

Connecting Librarians to NTU Data Management Plan (DMP)

7 April 2016

Facilitators: Goh Su Nee & Cheng Wei Yeow



Pre-class Preparation

1. Discuss with your group members to select one journal paper from the list.
2. Identify the following in the journal paper that your group has selected:
 - a. Purpose of the research
 - b. Research methodology
 - c. Nature of research data used/generated/collected

Programme

1. Research Data Management (RDM) & DMP – Overview
2. NTU Research Data Policy & NTU DMP
3. Communication Plan
4. ACTIVITY 1 – DMP Guides by Others
5. DMP Tools

BREAK

6. ACTIVITY 2 – Writing DMP
7. RDM Services – Other Libraries
8. RDM Services – NTU Libraries
9. ACTIVITY 3 – How Subject Librarians can be a part of this?

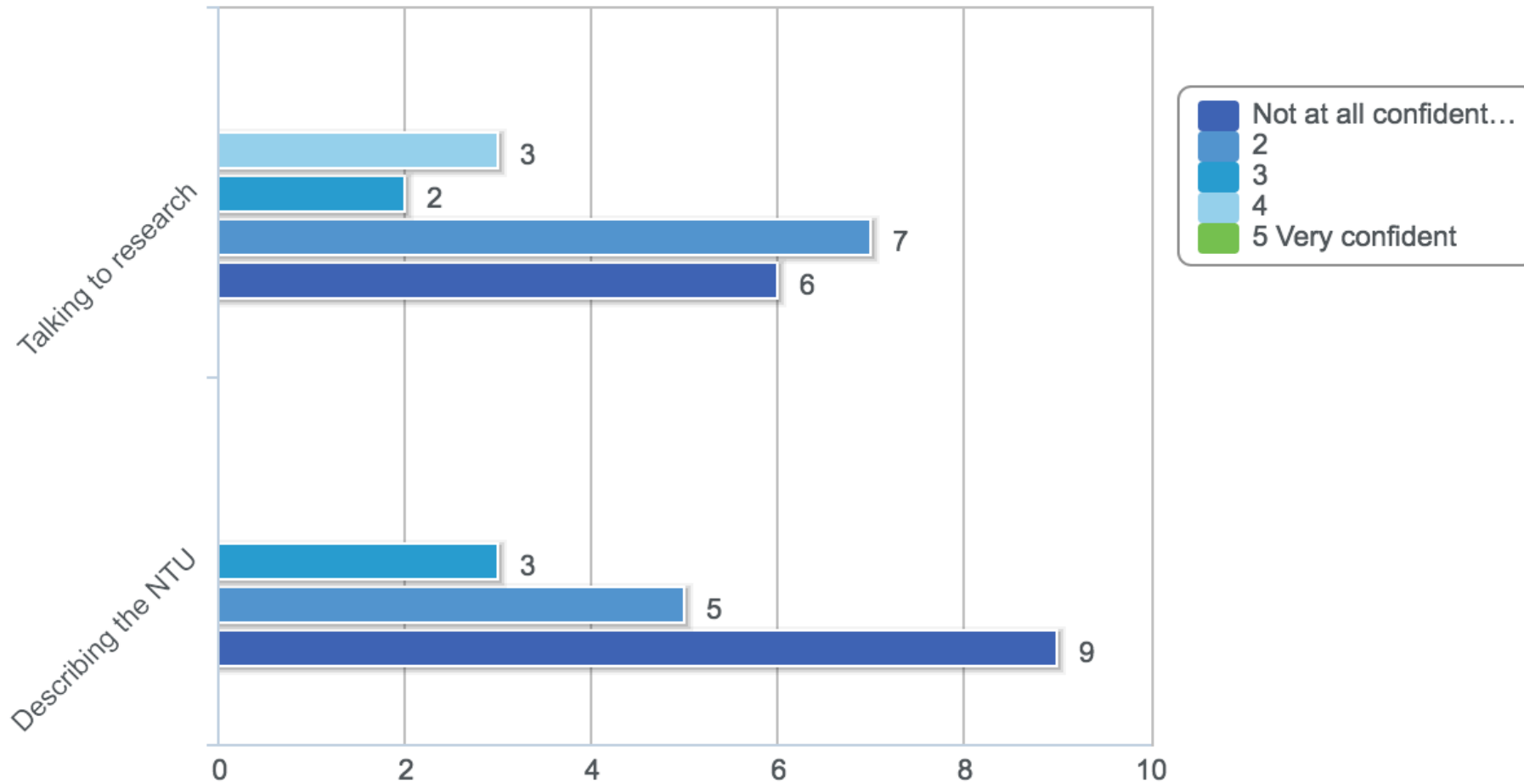
Learning Outcomes

At the end of the session, you will be able to:

- **Describe the importance of a DMP**
- **List the key features of the NTU DMP tool**
- **Describe the services provided by the library to support data management**



