Chair Chris Burns called the meeting to order at 12:34pm in 427A Waterman.

1. **Approval of the Minutes.** The minutes of October 8, 2016 were approved as written.

2. **Research Data Management. (See attached PowerPoint)**

   Elizabeth Berman from Libraries has spent the last two years focusing on research management. Study concept all the way to data archiving is part of the data lifecycle model and need to be included in data management conversations. Here are some of the key concepts she discussed:

   - Open data and data sharing are not the same and often get used interchangeably, though the expectations are often different.
   - Data sharing increases scholarly impact.
   - 60% of universities provide research data management to its faculty, and 20% are working on offering it in the future.
   - There is no single national standard on metadata, standards are discipline-specific.
   - How can UVM provide tools and services to the campus?

It is important for the faculty of the University of Vermont to support the development of research data management on campus. It is being asked that the RSCA present a resolution on this concept to the Faculty Senate to gain senate support. The RSCA will follow these actions in collaboration with this effort:
• Work with Richard, Alex and Mara to include scholarly data
• Draft a resolution that can be brought to the Faculty Senate
• Hold expert guided workshops to help educate faculty on process.

Chris Burns, Rory Waterman and Jeff Marshall will work on a resolution and bring it to the December meeting for discussion.

3. Libraries (Dean Mara Saule)
Libraries are often used as the center for data management. A Library Advisory committee has been formed to help recognize the needs of the Bailey/Howe Library. They will focus on issues such as:
• The need for print versus digital resources in certain disciplines
• Space and the best way to configure it
• How the new dormitory will effect traffic?
• The future of the Library as a data management center

The committee will begin its work over the next couple of weeks. If anyone has any comments or concerns they can send them to Mara Saule and she will pass them on to the committee.

Other import library news includes:
• At the October BOT meeting it was approved that Special Collections will be moved to Billings in spring of 2018.
• Dana Library is going through a reconfiguration in part to Dr. Larner’s gift.
• The weeding project continues. Libraries has 3 off site storage facilities. Lesser used materials have been moved to those facilities.

4. Burack Lectures.
The committee went into executive session to discuss the Burack Lectures. Chris Burns will forward their recommendations to the President’s Office.

5. New Business.
Richard Galbraith is working on the creation of a committee to focus on F & A across colleges. He will update the committee at a future meeting.

The meeting was adjourned at 2:00pm.

*Sabbatical

The next meeting of the RSCA is scheduled for Thursday, December 8th from 12:30 – 2:00 in 427a Waterman
Data Management at the University of Vermont
elizabeth a. berman • bailey/howe library

Research Data Management

Data Lifecycle Model

Data Management Funding Mandates
Requires PIs to account for how data from federally funded research will be made accessible and preserved in the long-term. (Office of Science and Technology Policy, 2013)

Open Data
“Research data that is freely available on the internet permitting any user to download, copy, analyse, re-process, pass to software or use for any other purpose without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself.” (SPARC, 2016)

MIXED METHODS RESEARCH DESIGN

PHASE ONE
- Timeline: March - July 2015
- Procedures:
  - Data collection
- Products:
  - Transcripts
  - Field notes
  - Documents

PHASE TWO
- Timeline: August - November 2015
- Procedures:
  - Data analysis
  - Development of Survey Instruments
- Products:
  - Survey

STUDY DEMOGRAPHICS

PHASE ONE: Qualitative Sample
- Data Management Plans (N=35)
  - 11.43%
- Interviews (N=6)
  - 16.67%
  - 83.33%

PHASE TWO: Quantitative Sample
- Survey (N=319)
  - 15.97%
  - 64.07%
  - 15.97%

Legend:
- Arts & Humanities
- Social Sciences & Business
- Science, Technology, Engineering, & Mathematics
UVM RESEARCH DATA: A SNAPSHOT

Data Types
- digital field notes
- software/ scripts/code
- physical specimens
- patient records
- quantitative data
- digital images
- curriculum materials
- video recordings
- audio recordings

Data Storage
- Data repository: 12.4%
- 3rd party cloud storage: 17.6%
- External hard drive/media: 14.7%
- Network server: 79.8%

Data Size
- < 1GB: 30.0%
- 1GB to < 10GB: 35.0%
- 10GB to < 100GB: 23.5%
- > 100GB: 1.5%
- More than 1 PB: 0.5%

