Data Management Plans: an offer [of collaboration] we can't refuse.

Photo credit: Mary Stettner, LITS
Science has changed—how will we change with it?

Clockwise from bottom left: Shattuck hall and Kendade Science Center today; Shattuck in 1932, Clapp Laboratory in the 1920s.

Photo credits: Sandy Ward; Mount Holyoke College Archives
Clockwise from top left: Chemist Lucy Pickett in the 1960s, Physicist Katherine Aidala and students in 2008, MHC chemistry lab around 1900.

Photo credits: Mount Holyoke College Archives; Mount Holyoke College Office of Communications.
The New Machine:  
same institution,  
new needs
DAPS centralizes and supports digital asset creation, management (via repository administration) and preservation.

This mission would be impossible to carry out without the many collaborative relationships established within LITS, and by collaborations already in place before DAPS was created.

The RIS team members are a vital part of this new machine: they assist DAPS in outreach, possess institutional/faculty knowledge, and have expertise in pedagogical needs and practice that informs DAPS programs!
Where is your data hiding?

<table>
<thead>
<tr>
<th>H</th>
<th>Projected growth (3 years)</th>
<th>File type(s)</th>
</tr>
</thead>
<tbody>
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<tr>
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<td>movies</td>
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<tr>
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<td>animation files</td>
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<tr>
<td>&gt; 3 TB</td>
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<td>movies</td>
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<tr>
<td>60 MB</td>
<td>60 MB</td>
<td></td>
</tr>
<tr>
<td>1 GB</td>
<td>3 GB</td>
<td>AVI files compiled from image files</td>
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<tr>
<td>&gt; 50 GB</td>
<td>varies widely</td>
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<tr>
<td>10 GB</td>
<td>a few more GB/year</td>
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Data Management and the National Science Foundation

Sep 27, 2010 by Sarah Goldstein

Are you in the process of applying for an NSF (National Science Foundation) grant? The National Science Foundation will soon require that grant proposals include a data management plan. LITS has recently developed a new department with staff who can assist you with this process: the Digital Assets and Preservation Services (DAPS) department. The DAPS team includes specialists in digital capture and editing, digital collections management, and metadata. DAPS administers the MHC digital collections in CONTENTdm and our Institutional Digital Archives (IDA), powered by DSpace.

Why is data management important?

Data management encompasses the lifecycle of your digital research output including its creation, organization, accessibility, archiving and distribution. Planning for the long-term management of your data ensures that it will be well organized and accessible over time. Placing your data in a repository allows for increased discovery and sharing, ensures preservation and prevents obsolescence. You may need to provide the NSF with the following kinds of information about your research data:

- what type(s) of data will be produced, and by what methodology?
- what standards will be used to format the data, including metadata content?
Data Management Resources & Services

What is Data Management?

Data management addresses the lifecycle of your digital research output including its creation, organization, accessibility, archiving and distribution. Planning for the long-term management of your data ensures that it will be well organized and accessible over time. "Data" may refer to observational data (sensor data, telemetry, sample data), experimental (gene sequences, chromatograms), simulation (climate models, economic models), or derived or compiled data (text and data mining, compiled database, 3D models).

The National Science Foundation (NSF) and other granting agencies require that Principal Investigators (PI) submit data management plans along with their grant applications.

More information on the NSF requirements and what is expected in the data management plans.
Digital Initiatives

Digital initiatives at UMass Amherst Libraries are coordinated under the direction of the Digital Strategies Group and facilitated by the activities of three working groups: the Metadata Working Group; the Digital Creation and Preservation Working Group; and the Data Working Group. This infrastructure enables the library to build the technical and cultural environment for digital content to thrive in the library and on campus.

Browse UMass Amherst Digital Collections

Digital Strategies Group

Digital Strategies Group provides direction and strategic planning for the libraries’ development of digital activities that focus on digital content that is created or collected by the libraries, and services that grow from these digital collections. The group oversees coordination of digital activities, including creation and management of metadata and digital content, and establishes priorities and provides guidance for digital projects.

Digital Strategies Charge (PDF)
Facilitator: Rebecca Reznik-Zeller, reznikz@library.umass.edu

Working Groups

Metadata Working Group

Formed in June 2009, the Metadata Working Group (MWG) consists of library staff with expertise in metadata, cataloging,
So far this semester I've heard from 3 researchers needing help with DMPs and am working on exploring data archiving along with the institutional repository librarian.

Wendy Mann  
Head of Data Services Group, George Mason University

I'm so glad to see an inquiry like yours come over the wire.... ....I've also been curious how the NSF requirement has been shifting things for small colleges, where no doubt there are science faculty applying for grant funding but from institutional bases far smaller than, say, a Research 1 university.

Patricia Hswe  
Digital Collections Curator, Pennsylvania State University

...at Colby we took some small urgent steps in December since we had a couple of science faculty who were applying for NSF grants in January. We typically have about 6 applications a year, with 1-3 getting funding. We formed a data management group comprised of the Library Director, the grants officer in Corporate, Foundation, and Government Relations (CFGR), the Director of Academic Information Technology Services, and myself.

Suzi Cole  
Science Librarian, Colby College
Data Management Plan templates we use:

The Data Conservancy NSF Data Management Plan Template

University of Chicago Division of the Physical Sciences NSF Data Management Plan Template

Long Term Ecological Research Network (LTER) How to Write a Data Management Plan for a NSF Proposal
http://intranet2.lternet.edu/node/3248

University of Virginia Library Scientific Data Consulting Group NSF Data Management Plan Template
http://www2.lib.virginia.edu/brown/data/NSF_Data_Management_Plan_Template.doc

Gold stars for resources frequently mentioned by our peers
Resources we recommend to our faculty:

Australian National Data Service

ICPSR Guide to Social Science Data Preparation and Archiving (pdf)
http://www.icpsr.umich.edu/files/ICPSR/access/dataprep.pdf

MIT Libraries Data Management Subject Guides

University of Virginia Library Scientific Data Consulting
http://www2.lib.virginia.edu/brown/data/

University of Wisconsin-Madison Research Data Services
http://researchdata.wisc.edu/

Gold stars for resources frequently mentioned by our peers
@ your Library

Reach out to:
- IT (infrastructure, networking)
- Deans/sponsored programs
- Subject specialists
- Repository managers or digital collections/metadata staff
- GET THE WORD OUT to anyone who will listen!

It’s ok to be informal: educate yourself, work out strategies for just-in-time support and make use of online resources that are already out there. Try to build consensus on longer-term issues like repositories, storage/backup, etc.

your peers

Reach out to:
- Propose regional get-togethers to share successes, failures, & opportunities for collaborating on educational opportunities for staff and faculty

nationally

- Keep an eye on larger initiatives, such as the CDL’s development of an online DMP creation tool.
This presentation is online at: http://bit.ly/mSlcUG