

Introduction and Charge of the Working Group

The [Office of Data Science Strategy \(ODSS\)](#) leads and coordinates the implementation of the [NIH Strategic Plan for Data Science](#). This Strategic Plan provides a roadmap for modernizing the NIH-funded biomedical data science ecosystem as follows:

- supporting a highly efficient and effective biomedical research data infrastructure,
- promoting modernization of the data resources ecosystem,
- supporting the development and dissemination of advanced data management, analytics, and visualization tools,
- enhancing workforce development for biomedical data science, and
- enacting appropriate policies to promote stewardship and sustainability.

In support of the NIH Final Data management and Sharing Policy, in January of 2022 ODSS launched the Generalist Repository Ecosystem Initiative ([GREI](#)), based on a [Generalist Repositories Pilot](#). From this pilot, NIH learned three key lessons:

- Generalist repositories are growing as more researchers deposit and link their publications to data in generalist repositories,
- Researchers require additional education and guidance on where to publish data and how to describe datasets, and
- Metadata enhancement enables greater discoverability.

NIH recognized that generalist repositories are well situated to support researchers' data sharing needs and positively impact data sharing and discovery. Therefore, the GREI initiative was launched with seven generalist repositories to work together to establish consistent metadata, develop use cases for data sharing, and train and educate researchers on FAIR data and the importance of sharing.

The GREI's mission is twofold. The primary mission is to establish a common set of cohesive and consistent capabilities, services, metrics, and social infrastructure across various generalist repositories. The secondary mission is to raise general awareness and targeted outreach to facilitate researchers adopt the Findable, Accessible, Interoperable, and Reusable (FAIR) principles to better share and reuse NIH-funded data.

The GREI initiative utilizes a 'coopetition' model (competition + cooperation) conceptualized during the "Establishing a FAIR Biomedical Data Ecosystem" [Community Workshop](#) in February 2020. The coopetition model allows the generalist repository awardees to cooperate on common features and standards (e.g. metadata standards, metrics, identifiers, etc.) and allows them to remain competitive in the market by offering their unique features (e.g., data visualization and analytics, tool integrations, curation efforts, etc.). The use of the coopetition model places GREI in a unique position to leverage the common capabilities developed collaboratively by the awardees that would have either not been developed or developed at a much higher cost in a normal marketplace setting.

Since January 2022, GREI has enhanced the biomedical data ecosystem; impactful outputs include:

- Engaging with key audiences, such as librarians, academic institutions, and biomedical research communities, to ensure training and outreach are appropriately tailored and impactful;

- Developing a common core metadata scheme that each generalist repository will adopt to enhance the interoperability and discoverability of datasets across repositories and allow NIH to track the impact of NIH-funded research data;
- Publishing community resources including best practices for sharing data and how to include generalist repositories in NIH data management and sharing plans, use cases for sharing and searching data in each of the GREI repositories.

Charge of the Working Group

The charge of the GREI Working Group of the Council of Councils is to provide an assessment of the GREI's progress to date and to provide recommendations for the future of this initiative. NIH expects to use these recommendations to guide the future focus of the initiative.

Specifically, the charge for the Working Group will be to:

- Review the current scope and goals of the GREI as well as progress to date;
- Provide recommendations on future GREI objectives and goals, based on progress and the biomedical research community needs;
- Provide recommendations on future success measures for the GREI initiative, accounting for a diverse community of researchers.