Research Development Services provides a variety of services for faculty seeking support for research, performance, public service and scholarly projects.
Research Development Services

Types of Services

• Funding searches
• Funding strategy
• Resources/templates
• Proposal development support
• Coordinate internal grants
• Oversee limited submissions
Welcome to RDS at UO

Research Development Services (RDS) aims to support and increase externally-funded research activity at the university. Our services are designed to meet the unique needs of faculty across disciplines and career stages. We help researchers identify funding opportunities and develop compelling, competitive proposals through a variety of resources, trainings, and customized assistance. RDS also manages the internal award programs funded by the Office of the Vice President for Research and Innovation and serves as the central coordinator for external, limited submission competitions.

The following are our primary areas of activity to support the University of Oregon's research endeavors:

**Services**

- Proposal Development
- Internal Funding
- Limited Submissions
- Funding Searches
- Proposal Resources
- Honors and Awards

*If you would like to request services, please fill out the webform below, or contact RDS staff at rds@uoregon.edu*
Create a Data Management Plan

**UO Libraries now has DMP Tool, which offers funder-specific guidance on writing your Data Management Plan. Click here to learn how to register.**

Good data management practices aren't just for grants. They are a gift to your future self:

- Keep better track of workflows, code, and dataset versions to avoid mix-ups
- Automate backups to avoid disaster
- Use software to collaborate more effectively
- Publish data, code, and workflows => get more citations
- Know where your data is in 5 years, so you can re-use or refer to it in your next study

Resources and guidelines for data management are constantly changing. If you would like support and advice specific to your field or project, write us at ResearchDataMgmt@uoregon.edu to schedule a consultation.

Data management plans usually include the following:

1. **Describe the data that your research will generate/collect.**
   Data may originate from observations, experiments, or references; it may be derived from other sources, transformed, or the result of a simulation. Data also includes your code and workflow documentation.

   Describe your data file formats. Whenever possible, use non-proprietary formats or convert your data to open, shareable formats when archiving data.
Data Services

Find Us:
https://library.uoregon.edu/data-services

Contact Us:
dataservices@uoregon.edu

Consult with us:
Data Management Plans
Best practices for computational reproducibility
Statistical consulting (students only)
https://library.uoregon.edu/research-data-management/consultations

Train with us:
GIS, R/RStudio, Stats, Data Management (git/GitHub, Tidy Data)
https://library.uoregon.edu/research-data-management/training-workshops
Why is DMP important?
Data Management Plan

- Data Collection
- Data Organization
- Data Storage
- Data Protection
- Data Sharing
- Data Preservation
Grants

• Strengthens research project
• Used in grant applications
  ✓ DMP = Data Management Plan (NSF)
  ✓ RSP = Resource Sharing Plan (NIH)
• Required by NSF/Recommended or recommended for NIH
• Taken very seriously in review
Rigor & Reproducibility

- Issues with reproducing experiments
- Lack of diversity in human subjects research
- Need to be able to validate results
- Good data management important
- NIH Resources on R & R
Open Access and Scholarly Impact

• How is Open Access perceived in your field?
Open Source Data

• Improves transparency and accountability
• Develops trust and credibility
• Ease of access and use
• Enhances collaboration
• Promotes progress and innovation
Open Access and Scholarly Impact

- Open access journal articles, particularly those in university repositories, are cited more often.
- Papers that link to datasets publicly available in a repository are cited more often.
- Potential confounder: higher quality papers may be more likely to be OA or include publicly available datasets.
Open Access and Scholarly Impact

Planning to share data from the beginning will improve the quality of your data and the reproducibility of your research.
Activity: DMP Tool