Pre-Session Questions/Reflections

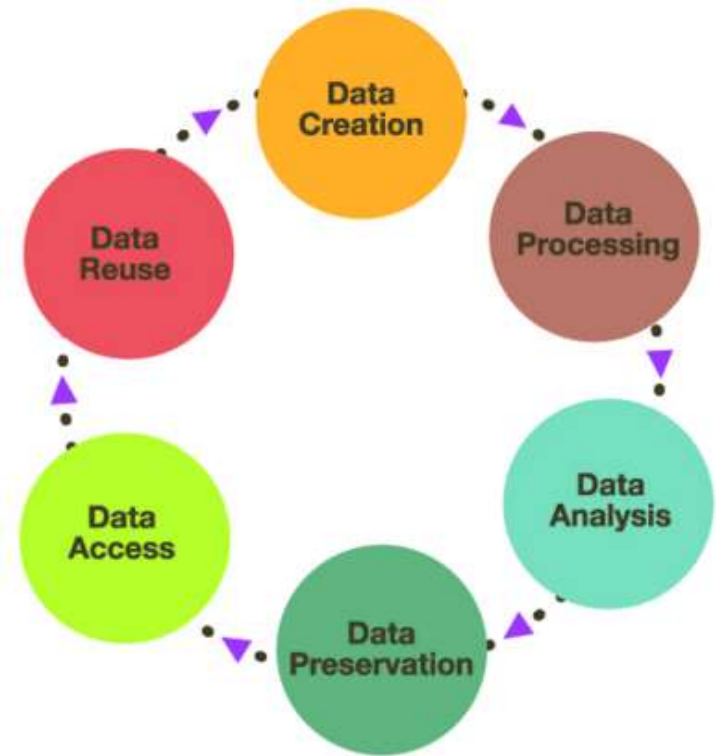


As at 6pm on 6 Apr 2016

RESEARCH DATA MANAGEMENT AND DMP - OVERVIEW

What is Research Data Management?

- All aspects of creating, housing, delivering, maintaining, archiving and preserving research data.



RESEARCH DATA LIFECYCLE

Why is Research Data Management Important?



YouTube Video: [Research data management and sharing](#) (2:22)

Delegates of Research Waste / EQUATOR conference, University of Edinburgh September 2015, respond to questions about research data management and sharing. The video is part of the University of North Carolina / University of Edinburgh Coursera MOOC, 'Research Data Management and Sharing'.

Source: Data Library team, EDINA, University of Edinburgh



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Importance of RDM – Questions to Think About

- What if someone in your lab quits?
- What if you need to use your old data?
- What if you are accused of fraud?
- What if your laptop is stolen?
- What if you could get more credit for your work?

DO YOU STILL HAVE YOUR DATA?

What is a Data Management Plan (DMP)?

- A formal **DOCUMENT** that describes how the research data for a specific research project would be **MANAGED**, **USED** and **SHARED**. This includes **DURING** the project and **AFTER** the project.



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What is a Data Management Plan (DMP)?

- Describes the data management life cycle for all datasets that will be collected, processed or generated by the research project



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WHERE?

Global and National Movement to Increasing Access to Publicly Funded Research Outputs



Not Exhaustive: similar movements in Central and South America, Asia and Africa

Screen capture from Dr Paul Wong (ANDS)'s 28 Sept 2015 presentation slides for "*Managing and sharing research data: why bother for institutions?*"

SINGAPORE - NATIONAL MEDICAL RESEARCH COUNCIL (NMRC)

