to apply.

Summary

The award's primary aim is to focus on projects that stimulate innovations in biomedical knowledge collection, organization, and management or data science, information, or research services. The programs are intended to help a variety of users, with a focus on minority and other underrepresented populations and the health professionals who serve them, make the most effective use of information and decision-support resources that hold the promise of promoting healthy behaviors, preventing costly and debilitating illness, and improving health outcomes when disease occurs.

Description of Award

The mission of the Network of the National Library of Medicine (NNLM) is to advance the progress of medicine and improve the public's health by providing U.S. researchers, health professionals, public health workforce, educators, and the public with equal access to biomedical and health information resources and data.

Background/Purpose

The award's primary aim is to focus on projects that stimulate innovations in biomedical knowledge collection, organization, and management or data science, information, or research services. The programs are intended to help a variety of users, with a focus on minority and other underrepresented populations and the health professionals who serve them, make the most effective use of information and decision-support resources that hold the promise of promoting healthy behaviors, preventing costly and debilitating illness, and improving health outcomes when disease occurs. Project should be in support of the NLM 2017-2027 Strategic Plan.

Projects are encouraged that incorporate one or more of the following:

- Increase awareness of and skills for locating high quality biomedical and health data information
- Promote data literacy in health and science education
- Increase data management skills and awareness
- Encourage interdepartmental partnerships, including clinical and translational science research departments.

Project proposals are intended to support of Aim 2 of the Region 1 RML Core to develop a highly trained, diverse, and data-ready workforce for all audiences, especially researchers, educators, health information and technology professionals whose work benefits underrepresented populations.

Proposal Requirements and Preferences

Preference will be given to NNLM network members who have not previously been funded during the 2021-2026 Cooperative Agreement.

All projects may incorporate one or more National Library of Medicine resources like PubMed, ClinicalTrials.gov, or MedlinePlus. You can refer to the NLM list of Databases, Resources, and APIs for a complete overview of resources by topic. However, this is not a requirement for data science and service projects.

Preference will be given to projects that reach underserved, minority and underrepresented communities including but not limited to:

- Racial and ethnic minority populations
- Sexual and gender minority populations
- Populations reported below the Federal Poverty Level
- Populations with limited access to medical care
- Populations with physical and/or mental disabilities
- Soldiers, Veterans and Military Families
- Rural Populations

Potential Project Ideas

Potential projects may include but are not limited to (this list is not meant to be all-inclusive):

- Train-the-Trainer projects that enhance the data skills of library/organization staff and other consumer intermediaries to train a target population on the research data life cycle.
- Host virtual coding and data science workshops like the <u>Library Carpentry</u> or <u>Data</u>
 <u>Carpentry</u> Workshops at your institution and provide an opportunity for librarians and other data science professionals an opportunity to participate.
- Host virtual hackathons and codeathon events to gather researchers, programmers, data scientists, and others to collaborate on software projects and tools; Refer to NCBI Codeathons as reference.
- Development of curriculum or supplemental educational materials on aspects of data science for the consumer.
- Integrating data literacy into health sciences curricula.
- Development of data catalogs that promote <u>FAIR Data Principles</u>, advance research, data sharing, and accessibility through the use of a searchable online collection of data locaters.
 - The data catalog is designed to:
 - Increase the visibility of research data generated by the funded organizations' researchers;
 - Facilitate collaborations across departments and the funded organization;
 - Help researchers locate and understand datasets generated at external organizations;
 - Support the process of reusing research data.

- Data catalog applicants are encouraged to make use of the open source data catalogs created by the <u>New York University</u> and to join the <u>Data Discovery Collaboration</u>; however, neither is a requirement.
- Support for data catalogs at awardee institutions must include a dedicated developer in the Personnel description to support its launch.

Other project ideas may be accepted. Please contact the NNLM Region 1 office for a consultation.