Set up DMPTool.org account, and create a sample DMP.
Tip: Use Tables

<table>
<thead>
<tr>
<th>Data type</th>
<th>File types-</th>
<th>File types-</th>
<th>File Size</th>
<th>Storage during collection &amp; analysis</th>
<th>Vehicle for public release</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metadata codebook</td>
<td>Excel files (.xlsx), Word (.docx)</td>
<td>.xml, .csv, .pdf</td>
<td>&lt;1MB</td>
<td>Basecamp &amp; Institutional fileserver</td>
<td>PDX Scholar/ Scholars’ Bank</td>
</tr>
<tr>
<td>Interview &amp; focus group audiofiles</td>
<td>.wav</td>
<td>.wav</td>
<td>&lt;1GB</td>
<td>Basecamp &amp; institutional fileserver</td>
<td>Will not be released-cannot be de-identified</td>
</tr>
<tr>
<td>Transcripts</td>
<td>Word (.docx)</td>
<td>.pdf</td>
<td>&lt;100MB</td>
<td>Basecamp &amp; institutional fileserver</td>
<td>Will not be released-cannot be de-identified</td>
</tr>
<tr>
<td>Social survey data</td>
<td>Excel files (.csv)</td>
<td>.csv</td>
<td>&lt;10MB</td>
<td>Basecamp &amp; institutional fileserver</td>
<td>PDX Scholar/ Scholars’ Bank</td>
</tr>
<tr>
<td>Envision source code, setup files &amp; output data</td>
<td>Envision files (.envx &amp; .xml) Excel files (.csv)</td>
<td>.envx, .xml, .csv, or .Rdata</td>
<td>&lt;1TB</td>
<td>Institutional fileserver, Subversion repository</td>
<td>OSU Envision Website</td>
</tr>
<tr>
<td>Final data analysis codes</td>
<td>SAS, Word (.docx)</td>
<td>.txt or .pdf</td>
<td>&lt;1MB</td>
<td>Basecamp &amp; institutional fileserver</td>
<td>PDX Scholar/ Scholars’ Bank</td>
</tr>
<tr>
<td>White papers</td>
<td>Word (.docx); InDesign (.indd)</td>
<td>.pdf</td>
<td>&lt;10MB</td>
<td>Basecamp &amp; institutional fileserver</td>
<td>PDX Scholar/ Scholars’ Bank</td>
</tr>
<tr>
<td>Peer-reviewed journal articles</td>
<td>Word (.docx)</td>
<td>.pdf &amp; paper</td>
<td>&lt;1MB</td>
<td>Basecamp &amp; institutional fileserver</td>
<td>Print &amp; electronic journals</td>
</tr>
</tbody>
</table>
4. Archiving of Data
I will store my data on my password-protected hard drive and my University of Oregon secure network server space. Data will also be archived in line with guidance from the University of Oregon Libraries “stewardship and Archiving of Research Data,” and in accordance to the IRB protocol. It will be archived and preserved in the University of Oregon’s Scholars’ Bank, a repository for the intellectual work of faculty that is maintained by the university library. Data in this Scholars’ Bank is preserved according to the “digital preservation standards enacted by the Libraries for all digital collections” (https://library.uoregon.edu/research-data-management/best-practices). Scholars’ Bank will ensure that services such as format conversion or data migration will be performed if/when necessary.

5. Roles and responsibilities
I will be responsible for collection, storage, and sharing of all the data discussed in this document.
The data from this project will conform to the policies outlined in NSF’s Grant Proposal Guide, and more specifically, to the Division of Ocean Sciences Sample and Data Policy (http://www.nsf.gov/geo/geo-data-policies/oce). Data collected here will include in situ physical oceanographic observations, iceberg positions, and multibeam sonar imagery. These data will be submitted to the appropriate data center and are described individually below. Model “data” from numerical ocean simulations have no formal data center for repository.

Identified Data Centers

- National Oceanographic Data Center, NODC (www.nodc.noaa.gov) serves as a national archive for oceanographic data, including the CTD profiles and velocity data proposed here.
- National Snow and Ice Data Center, NSIDC (www.nsidc.org) serves as an archive for general cryospheric data, and will be where we submit iceberg positions and shape data.
- National Geophysical Data Center, NGDC (www.ngdc.noaa.gov) archives geophysical and geological data. Multibeam sonar data will be deposited here.
4. Archiving of Data

I will store my data on my password-protected hard drive and my University of Oregon secure network server space. Data will also be archived in line with guidance from the University of Oregon Libraries “stewardship and Archiving of Research Data,” and in accordance to the IRB protocol. It will be archived and preserved in the University of Oregon’s Dataverse Data Repository, a repository for faculty data that is hosted by the Harvard Dataverse. Harvard University maintains a rigorous backup schedule, and “commits to best archival practice to ensure that all materials deposited in the archive remain available and usable” (https://dataverse.org/best-practices/harvard-dataverse-preservation-policy).
Tip: Address Privacy

Given the sensitivity of the data and the consequences of confidentiality breaches with regard to adoptions that pertain to our cohort, strict safeguard systems will be put in place. Researchers outside of the consortium will have potential access to two types of data: a standard de-identified dataset held to the same standard as that established by the HIPAA Privacy Rule and a highly de-identified dataset that is de-identified to a much higher standard than that established under the HIPAA Privacy Rule. Variables such as occupation, drug use, and criminal offenses might be included in the standard de-identified dataset but excluded from the highly de-identified dataset. The latter could be used offsite by qualified investigators with no oversight by the EGDS cohort PIs. The standard de-identified dataset could be used under close supervision by one of the EGDS cohort PIs and would require a stricter approval process. All requests for use must be approved by the investigator’s local IRB and by the PI of the current project and must be accompanied by a signed Data Use Agreement.
Activity: What’s wrong with this Data Management Plan?

- Read
- Discuss with your neighbor
Activity: What’s wrong with this Data Management Plan?

- Compare with DMP Tool prompt questions: what’s missing?
Storage and Backup During your Project

- 3 Copies of Important Files
- Store Files on 2 Media Types
- Keep one copy offsite
Storage and Backup Resources on Campus

- 1 TB of storage on OneDrive for Business
- May be possible to rent server space through IS (Information Services)
- Your department may offer other resources
Repository: Sharing and Archiving Data

- Discipline-specific repositories
- Data repository at UO Libraries
- Other general-purpose repositories
Activity: What makes this DMP good?

- Read the sample DMP closest to your field.
- Discuss with your neighbor.
Activity: What makes this DMP good?

- Read the sample DMP closest to your field.
- Discuss with your neighbor.
DMP Best Practices

• Specific to funding agency
• Detailed, actionable plan
  • For during the project
  • For after the project
• Take advantage of resources and boilerplate language: don’t reinvent the wheel