Implementation – 2-Phase Approach

Phase 1

Requirement of Open Access of Publication

Involves all existing or new projects

May 2015

Phase 2

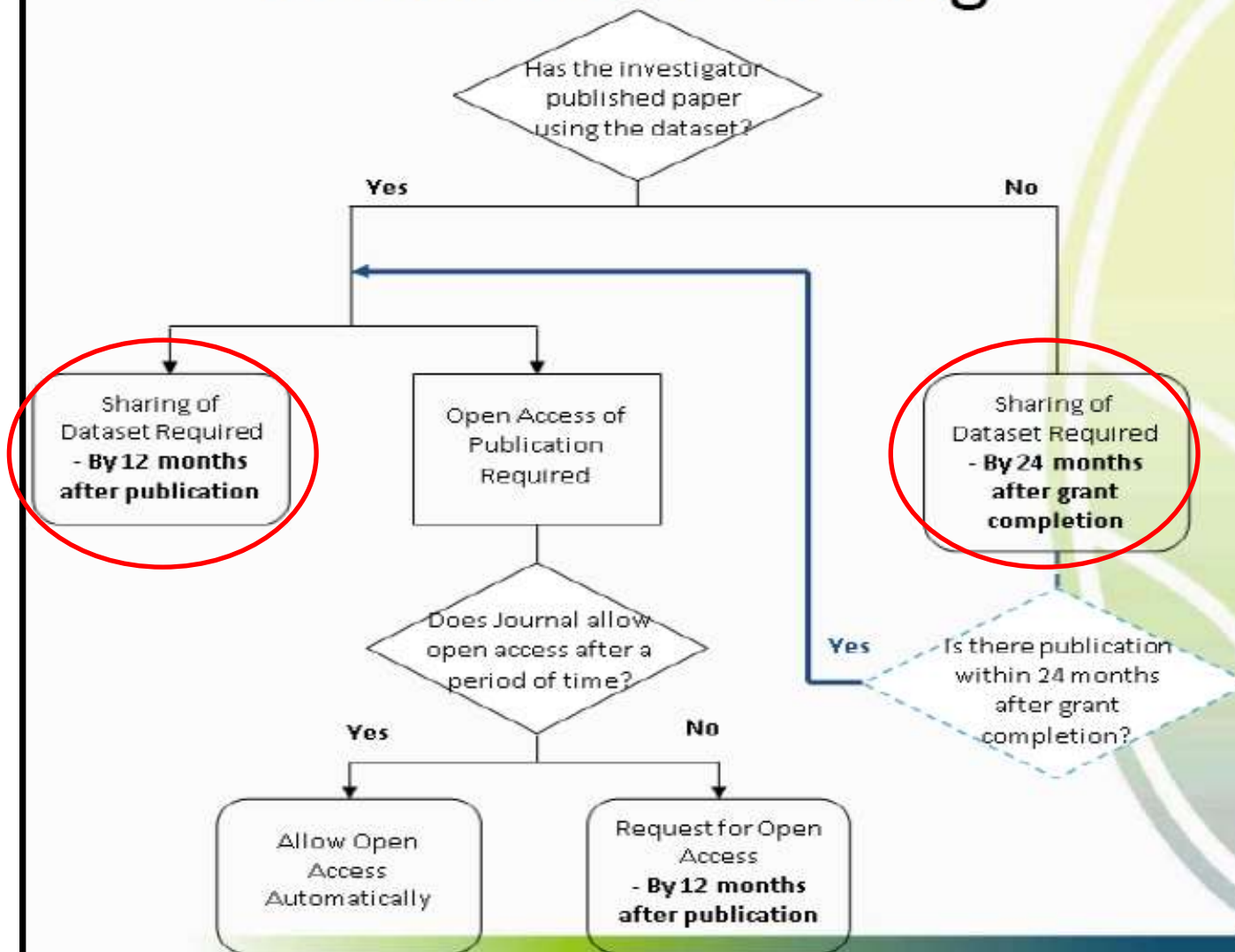
Requirement of Sharing of Dataset

Involves new projects seeking funding of \$250,000 and above

~~Nov 2015~~

SINGAPORE - NATIONAL MEDICAL RESEARCH COUNCIL (NMRC)

Workflow of Sharing



NTU RESEARCH DATA POLICY & DATA MANAGEMENT PLAN

NTU RESEARCH DATA POLICY

NANYANG TECHNOLOGICAL UNIVERSITY RESEARCH DATA POLICY

1. INTRODUCTION AND OBJECTIVES

- 1.1 NTU recognizes that research data is an important part of all research and scholarly work carried out in the university, not only for establishing research findings and discovery but also in contributing to the advancement of science and scholarship through its availability for sharing. Moreover the proper management of research data is necessary to ensure that the research integrity of research work carried out in NTU is beyond reproach.
- 1.2 This policy aims to ensure that research data generated in the conduct of research projects at NTU are managed in a systematic and comprehensive manner to ensure integrity, accountability, long term availability, appropriate sharing and compliance with requirements of funding agencies.

2. POLICY IMPLEMENTATION

- 2.1 The Research Support Office (RSO) is responsible for the promulgation and implementation of the policy.

3. POLICY APPLICATION

- 3.1 This Policy shall apply to all NTU faculty, staff, researchers, students and any other persons, including consultants, visiting researchers, those involved in the design, conduct or reporting of research performed at or under the auspices of the University.

4. DEFINITIONS

- a. **Research data**
Research data are data in whatever formats or form collected, observed, generated, created and obtained during the entire course of a research project. This would include numerical, descriptive, aural, visual or physical forms recorded by the researcher, generated by equipment and derived from models, simulations.
- b. **Final research data**
The final dataset is a collection of final version of data that exists during

- Approved by NTU Research Core Group on 2 Sept 2015
- Shared draft with NMRC (National Medical Research Council) on 3 Sept 2015 - requested by NMRC
- Accessible via:
 - Research Integrity webpage (<http://research.ntu.edu.sg/ResearchIntegrity/>)
 - NTU Policy Portal



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• OBJECTIVES

This policy aims to ensure that research data generated in the conduct of research projects at NTU are managed in a systematic and comprehensive manner to ensure **INTEGRITY, ACCOUNTABILITY, LONG TERM AVAILABILITY, APPROPRIATE SHARING AND COMPLIANCE** with requirements of funding agencies.