Eligibility

- Organizations must be a Network Member of the NNLM. Not a member yet? Join now for free!
- Organizations, in most cases, are only eligible to apply for awards from the Regional Medical Library that serves the state in which they operate in. Please contact the <u>RML/Office</u> for further clarification.

Application Instructions

Online Application Overview

System Requirements

You will need to submit your application online. It is recommended that you use the following outline to draft your proposal, then submit online.

Before attempting to submit your application for funding in the NNLM online application system:

- 1. Confirm that your institution is a <u>NNLM Member</u> with a NNLM Member record.
 - Not sure if your institution is a Member or has a Member record? Search the <u>NNLM</u> <u>Membership Directory</u> or email your <u>Regional Medical Library</u>.
 - If your institution is not a NNLM Member, <u>submit an application for Membership</u> at least 3 weeks prior to the funding deadline. Membership is not automatic. A Member record is required to submit an application.
- 2. Confirm that you (the applicant) have an NNLM Account.
 - You must be logged in to your NNLM account to successfully submit an application.
 - If you are submitting an application on behalf of the Project Lead, the Project Lead must also have an NNLM account prior to submission.
- 3. Confirm that your NNLM account is connected to the NNLM Member record for your institution.
 - To connect, fill in the "Organization" field on your NNLM account using the
 autocomplete function. When correctly filled, you will see a 5-digit NNLM ID in
 parenthesis beside the institution name.
 - If you are submitting an application on behalf of the Project Lead, the Project Lead must also be connected to the NNLM Member record for your institution prior to submission.

Please note: you cannot successfully submit an application without these components. If you have questions about these or any other system requirements, please email NNLM Region 1 in advance of the application deadline.

Online Application Overview

• <u>Lead Organization</u>: Select the institution that will lead and receive funding to conduct the proposed project.

If the drop-down list appears blank, confirm that your NNLM account is connected to the NNLM Member record for your institution. (See *System Requirements* above)

• <u>Project Lead</u>: If you are the Project Lead, select your own name from the drop-down list. If you are submitting this application on behalf of the Project Lead, select their name from the drop-down list.

If the name of the Project Lead does not appear in the drop-down list, confirm that their NNLM account is connected to the NNLM Member record for the institution. (See *System Requirements* above)

- <u>Institution Tax ID</u>: Enter the 9-digit tax identification number for your institution.
- <u>Unique Entity ID Number</u>: Please confirm your organization's UEI number. If you do not have a UEI number, <u>apply for one</u> as soon as possible. Please note this is NOT the DUNS number requested in the past.
- Have you/your institution previously received NNLM funding in the current grant cycle? Select Yes, No, or I Don't Know.
- <u>Amount Requested</u>: The amount specified should not exceed the limit established by the RML/Office. Contact your RML/Office if you have questions about the funding amount. This field will accept numbers only. Enter the amount to the nearest whole dollar.

Project Proposal

- <u>Project Title</u>: Describe the project with an external audience in mind. Funded projects are displayed on the <u>NNLM website</u> and are provided by NLM in response to data calls from NIH, HHS, OMB, Congress, and the White House.
- <u>Project Summary</u>: Provide a one-paragraph description that summarizes the proposed project.
 Funded projects are displayed on the NNLM website and are provided by NLM in response to requests from NIH, HHS, OMB, Congress, and the White House.
- <u>Partner Organizations</u>: Use the autocomplete function to find and select existing records for up to three (3) organizations that will partner with the Lead Organization to conduct/complete the project.

If a record does not exist for a partner organization, click "Partner Organization not Listed?" and use the additional fields under "Add Partner Organization" to provide the institution name and address.

- <u>Training be Provided as Part of this Award</u>: Select yes or no. Training provided will be related to education towards data science, including use of specific data tools and programs. This is not training related to technology purchased with award funds.
- <u>Proposed Start and End Dates for the Project</u>: Select the appropriate dates. Contact your RML/Office before applying if your project will extend more than one year.

