The Position of Library-Based Research Data Services: What Funding Data Can Tell Us

Key Conclusions and Future Directions

Personalized data management consultations and embedded services will not scale to support every researcher.

- We may have to allocate resources on a selective basis that reflects the research priorities of our institution. Funding data can aid in this process.

- The subject liaison system may not be the best model for research data services. Alternatives may come from outside the traditional library organizational model, such as the cross-disciplinary synthesis centers sponsored by the NSF’s Biological Sciences Directorate, digital humanities centers, or data curation institutes.

An outreach and engagement strategy positioned around data management requirements and DMP compliance will not be relevant to all researchers.

- We need to re-position data management support services from compliance to research efficiency, innovation, and impact.

- Demand for services from researchers who have no external funding, or funding from unusual sources, remains unexplored.

- Additional research is necessary to develop outreach and engagement strategies. Funding data can play a role in identifying potential participants.

Notable Findings

1. Federal policies put additional pressure on traditional service models

Federal sponsorship accounted for almost two thirds of awards and supported close to 1,222 distinct investigators at UMD in FY09-13.

Given the importance of federal sponsorship to research at UMD, U.S. government science and technology policy will have a massive influence on data management support services. The Office of Science and Technology Policy memorandum directing federal agencies with over $100 million in annual research and development expenditures to support public access to data will likely compel many UMD researchers to pay greater attention to data management.

Implications:

As federal policies transform more and more into potential clients for data management support services, it becomes difficult for libraries to provide personalized consultations or embedded support to every researcher. Unlike library services designed to deliver uniform support across the campus, research data services may be forced to allocate resources to a limited number of projects. At UMD, the authors are considering a selection process that will allocate resources to researchers whose projects match well with the priorities of the university, the relevant college, and the libraries.

2. The long tail of non-federal grants is long and diverse

UMD researchers submitted proposals to more than 567 distinct non-federal funding sources in FY12.

While federal sources account for a substantial portion of research funding, there is a long tail of non-federal and non-government sources that may or may not impose data management or sharing requirements on researchers. In the absence of requirements, data and documentation are potentially at higher risk of being deleted, damaged, or left to languish on old media.

Implications:

A large number of research projects may not have to comply with data management requirements or submit data management plans, neutralizing a basic engagement strategy for librarians. Similarly, the intellectual property issues associated with corporate sponsorship may frustrate engagement efforts that focus on public data sharing. To build relationships with researchers in these situations, the authors intend to position data management services as activities that support research efficiency, innovation, and impact, rather than primarily compliance.

3. Non-federal grants are less likely to support fee-based curation services

The average value of a UMD funding proposal to federal sources in FY12 was 341% greater than the average value of a proposal to non-federal sources. The median was 355% greater.

Implications:

Recipients of non-federal awards (and low-value federal awards) may be reluctant to budget for curation and preservation. Institutions that plan for the funding of curation from research awards will have to account for the many researchers who may not be able to justify allocating funds to fee-based curation services. In addition, we will have to accommodate researchers whose funding varies from project to project while the amounts of data generated may not vary significantly.

References


Award end dates signal outreach opportunities

Award data from the NSF database, NIH REPORTER, and Research.gov contain end dates for individual awards. In some cases, researchers may renew an award, but, in other cases, their project may be complete and their research products available for curation and preservation. Shown here, there is a spike in NSF end dates at UMD in late summer.

Implications:

The authors intend to use upcoming end dates to identify researchers who may be interested to learn about options for curating and preserving their data. By aligning outreach efforts with an individual researcher’s project lifecycle, we may be more successful at intercepting data before it is lost.