• IMPORTANCE OF RESEARCH DATA MANAGEMENT

- support research findings and discovery
- contribute to advancement of science and scholarship through its availability for **SHARING**
- **RESEARCH INTEGRITY**

NTU RESEARCH DATA POLICY – DATA MANAGEMENT PLAN #5.2

- All research proposals must include a data management plan (DMP) that records the **INTENTION ON HOW RESEARCH DATA ARISING FROM THE RESEARCH PROJECT WILL BE MANAGED, USED AND SHARED.**

NTU RESEARCH DATA POLICY – DATA MANAGEMENT PLAN #5.6

- The final research data from projects carried out at NTU shall be made **AVAILABLE FOR SHARING** (via the NTU Data Repository) unless there are prior formal agreements with external collaborators and parties on non-disclosure or proprietary use of the data.
- The sharing and use of research data shall be based on **CREATIVE COMMONS LICENSE CC:BY:NC**, where others may use data for non-commercial applications only and must correctly attribute the data source in NTU.

NTU RESEARCH DATA POLICY – ROLE OF PRINCIPAL INVESTIGATOR FOR DATA MANAGEMENT PLAN #6.1.2

- Prepare a data management plan using either the **NTU DMP TEMPLATE** or that provided by the funding agency and submit it online onto the NTU platform specified by the University **WITHIN THREE MONTHS** upon approval of the project grant.
- The PI shall provide an **UPDATED** version whenever there are substantive changes to the research project.

NTU RESEARCH DATA POLICY – ROLE OF PRINCIPAL INVESTIGATOR FOR DATA MANAGEMENT PLAN #6.1.6

- Provide statement and **JUSTIFICATION** if there is a strong need to **DEVIATE** from NTU research data policy **including** sharing of final research data.

POLICY & DMP COMMUNICATION PLAN

ACTIVITY 1 – DMP GUIDES BY OTHERS

Individual or Group (2-3 per group) Activity

List at least 2 webpage URLs that provide RDM/DMP related requirements/guidelines/tips on the PD blog.

- Include the URL and content provider's name/title.
- Include your team members' names if you're doing in groups.

PD blog: <http://blogs.ntu.edu.sg/lib-pdblog/>



DMP TOOLS

Data Management Plan Tools

UK



A web-based tool to help researchers develop and maintain data management plans

A short history

Launched in April 2010 at the Jisc conference

Released v.2 in March 2011 with extra functionality

Released v.3 in April 2012 with revisions in light of the DMPTool and work from the Jisc MRD programme


Released v.4 in Dec 2013, incorporating major changes from an evaluation and extensive user testing

Subsequent point releases in 2014-2015 to add new features

Data Management Plan Tools

Templates





Signed in as Sarah Jones ▾

[View plans](#) [Create plan](#) [About](#) [News](#) [Help](#)

Create a new plan

Please select from the following drop-downs so we can determine what questions and guidance should be displayed in your plan.

If applying for funding, select your research funder.

Otherwise leave blank.

Medical Research Council ▾

[Not applicable/not listed.](#)

To see institutional questions and/or guidance, select your organisation.

You may leave blank or select a different institution to your own.

University of Glasgow ▾

[Not applicable/not listed.](#)



Tick to select any other sources of guidance you wish to see.

Generic guidance from the Digital Curation Centre

[Create plan](#)

Contact us | Terms of use | DMPonline previous version

© 2004 - 2014 Digital Curation Centre (DCC)



Data Management Plan Tools

Templates



Ethics and Legal Compliance (7 questions, 0 answered)

How will you manage any ethical issues?

Example of answer

It is not envisaged that there will be any ethical or privacy issues with respect to the data as there is no personal data as defined by the Data Protection Act

B *I* [List] [List] [Link] [Image]

Save

Not answered yet

How will you manage copyright and Intellectual Property Rights (IPR) issues?

Example of answer

The research data from this project will be issued under an Attribution Non-commercial Share Alike (by-nc-sa) licence, meaning others can use, adapt and build upon our work non-commercially, as long as they credit us and license their new creations under the identical terms.

B *I* [List] [List] [Link] [Image]

Guidance Share note

EPSRC Policy Expectations

EPSRC recognises that there are legal, ethical and commercial constraints on release of research data. To ensure that the research process (including the collaborative research process) is not damaged by inappropriate release of data, research organisation policies and practices should ensure that these constraints are considered at all stages in the research process.

St Andrews guidance on Ethical Issues

Guidance Share note

EPSRC Policy Expectations

St Andrews guidance on IPR Ownership and Licencing

<https://dmponline.dcc.ac.uk/>

Data Management Plan Tools

USA



Create, review, and share data management plans that meet institutional and funder requirements

A short history
































Launched in October 2011 following planning efforts of founding partners: CDL, DCC, DataONE, Smithsonian, UCLA, UCSD, UIUC, UVa