- <u>Evidence of Need</u>: Provide a statement of how the project proposed will support the mission of NNLM, explain the need for the project, and describe the audience or population that will be reached through this project. Please clearly document if this project will engage traditionally underrepresented populations and/or involve medically underserved areas. When possible, support the stated need using data such as known needs assessments or statistics.
- <u>Project goals and objectives</u>: State the goal(s) and specific objectives(s) of the proposed project.
 Goals should align to the <u>NNLM Goals and Objectives</u>. Please review the <u>National Evaluation Center</u> (<u>NEC</u>) resources for information on how to create evaluation plans and objectives.
- <u>Implementation</u>: Describe what will be done to meet project objectives and its rationale. Include tasks to be performed and who will perform them.
- Schedule/Timeline: Include a timeline for implementing the plan to meet objectives.
- <u>Evaluation Plan</u>: Describe how the project will measure success. Include data collection frequency, type of data to be collected, tools, and how data will be used or disseminated. Please review the <u>National Evaluation Center (NEC)</u> resources for information on how to create evaluation plans and objectives.
- <u>Publicity/Promotion</u>: Briefly describe how you intend to promote your project to the target population. Please specify which NLM resources or NNLM national initiatives will be utilized, how they will be promoted, and how they will be utilized throughout the project.
- <u>Continuity/Sustainability Plan</u>: Describe the activities that will sustain project services and/or communication to the targeted community beyond the cooperative agreement period.
- <u>Personnel Qualifications</u>: If applicable, list the project personnel who will be involved in the project and include their role(s) and applicable experience. Combine and submit resumes or CVs for personnel listed as one attachment with your completed application.

Budget

Awards are cost-reimbursable and are issued to the institution, not the individual. The budget needs to be filled out in the online application system. Budget fields will accept numbers only. Enter each amount to the nearest whole dollar. If a budget line is not applicable for your project, you may leave it blank. The budget estimate should be categorized by the following, as they apply:

- <u>Personnel</u>: Include (hourly rate X estimated hours) or (% time X annual salary) in the budget justification attachments or descriptions. Check with your RML/Office for specifics on personnel.
- <u>Consultant Costs</u>: Estimated expenses from consultants, such as marketing firms or other agencies;
 Prior to hiring Consultants, submit the following information to the RML/Office: name of consultant, description of work, hourly rate, total amount/not to exceed amount, and period of performance.
- <u>Equipment</u>: Quotes for items required such as computers and other equipment. Include quotes received or other pricing information in the budget attachment or as another attachment.
- <u>Supplies</u>: Quotes for printing, publication costs and other materials. Include description and any quotes in the attached budget or as other attachment.
- <u>Communications</u>: Media, publicity, or other communication costs. Include description and any quotes in the attached budget or as other attachment.
- Reproduction: Printing materials or other reproduction costs.
- <u>Travel</u>: Estimates for travel. Include description and any quotes in the attached budget or as other attachment.
- Other: Include description and any quotes in the attached budget or as other attachment.

- Indirect Costs (IDC) or Facilities and Administrative (F&A) Costs: Apply at your institution's non-research rate (or, if your institution has no negotiated rate, a 10% Modified Total Direct Cost (MTDC) can be applied if you wish to claim it). Indirect Costs need to be factored into your overall budget. The total budget cannot exceed the limit defined by the RML/Office you are applying to, including Indirect Costs.
- Other Funding if Applicable: Other funds that will be used to support the project should be specified. This includes matching funds, other grants, etc.

NOTE: You will need to submit a budget table or spreadsheet that *includes* a narrative justification for budget items. This includes explaining the purpose of each item of the project and a breakdown of how fees were calculated. Please refer to the NNLM Proposal Writing Toolkit "Budgeting" tab for an example Budget Template you can use. This can be uploaded in the attachments section of the online application.

