George Mason University Libraries' Data Services Help Researchers with Datasets and Data Tools

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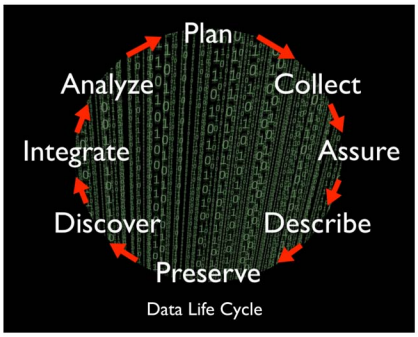
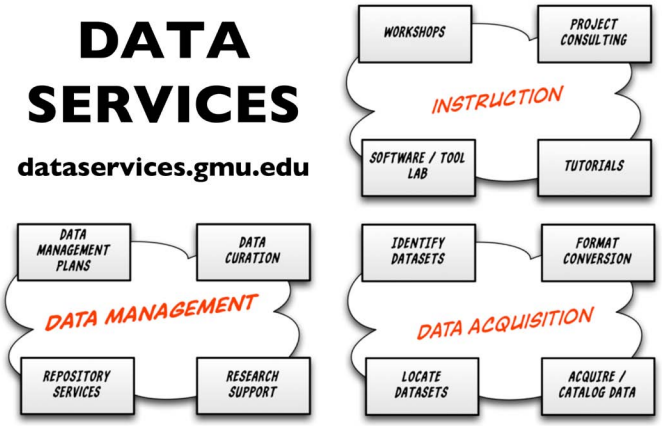


Academic libraries are renown as the repositories of scholarly materials and research resources, the centralized place to access physical collections, to quietly study, and through which to access an almost boundless array of digital resources and information. Visitors to George Mason University Libraries' Fenwick Library might be surprised at what they find on the first floor of Wing C: the offices and laboratory of Data Services, a group established by the Libraries to assist Mason researchers using quantitative, qualitative, statistical, or geospatial data.

Data Services was created two years ago to meet the growing importance of data, necessary for both student assignments and faculty research. Its mission is built on the traditional mission of all libraries: to guide users—from the "newbie" to the expert—through the process of finding, managing, and using information. Historically, working with data was in the purview of specialized researchers in a few disciplines. Today, researchers are confronted with the problem of "big data" or the "data deluge" in most fields.

"We're here to help students, faculty, and staff with most things related to data," "says Wendy Mann, head of Data Services. "Specifically, the discovery and use of numeric, geospatial and qualitative data," says Mann. To help address and prepare for the growing demand for research support in this area, the University Libraries began the reorganization in 2010: the data focused services of the Libraries—the Statistical Research Service and the Geographic Information Systems service—were moved into one unit. The new unit was renamed Data Services."

For Data Services, the resources are often datasets and the tools are computer software. Mann recognizes that it can be challenging for many researchers to deal with datasets and software. She notes, "We make resources available online, offer workshops, and consult individually with researchers to give them all the support they need to find, use, manage, analyze, and archive information."



If Fenwick Library is the centralized home to the offices of Data Services, the computer lab is a centralizing force for Data Services. The lab gives the Mason community access to specialized software such as SPSS and Stata for quantitative data, NVivo for qualitative data, and ArcGIS for geospatial data. The lab also hosts many classes on specialized software packages at both the introductory and intermediate level, plus workshops on finding and managing data.

Researchers can use the computer lab without an appointment during regularly scheduled hours. The lab is staffed by graduate research assistants that specialize in a particular type of data. Researchers seeking help with specific software or analysis can request an appointment to ensure that personalized assistance will be available. Researchers are also encouraged to share their data needs as they change. Data Services continually gathers feedback on what its user and the Mason community need from them.

Data management was one need that the Data Services consultants agreed was important but often overlooked. Debby Kermer, Data Services research consultant, says, "Researchers can get advice and assistance with all aspects of data management, processing, and storage, including transforming data and converting from one format to another."

Data Services assists with one of the newest tools researchers can use to develop their data management plans (DMP), which are required by funding agencies such as the National Science Foundation and the National Institutes of Health. The George Mason University Libraries was one of the first few dozen research universities signing on as a contributing institution to the DMPTool.

In addition to its early involvement with the DMPTool, Mason's Data Services was also instrumental in the development of model languages for research data management policies at the institutional level, recently endorsed by the Association of Southeastern Research Libraries (ASERL) and the Southeastern Universities Research Association (SURA). "We are pleased that Data Services was and is at the forefront of providing new tools for Mason researchers and for contributing to this newer research library field, " says John Zenelis, university librarian.

By following the online templates on the DMPTool, researchers are guided through detailed, content-specific instructions and resources, with the end result being a completed DMP that can be submitted as part of their grant application. The DMPTool allows for customized features such as referrals to additional help at Mason from Data Services as well as information about archiving data in the Mason Archival Repository Services.

"An emerging trend is visualizing data on maps," adds Joy Suh, Government Information and Geographic Information Systems librarian. Suh assists researchers in locating and displaying geospatial data using both proprietary software (e.g., ArcGIS) and a growing number of free and open-source alternatives such as Google Fusion Tables. "Open source tools are very popular," agrees Kermer, who is creating a workshop on the free statistical software R after many requests.

Building on the role that libraries play in data-centered research, the George Mason University Libraries recently, along with a cohort of libraries from major research institutions from the U.S. and Canada, completed an e-Science strategic agenda setting process. The end product is that there is now a strategic agenda that can be used to shape libraries' e-research services. "One very important aspect that came out of this process and working with researchers here on campus," says Mann, "is the need for collaboration between, the library, research computing and research entities in the academic units to support researchers throughout the life cycle of their projects."

Mann encourages researchers working with data to be strategic, to schedule an individual consultation with Data Services staff or coming in for a workshop or class. "Although we are located at the Fairfax campus, we also have workshops and office hours in the Arlington Campus Library and do our best to help users remotely," reminds Mann. Emails and phone numbers for Data Services consultants, along with links to tutorials and details about the computer lab and available workshops, can be found at dataservices.gmu.edu.