Released v.2 in May 2014 with extra functionality

Roadmap for new work on API, usability in 2016

Data Management Plan Tools



- ▼  Department of Energy (DOE)
 -  Department of Energy: Generic
 -  Department of Energy: Office of Science
-  DMP Template from DCC
-  GoMRI Research Consortia DMP Template 2015
-  Gordon and Betty Moore Foundation
-  Institute of Education Sciences (US Dept of Education)
- ▼  Institute of Museum and Library Services
 -  IMLS (2014-): Digital Content
 -  IMLS (2014-): New Software Tools or Applications
 -  IMLS (2014-): Research Data
-  Joint Fire Science Program
- ▼  National Institutes of Health
 -  NIH-GDS: Genomic Data Sharing
 -  NIH-GEN: Generic
- ▼  National Science Foundation
 -  BCO-DMO NSF OCE: Biological and Chemical Oceanography
 -  NSF-AGS: Atmospheric and Geospace Sciences
 -  NSF-AST: Astronomical Sciences
 -  NSF-BIO: Biological Sciences (2015-)
 -  NSF-CHE: Chemistry Division
 -  NSF-CISE: Computer and Information Science and Engineering
 -  NSF-DMR: Materials Research
 -  NSF-EAR: Earth Sciences
 -  NSF-EHR: Education and Human Resources
 -  NSF-ENG: Engineering
 -  NSF-GEN: Generic
 -  NSF-PHY: Physics
 -  NSF-SBE: Social, Behavioral, Economic Sciences
-  NEH-ODH: Office of Digital Humanities
-  NOAA Data Sharing Template
-  U.S. Geological Survey DMP Guidance
-  USDA - NIFA: National Institute of Food and Agriculture

Templates

Data Management Plan Tools

My Dashboard | My DMPs | Create New DMP | My Profile

CREATE NEW DMP

A Start with a DMP Template
To create a new DMP, select a funder or institutional template.
[Select Template >>](#)

B Copy an Existing DMP
The existing DMPs in this list are either publicly shared by any user, shared within your institution by other DMP creators, or are plans that you have previously created.
Select an existing DMP below and add text to the template.

Name	Owner
NSF BIO - general Lorem Ipsum is simply dummy text of the	Tasha Chase

<https://dmptool.org/>

DMP DETAILS

IMLS II (2014-): New Software Tools or Applications

Click on a section below to edit it at any time.

✔ = Complete
* = Mandatory

Template Outline

- I. Mandatory for All Projects
 - I.A.) Copyright and Intellectual Property Rights
 - I.A.1) Copyright/MP Status** **1**
 - I.A.2) Ownership Rights
 - I.A.3) Privacy/permissions
 - III. For Projects Creating New Software Tools or Applications
 - III.A) General Information
 - III.A.1) Description
 - III.A.2) Other tools
 - III.B) Technical Information
 - III.B.1) Programming languages, platforms, software
 - III.B.2) Interoperate
 - III.B.3) Additional software/system dependencies
 - III.B.4) Documentation
 - III.B.5) Examples
 - III.C) Access and Use
 - III.C.1) Ownership, terms of use
 - III.C.2) Public availability

2 Instructions **2** Links

3 What will be the copyright or intellectual property status of the content you intend to create? Will you assign a Creative Commons license to the content? If so, which license will it be?

4

5 [Cancel Changes](#) [Save Response](#) [Save and Next](#)

[<< Back](#) [DMP Preview >>](#)

Data Management Plan Tools

DMP Assistant

CANADA



Shared stewardship of research data

[Version française](#)

[Home](#) [About](#) [Help](#)

DMP Assistant is a bilingual tool for preparing data management plans (DMPs). The tool follows best practices in data stewardship and walks researchers step-by-step through key questions about data management.

Step 1 Sign up with DMP Assistant

Step 2 Sign in and select a template under Organizations. The Portage template is the default.

Step 3 Answer the questions that are relevant to your work. Guidance and examples are provided.

Step 4 Revisit the tool throughout your research to review or revise your answers.

Sign in



If you have an existing account with DMP Assistant or previous version of DMP Builder.

Sign up



New to DMP Assistant? Sign up today.

Please note that we are currently working on single sign-in authentication. For now, please create a new DMP Assistant account. You will have the option to link your DMP Assistant account to your campus ID when that feature becomes available.

<https://portagenetwork.ca/>

NTU DMP Tool (interface, functions and features) in RIMS

NTU Data Management Plan

- Where and How to create NTU DMP?

<live demo>

NTU DMP questions, guides and samples

About the Data

1. Types, Formats & Collection Methods of Data

What data will you be collecting and how?

2. Processing & Transformation of Data

How will the data be used and managed in your research project?

3. File Extensions & Software/ Tools

- a. Check the relevant file extensions that you will be using (you may choose more than one)
- b. What software(s) and/or tool(s) is/are needed to process/read the file(s)?
- c. Where can this/these software(s) and/or tool(s) be obtained?

4. Confidentiality, Privacy & Security of Data

If your data is sensitive, how will you be managing and using it?

Access to Data

5. Access & Usage Restrictions

Will there be restrictions on accessing & sharing your final research data?

Metadata and Documentation

6. Metadata & Standards

What metadata and/or data standards will you be using to describe your data?

7. Data Documentation

What documentation will you be providing to facilitate a better understanding of the project data?

