Panel Discussion presentation: "Addressing Research Data Management Needs as the Scientific Data Consulting Group"

Andrew Sallans
University of Virginia, andrew@cos.io

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Addressing Research Data Management Needs as the Scientific Data Consulting Group

5th Annual University of Massachusetts and New England Area Librarian eScience Symposium
4/3/13
Andrew Sallans,
Head of Strategic Data Initiatives,
University of Virginia Library
A need, and an opportunity

- May 2010 announcement of upcoming NSF DMP requirement
- UVA administrators recognize new requirement and insufficient researcher preparedness as a risk to future funding
- Library made case to take on support, and received support from research and IT leadership
An evolution of services

Electronic Text (Etext) Center and Geospatial and Statistical Data (GeoStat) Center, 1990s-2006


Research Computing Lab (RCL), 2006-2010

Scientific Data Consulting (SciDaC) Group, 2010-Present

What comes next?
Getting SciDaC started: May 2010

- Assessment
- Planning
- Implementation

Data Interviews
Data Management Plan Support
Data in the Institutional Repository

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Engaging on many fronts

<table>
<thead>
<tr>
<th>Front-line Services</th>
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<tbody>
<tr>
<td>• Advising on data management planning</td>
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<tr>
<td>• Consulting on data management process improvement and curation</td>
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<tr>
<td>• Training on requirements and best practices</td>
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<table>
<thead>
<tr>
<th>Process Improvement</th>
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<tbody>
<tr>
<td>• DMPTool for efficiency in offering DMP services and sharing best practices</td>
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<tr>
<td>• Policy revision and recommendations</td>
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<tr>
<td>• Serving as the bridge for institutional data management services</td>
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<tr>
<th>Infrastructure Development</th>
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<tbody>
<tr>
<td>• Repository services (Libra, Academic Preservation Trust, Digital Preservation Network)</td>
</tr>
<tr>
<td>• Contributing use cases and real requirements to development efforts</td>
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<table>
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<tr>
<th>Community-wide</th>
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<tbody>
<tr>
<td>• Involvement in national initiatives to develop parts of our support model</td>
</tr>
<tr>
<td>• Developing collaborations to share and gain expertise</td>
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Data interviews

• Two goals
  1. Gain deeper knowledge of specific research behaviors, and
  2. Promote our intention to provide data management support
• Conducted around 30 interviews across many domain areas, in partnership with subject liaisons
• Identified tremendous challenge of balance between fully-customized versus commodity/scalable solutions
Improving assessment through DMVitals

Conduct Data Interview

Produce "Data Interview Report"

Send initial report to researcher for approval/review

Code Data Interview answers in the "DM Vitals" tool

Extract action statements from "DM Vitals Recommendations Report"

Distribute final report and begin DM Implementation with Researcher

DMVitals Sustainability Rating
(Example - not real data)

% of Sustainability Guidelines Met

80% 60% 40% 20%

STS ASTRO BIO BMÉ CHEM CIVE CS PATH MOLPHYS CELLIBO

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• Initially asked to provide boilerplate text for researchers, we resisted this approach

• Began providing services by developing a very user-centered template approach, incorporating Q&A and guidance

• Heavy focus on collaborative development with our team and iterative revision
Scaling the DMP consulting service

DMPTool Uptake: October 2011 - September 2012

Number of Plans (solid) & Unique Users (dashed)

- Unique Users
- Plans
- Institutions

Growth of DMPTool Plans by Institution

U of Virginia
Average of partners
Average of all institutions counted
Max of all institutions counted
Min of all institutions counted

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Guiding data management support within our institutional repository

• Improvement of upstream data management practices to improve quality in downstream preservation

• Development of mechanisms for preservation of data
Shifting into “operational” support

• Implementation of grant-driven data management plans
• Plans for the sake of doing better research
• Using notebook approach
Selected additional efforts

- Data Rights and Responsibilities Guidance
  - [http://www.lib.virginia.edu/brown/data/datarights.html](http://www.lib.virginia.edu/brown/data/datarights.html)
- Data Management Day at UVA
- Graduate Student Data Management Portal
- Graduate Student Data Management Bootcamp (in partnership with Virginia Tech Libraries)
- ASERL/SURA Model Language for Research Data Management Policies
- ARL SPEC Kit on Research Data Management Services (in collaboration with JHU, data presently being collected)

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## Core team composition

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Training</th>
<th>Percent Time</th>
<th>Area of Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andrew Sallans</td>
<td>Head of Strategic Data Initiatives</td>
<td>MLIS, MSMIT</td>
<td>Full-time</td>
<td>Management, planning, IT, budgeting</td>
</tr>
<tr>
<td>Sherry Lake</td>
<td>Senior Data Consultant</td>
<td>MLIS</td>
<td>Full-time</td>
<td>Planning, programming, storage, metadata</td>
</tr>
<tr>
<td>Bill Corey</td>
<td>Data Consultant</td>
<td>MLIS</td>
<td>Full-time</td>
<td>Policy, ownership, metadata</td>
</tr>
<tr>
<td>Andrea Denton</td>
<td>Health Sciences Data Consultant</td>
<td>MLIS</td>
<td>4 hours per week</td>
<td>Clinical research, IRBs</td>
</tr>
<tr>
<td>Ricky Patterson</td>
<td>Data Consultant</td>
<td>PhD Astronomy</td>
<td>Half-time</td>
<td>Scientific data, methods, funded research</td>
</tr>
<tr>
<td>Summer interns</td>
<td></td>
<td>MLIS</td>
<td>Full-time for 10 weeks</td>
<td>Project based</td>
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What comes next?

Making Data Management Easier

Libraries have been managing information for 4,000 years. Today, your libraries are evolving and building expertise to continue this tradition so that they can help you preserve research data of the past, present, and future.

The Data Management Consulting Group is ready to consult with you on your entire data life cycle, helping you to make the right decisions, so that your scientific research data will continue to be available when you and others need it in the future. Contact us now to start a conversation about your research.

Research Life Cycle

[Diagram showing the research life cycle with stages such as Data Discovery, Re-Use, Data Archive, Deposit, Data Collection, Data Analysis, Data Sharing, End of Project, Proposal Planning Writing, Project Start Up, Re-Purpose, and Data Life Cycle.]

LATEST NEWS
- Research data event for VA librarians on May 16
- Data Management Training Sessions
- Seeking applications for summer 2013 DMPTool interns

Data Management Home
Why Manage Your Data?
Data Management Plan Support
Data Management Plan Components

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Questions?

Contact:
Andrew Sallans
als9q@virginia.edu
Twitter:  @asallans