<u>Funding restrictions</u>: Food, promotional items, and furniture are not allowable expenses. Promotional items include but are not limited to: Clothing and commemorative items such as pens, mugs/cups, folders/folios, lanyards, and conference bags that are sometimes provided to visitors, employees, grantees, or conference attendees. Refer to the <u>NIH Policy on Allowability of Costs/Activities</u>.

Demographics

- <u>Populations Served</u>: Select all that apply, but these should be the primary populations targeted in your project. If not explicitly identified in the proposal section, please do not select it here.
- <u>Participant's Roles</u>: Select all that apply. These are the primary roles of the participants of your project. These should be explicitly identified in the proposal section.

Attachments

Gather all documents that will be attached to your application. Combine them all as a single file document, including:

- Personnel CVs and resumes
- Letters of institutional commitment or support
- University of Maryland, Baltimore Sub-recipient Commitment Form
- Budget Template and Budget Narrative.

Acknowledgements

You are required to acknowledge the following statements before submitting an application:

- You will share the information gained with colleagues in your institution/RML/Office, as required by the Request for Proposal.
- You will submit regular, interim & final reports, as requested by the funding agency & stipulated in the Request for Proposal.
- Any web-based resources developed for this project will ensure accessibility to the greatest possible number of people.
- Additional documentation will need to be completed should your project be awarded. Please consult with your RML/Office for details.

Proposal Submission

You will need to submit your application online.

Additional Information

Grant Writing Resources

For support in grant writing, please see the <u>NNLM Grants and Proposal Writing Course</u> for tips on award applications.

Please refer to the NNLM Resource Guides:

- Proposal Writing Toolkit
- Funding FAQs
- Guideline for Award Requirements

508 Compliance

Section 508 requires that all website content be accessible to people with disabilities. This applies to web applications, web pages and all attached files on the internet as well as any intranet. The National Library of Medicine is a part of the National Institutes of Health, U.S. Department of Health and Human Services. Recipients of National Library of Medicine funding through the NNLM must meet all requirements under Section 508. Information on 508 Compliance.

Reporting Requirements

The following reports are required for NNLM sub-awardees. All reports will be submitted through the NNLM Data Reporting System (DRS).

- Within the first five days of the month following an activity or exhibit, sub-awardees are required to submit an Activity Report, including participant data.
- Sub-awardees are required to submit a Final Report within 30 days after completing a project or period of performance.
- If technology is purchased or provided as part of the project, sub-awardees are required to submit a Technology Report.
- If funds are included for librarian professional development as part of the project, sub-awardees are required to submit a Professional Development Report within 30 days after completing the professional development.

The following may be required, depending on the project:

- If training is provided to librarians as part of the project, sub-awardees can utilize the NNLM Training Evaluation Form to collect and share feedback on their training activities with NNLM
- If programming is provided to patrons or community members, sub-awardees can utilize <u>Project</u>
 <u>Outcome</u> resources from the Public Library Association to collect and share feedback on their
 program activities with NNLM.

NIH Public Access Policy

Recipients of NNLM funding are required to deposit any peer-reviewed manuscript upon acceptance for publication in PubMed Central in accordance with the <u>NIH Public Access Policy</u>.

Data Sharing and Development of Training Materials

To facilitate the dissemination of knowledge and information associated with the NNLM Cooperative Agreement Award, all sub-awardees are required to share any data or training material resulting from funding. This information must be submitted to the following collection sites as applicable:

- Network of the National Library of Medicine (NNLM) website;
- Other websites specifically designated by the NLM as part of the Network of the National Library of Medicine (considering changes in the project and data repositories required to maintain sharing within the Network).

In addition, recipients of funding are expected to use or adapt existing training materials before developing new materials. Consult with your RML/Office and the NNLM Training Office (NTO) prior to developing materials.