Data Storage and Preservation

8. Data Storing

Where and how are you storing the data during the project lifetime?

9. Backup & Versioning Control

What backup and versioning control procedures will you be undertaking?

10. Long-term Storage & Preservation

- a. What are your plans for storing your working data (physical and digital copies) other than your final dataset after the completion of your project?
- b. I will store the final research data in: NTU Data Repository OR another open data repository and the URL is:



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Coffee and Tea Break



ACTIVITY 2 – WRITING DMP

Group Activity

1. Answer ALL NTU DMP questions based on the journal paper which you have identified using the off-line version of NTU DMP template.
2. Send the completed NTU DMP to wycheng@ntu.edu.sg by 11:15am with group member names in DMP.

Download the off-line NTU DMP form:

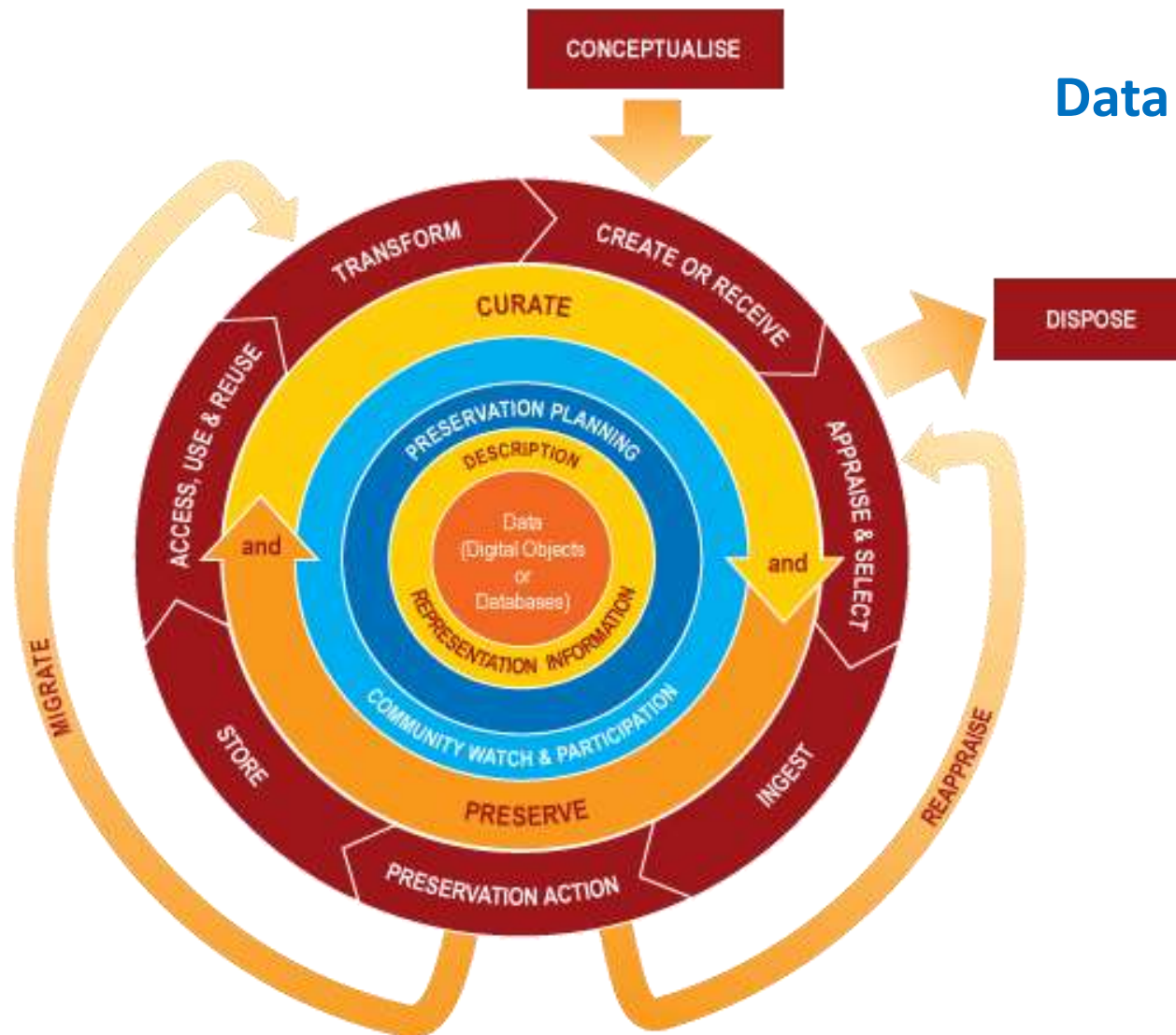
<http://blogs.ntu.edu.sg/lib-pdblog/2016/04/01/ntu-data-management-plan/>



