







14 April 2021 **Purpose**

The goal of this Notice of Special Interest (NOSI) is to strengthen NIH-funded <u>biomedical data</u> <u>repositories</u> to better enable data discoverability, interoperability, and reuse by aligning with the FAIR and TRUST principles and using metrics to measure their effectiveness. This NOSI provides an opportunity for existing repositories to increase "<u>FAIR</u>"-ness and "<u>TRUST</u>"-worthiness to improve their usage, utility, act throughout the data resource lifecycle.

Key dates

- Release Date: April 5, 2021
- First Available Due Date: May 20, 2021
- Expiration Date: May 21, 2021

Background

NIH funds a range of biomedical data repositories that differ in size, complexity, and the research domains they serve. Biomedical repositories accept submission of relevant data from the community to store, organize, validate, archive, preserve, and distribute data, in compliance with the FAIR Data Principles. There is also a spectrum of ability and readiness for data repositories to adopt the <u>characteristics that are desirable for repositories</u> that are aligned with FAIR and TRUST principles. In addition, developing metrics for evaluating the usage, utility, and impact of a given repository is evolving. This evolution is likely a function of several aspects, including, but not limited to the level





of maturity, expanding resource reach and scale, and understanding whether user needs have changed. This initiative is part of a plan for implementing the NIH Strategic Plan for Data Science, which describes actions aimed at modernizing the biomedical research data ecosystem. This effort supports the NIH Policy for Data Management and Sharing: Selecting a Repository for Data Resulting from NIH-Supported Research <u>NOT-OD-21-016</u> to better position NIH repositories for the updated data sharing requirements which will be implemented in 2023.

Research Objective

The goal of this NOSI is to provide support for existing NIH-supported repositories to improve their adoption of the FAIR and TRUST principles and to develop ways to measure their effectiveness to the research communities they serve. The intent is to provide an opportunity for existing repositories of all sizes, and at different stages of establishment, to increase "FAIR"-ness and "TRUST"-worthiness to improve their usage, utility, and impact throughout the data resource lifecycle.

Prospective applicants are required to conduct a self-assessment to identify gaps or deficiencies in "FAIR"-ness and "TRUST"-worthiness that are unique to their data resource and consider which metrics could be implemented for evaluation of usage, utility, and impact. Based on the self-assessment, applicants must identify how they would improve the impact of their unique data resource. Justification for one or more of the following activities, describing how the proposed work will increase usage, benefit their respective communities, and allow for broader use, should be provided:

- Implement the relevant portions of the Desirable Characteristics for Repositories (i.e., NOT-OD-21-016) with the aim to strengthen adoption of the <u>FAIR principles</u>
- Strengthen the adoption of the <u>TRUST principles</u>, which may include a structured plan to pursue certifications
- Adopting, enhancing, or contributing to community-based metrics standards or best practices of metrics to evaluate the usage, utility, and impact of the data resource throughout its lifecycle

These activities may overlap, and it would be possible for an application to include aspects of all three. Proposed activities should not exceed one year.

Additionally, all applicants should outline an appropriate plan (including milestones), staff, and expertise to complete the proposed work within the timeframe.

Applicants that are funded are expected to:

- Participate in a virtual kick-off meeting to share project goals, milestones, and experiences
- Participate in a workshop to report on goals and milestones met, share lessons learned and make recommendations that will be shared with the NIH research community; contributions may result in a workshop report
- Share outcomes, tools, and best practices

To be responsive to this NOSI, applications must:

- Propose work for a biomedical data repository
- Include a self-assessment that identifies gaps or deficiencies to be addressed in one or more of the following areas: "FAIR"-ness, "TRUST"-worthiness, and/or metrics

Application and Submission Information

Budget





To be eligible, the parent award must be able to receive funds in FY2021 (Oct. 2020 - Sept. 30, 2021) and not be in the final year or in a no-cost extension period at the time of award; the supplements should not extend beyond the project period of the parent award. Applicant budgets should include travel support to attend the planned workshop. One-time supplement budget requests cannot exceed \$150,000 direct costs. The number of awards will be contingent on availability of funds and receipt of meritorious applications.

Administrative Evaluation Process

Submitted applications must follow the guidelines of the IC that funds the parent grant.

Administrative Supplements do not receive peer review. Each IC will conduct administrative reviews of applications submitted to their IC separately. Responsive applications will be evaluated by a panel of trans-NIH staff and the most meritorious applications will be supported based upon availability of funds.. The criteria described below will be considered in the administrative evaluation process:

- 1. Is the work proposed within the scope of the active award?
- 2. Is the proposed work aligned with the needs of the biomedical data repository?
- 3. Does the application include an appropriate plan (including milestones), staff, and expertise to conduct the proposed activities in the one-year project period?
- 4. Does the proposed work address the gaps or deficiencies identified in the self-assessment, help to improve the impact of their unique data repository (i.e., value to the NIH research community it serves), and include one or more of the following?
 - a. Plans to implement the relevant portions of the Desirable Characteristics of Repositories (i.e., NOT-OD-21-016) with the aim to strengthen adoption of the FAIR principles
 - b. Plans to strengthen the adoption of the TRUST principles, which may include a structured plan to pursue certifications
 - c. Efforts to help adopt, enhance, or contribute to community-based metrics standards or best practices of metrics that evaluate the usage, utility, and impact of the data repository throughout its lifecycle

Applications for this initiative must be submitted using the following opportunity or its subsequent reissued equivalent.

• <u>PA-20-272</u> - Administrative Supplements to Existing NIH Grants and Cooperative Agreements (Parent Admin Supp Clinical Trial Optional)

All instructions in the <u>SF424 (R&R) Application Guide</u> and <u>PA-20-272</u> must be followed, with the following additions:

- Application Due Date(s) May 20th, 2021 by 5:00 PM local time of applicant organization.
- For funding consideration, applicants must include "NOT-OD-21-089" (without quotation marks) in the Agency Routing Identifier field (box 4B) of the SF424 R&R form. Applications without this information in box 4B will not be considered for this initiative.
- Requests may be for one year of support only.
- The Research Strategy section of the application is limited to 4 pages.
- Investigators planning to submit supplement applications are strongly encouraged to discuss the proposed project with the relevant scientific/programmatic contacts before applying to determine eligibility and alignment with the priorities listed above.
- Applicants are strongly encouraged to notify the program contact at the Institute supporting the parent award that a request has been submitted in response to this NOSI in order to facilitate efficient processing of the request.
- Applications nonresponsive to terms of this NOSI will not be considered for the NOSI initiative.





Inquiries

Please direct all inquiries to:

Scientific/Research Contact(s)

Fenglou Mao

Office of Data Science Strategy Division of Program Coordination, Planning, and Strategic Initiatives Office of the Director Telephone: 301-451-9389 reposupport@nih.gov

Please refer to the NIH ODSS website

<u>https://datascience.nih.gov/data-ecosystem/support-fair-biomedical-repositories</u> regularly for frequently asked questions and other announcements related to this NOSI.

Source: https://grants.nih.gov/grants/guide/notice-files/NOT-OD-21-089.html