Publication and Copyrighting

Per Section 8.2.1. - Right in Data (Publication and Copyrighting) of the NIH Grants Policy Statement. The NIH must be given a royalty-free, nonexclusive, and irrevocable license for the Federal government to reproduce, publish, or otherwise use any materials developed as a result of funding and to authorize others to do so for Federal purposes, i.e., the ongoing development of the Network of the National Library of Medicine. Data developed by a sub-awardees/consortium participants and consultants are also subject to this policy.

NIH Acknowledgement

Any resources developed with project funds must include an acknowledgment of NIH grant support and a disclaimer.

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Application Review and Scoring Criteria

Review and selection of proposals - reviewers selected by the RML/Office. The Review Committee is made up of Network members who represent the Region, public libraries, a variety of health science libraries, and community organizations. The Review Committee will make final recommendations for funding to the Executive Director of the RML. Applicants will receive a copy of reviewer comments along with a final decision regarding funding.

Scored Review Criteria: Scale: 1-100

The application will be scored in the following areas:

• <u>Significance (15 points max)</u>: Does the proposed program make a significant contribution to the mission of NNLM. Is there information on the target population provided? Are there estimates of the potential population and the portion expected to be reached? Is the target group or population described and the actual or perceived need for the proposed program is discussed?

- <u>Methodology/Approach (40 points max)</u>: Does the statement show the logic and feasibility of the technical approach to reaching the target group or community? Are the types of outreach services provided for the target population appropriate, creative, and cost-effective? Does the project plan demonstrate sustainability or the ability to provide lessons learned for future programs? Does the proposed project add value to other initiatives? Does the project use local partners? Does the proposal include a timeline or implementation schedule for major events and activities? Does the program specify what NLM resources or NNLM national initiatives will be promoted and how they will be utilized throughout the project?
- <u>Evaluation (15 points max)</u>: Is there an evaluation plan? Does the plan make sense given the goals and objectives? Is there a timeline and are individuals assigned responsibility for milestones or tasks? Are there other forms of evaluation that the project should consider or add? Is the plan thorough enough or feasible for the project?
- <u>Project Staff (15 points max):</u> Does the proposed personnel have experience in developing and conducting outreach and/or training programs in health information for patients, the public or health professionals. Do the proposed personnel have prior experience working with the target group? Is there evidence of institutional facilities and resources adequate to support the proposed programs. If applicable, do project partners bring experience to the project team?
- <u>Budget (10 points max):</u> Is the proposed budget within funding limits? Is the budget justification sound? Could budget items be eliminated or reduced without jeopardizing the project? Does it include money within allowable line items? Do they have line items that account for all the requested money?
- <u>Diversity, Equity, and Inclusion (5 points max):</u> Does the application identify inequities and disparities or target underserved populations? Is the organization using an inclusive, community-engaged process for planning and implementation if they are proposing community-based programming?
 - NIH-designated U.S. health disparity populations include Blacks/African Americans,
 Hispanics/Latinos, American Indians/Alaska Natives, Asian Americans, Native Hawaiians and
 other Pacific Islanders, socioeconomically disadvantaged populations, underserved rural
 populations, individuals with a physical or mental disability, sexual and gender minorities,
 individuals under 18 or over 65, and individuals with less than a high school degree.

RML/Office staff and Network members will review and score applications using a standardized RFP scorecard. For more information, please refer to the Scoring section's "Health Information Outreach scorecard as the scoring criteria." (See Review and Selection of Proposals tab.) This scorecard is applied to the Data science and Services Project Award as well.

- Reviewer score sheets and comments will be shared with the applicant. If further clarification is needed, the applicant will be given 1 week to submit more information.
- The RML/Office will provide a sub-award agreement for all approved projects. All sub-awards are
 cost reimbursement. Line-item invoices must be submitted for reimbursement of expenditures.
 Invoices may be sent monthly.

•	Sub-awardees may not begin their project until the University of Maryland, Baltimore has completed and signed all necessary documentation.