RDM SERVICES – OTHER LIBRARIES

Other library DMP related services

Data lifecycle

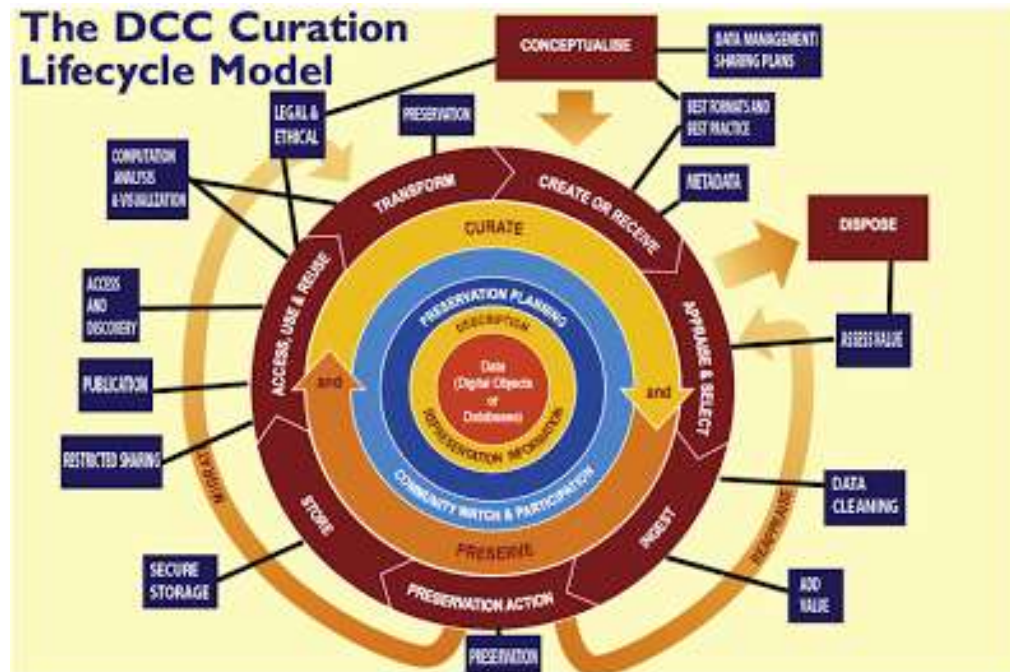


Other library DMP related services

Data Management and Sharing Plans	Support and advice to help researchers prepare their data management and sharing plans.
Legal and Ethical	This service includes support to assist researchers with the legal and ethical implications of creating, sharing and using data.
Best Formats and Best Practice	Support for researchers to decide which are the best formats and practice for producing and documenting specific data. This service may also include provision of support for database design.
Secure Storage	Secure storage includes infrastructure that allows storing research data providing backup and version control capabilities amongst other things.
Metadata	Tools and support to permit researchers describe their data from the moment of creation.
Access and Discovery	A support service as well as tools to help researchers locate and access research data. This service could also include tools to help research groups to find about their data resources using the Data Audit Framework methodology.
Computation, Analysis & Visualization	Software and computing resources that allow analysis and visualization of research data as well as the training needed to equip researchers with the appropriate skills.
Restricted Sharing	Technical infrastructure to share research data with selected individuals or groups.
Data Cleaning	Support to clean and prepare data to the standard required for publication. This service should include help with anonymizing data.
Publication	Infrastructure that permits researchers to publish documented data and link them to research articles and other materials located in other repositories. In some cases researchers may want to exploit their data commercially. DRAMBORA could serve as a tool here to assess repositories that publish the data.
Assess Value	One of the main challenges with research data is deciding what data needs to be kept and for how long.
Preservation	This service would be responsible for looking after the data in the long-term applying the required measures so that the data is accessible through time.
Add Value	Once the data is stored with the metadata associated with it, value can be added by organizing similar data in groups, promoting it, linking it to other materials or allowing annotations.

Other library DMP related services

Mapping between DCC Curation Lifecycle and Research Data Management Services



Other library DMP related services

Mapping between DCC Curation Lifecycle and Research Data Management Services

DCC Lifecycle Model Sequential Actions	Research Data Management Services	Description
Conceptualise	Data Management/ Sharing Plans; Best Formats and Best Practice; Legal and Ethical	This stage is related to services to support researchers in the production of data management and data sharing plans. It is also related to the advisory services for best formats and best practice for data creation as well as legal and ethical services for data creation (for instance to clearly define the ownership of the data to be created or how can they be used) and sharing.
Create or receive	Best Format and Best Practice; Metadata	At this point researchers need support to figure out best formats and best practice as well how to best document their data with appropriate metadata.
Appraise and select/ dispose	Assess Value	This phase relates to services to assess value of the data.
Ingest	Data Cleaning, Add Value	Before data are ingested, they will need to be prepared and cleaned. During ingestion other information can be added to enhance them.
Preservation Action	Preservation	Obviously relates to preservation services.
Store	Secure Storage	This stage clearly relates to the secure storage.
Access, Use and Reuse	Publication; Legal and Ethical; Computation, Analysis and Visualization	This phase relates to several of the research data management services. Publication of data as well as access and discovery belong to this stage. When publishing data there is a legal aspect that needs to be addressed and hence the relation here to legal services. In addition to this, the use and reuse of data is tightly coupled to analysis and computational services.
Transform	Computation, Analysis and Visualization; Preservation	Transforming the data relates to producing new derived version of them by either analysis, visualization or for preservation purposes.