Metadata
- Metadata: 73.0%
  - Textual: 28.0%
  - Image: 45.0%
  - Audio: 17.0%

Data Sharing
- Data repository: 85.5%
- Website: 12.3%
- External hard drive/media: 16.7%
- Email/file transfer: 35.1%
- Publications/presentations: 60.6%

TECHNICAL SERVICES & SUPPORT

How important do you think it is for UVM to spend resources on providing the following services? (Very Important) (N=191)

- Acquiring unique identifiers for data sets: 28.5%
- Production of advanced computing options: 41.5%
- Short-term data storage (5 years or less): 44.3%
- Long-term data storage (more than 5 years): 56.5%
- Data security support: 58.7%
- Provision of statistical and other data analysis support: 93.9%

Would you be interested in any of the following data management activities? (Yes)? (N=192)

- Data set purchasing: 94.5%
- Producing metadata: 13.3%
- Tools for sharing research data: 37.4%
- Assistance meeting data sharing and/or data management requirements: 28.1%
- Data security support: 36.7%
- Data storage and preservation: 53.2%
INFORMATIONAL SERVICES & SUPPORT

How important do you think it is for UVM to spend resources on providing the following services? (Very Important) (N=191)

- Guidance on how to use appropriate metadata standards: 34.1%
- Guidance on intellectual property issues: 36.2%
- Guidance on depositing data into data repository: 37.6%
- Guidance on writing data management plans: 38.7%
- Guidance on privacy/confidentiality: 44.6%

Would you be interested in any of the following data management activities? (Yes) (N=192)

- Information about citing data resources: 3.6%
- Assistance finding and accessing secondary data: 6.9%
- Help identifying repositories to submit data to: 9.2%
- Compliance with policies, legal requirements, and ethical standards: 24.0%
- Data management plan workshops: 27.1%
- Data management consultation: 33.3%
- Informational websites with best practices and campus resources: 46.9%
- Data management plan templates and tools: 51.8%

COMPARISON OF RESEARCH DATA SERVICES

National Survey of Student Engagement (NSSE) 2014 Selected Comparison Groups

Group 3: Selected Peers
- Binghamton University (State University of New York)
- Boston College
- Boston University
- College of William & Mary
- Northeastern University
- Stony Brook University
- University of Colorado at Boulder
- University of Connecticut
- University of Massachusetts Amherst
### TYPES OF RESEARCH DATA SERVICES

<table>
<thead>
<tr>
<th>University</th>
<th>Data Archiving</th>
<th>Data Repository</th>
<th>DMPTool/Templates</th>
<th>Website</th>
<th>Consultation</th>
<th>Workshops</th>
<th>Partners</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Binghamton University</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td>Library</td>
<td>Scholarly Communications Librarian</td>
</tr>
<tr>
<td>Boston College</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td>Library, Sponsored Programs</td>
<td>EResearch Team</td>
</tr>
<tr>
<td>Boston University</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td>Library, IT</td>
<td>Data Management Team</td>
</tr>
<tr>
<td>College of William &amp; Mary</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>Library, Sponsored Programs</td>
<td>Digital Services</td>
</tr>
<tr>
<td>Northeastern University</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td>Library, Sponsored Programs</td>
<td>Digital Services</td>
</tr>
<tr>
<td>Stony Brook University</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td>Library, IT</td>
<td>Research Data Services</td>
</tr>
<tr>
<td>University of Colorado</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>Library, IT, Sponsored Programs</td>
<td>Data Advisory Committee</td>
</tr>
<tr>
<td>Boulder</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Library, IT, Sponsored Programs</td>
<td>Data Advisory Committee</td>
</tr>
<tr>
<td>University of Connecticut</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td>Library, IT</td>
<td>Data Advisory Committee</td>
</tr>
<tr>
<td>University Massachusetts</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td>Library</td>
<td>Data Working Group</td>
</tr>
<tr>
<td>Amherst</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### CONCERNS AND THEMES AT UVM

What type of support is guaranteed via institutional overhead on grants?

The importance of data management plans as a required part of the grant proposal – attitudes towards and perceptions of.

Future of data analysis and statistical support provided on campus.

Concerns around campus infrastructure and ETS.

The challenge of metadata: it’s a problem no one wants to address.

Barriers to data sharing: time, funding, personnel; restricted data: fear of being scooped

Who is responsible for support on campus? Who is able to provide support?