Other library DMP related services

Case 1: Research Data Services



Research Data Services Team

- Membership consists of a Research Data Librarian, a digital archivist, and **subject librarians** from sciences, social sciences, and humanities.

Services

Research Data Services provides the following services:

- One-on-one data management consulting
- Custom workshops and trainings on data management for classes, seminars, labs, etc.
- Secure data storage via the [PetaLibrary](#)
- Archiving and publishing of small (under 2GB) completed data sets via the [CU Scholar](#) institutional repository
- Support for the [DMPTool](#) (tool for creating custom data management plans based on funding agency requirements)

For more information about any of these services, please email data-help@colorado.edu.

Other library DMP related services



Cornell University

Case 2: Research Data Services

Dianne Dietrich

Dianne is the **Physics & Astronomy Librarian** at the Edna McConnell Clark Physical Sciences Library. She is the library liaison to the Physics, Astronomy, and Applied and Engineering Physics departments. She has scholarly communication, collection development, instruction, and reference responsibilities, and is responsible for assessing and meeting emerging data curation needs for Cornell's Physics and Astronomy communities. Prior to this, she was the Research Data & Metadata Librarian in CUL's Library Technical Services. She has her library degree from the University of Michigan, and a BA in Mathematics from Wesleyan University. Areas of focus: metadata and documentation for scientific datasets, digital preservation

Michelle Edwards

Michelle Edwards is the Data Archivist and Data Librarian at the Cornell Institute for Social and Economic Research. She is responsible for the acquisition, maintenance, development, and preservation of the collections housed in the CISER Data archive. She has taught workshops in SAS, SPSS, and STATA, and is currently providing GIS support along with Data consultation and reference services. Michelle holds a B.Sc. (Agr) from the Nova Scotia Agricultural College, an M.Sc. (Biology) from Dalhousie University, a Ph.D. (Quantitative Genetics) from University of Guelph, and an MLIS from University of Western Ontario. Although her education is in the agricultural field, she has been working in the Social Sciences forum providing support to researchers and graduate students in these fields, along with agriculture for the past 17 years. Areas of focus: Social Sciences, statistics and data archives.

Christine Fournier

Chris is a **Life Sciences Librarian** for Research at Albert R. Mann Library where she is part of the Research Services team. Before becoming a librarian she worked in non-profits and at the USGS to make biological data available to the public. Chris has a B.A. in Environmental Studies and Latin American Studies (Tulane University) and a M.S. in Conservation Biology and Sustainable Development (University of Maryland, College Park). Areas of focus: Data management and organization, geospatial data and metadata.

Data Management Services at Cornell

Service areas

- [Collaboration tools](#)
- [Data collection and analysis](#)
- [Data sharing](#)
- [High performance computing](#)
- [Intellectual property and copyright](#)
- [Metadata](#)
- [Security, privacy, and confidentiality](#)
- [Storage, backup, and recovery](#)

Case 3: Research Data Services



Research Data Services

Your research data are important. Research Data Services is a network of services throughout the library to assist you during all phases of the research data lifecycle. For questions about research data or to schedule a consultation, please get in touch with your [subject librarian](#) or [email us](#).

We provide or are planning to provide services in the following areas:



[Data Management Planning](#): helping plan for managing, sharing and curating data and develop Data Management Plans (DMPs) that meet funder requirements.



[Discovery & Access](#): assisting in discovering, accessing, and acquiring different types of research materials, including data.



[Data Organization & Management](#): helping researchers to understand, develop and apply strategies for organizing and managing their data.



[Metadata & Documentation](#): locating standards for documentation that capture the details of generating, processing and analyzing data so it can be discovered, understood and reused.



[Data Sharing & Publication](#): helping disseminate research data for discovery, access and reuse in ways that enable researchers to receive credit for their work.



[Preservation](#): taking action to sustain the accessibility and scholarly value of data over time.



[Data Visualization](#): a rich and diverse set of practices, methodologies and tools from hand drawn charts to interactive web maps to immersive 3-D environments.

Case 4: Research Data Services



THE UNIVERSITY
of EDINBURGH

Help & support

Contact details for Information Services staff who can help you with any RDM questions

IS Helpline
Web: [Self service portal](#) (preferred)
Email: IS.Helpline@ed.ac.uk
Phone: +44 (0)131 651 5151

Specific School / subject support contact information

The **Academic Support Librarian(s)** for your School can provide guidance on all aspects of research data management and can advise you on who else to contact within your School and within Information Services.

[Academic Support Librarians by subject](#)

This article was published on Aug 13, 2015

The screenshot displays the 'Research Data Management' website with a navigation bar at the top containing 'Home', 'Information Services', 'Research Support', 'Research Data Management', and 'Contact us'. The main content area features several red-titled tiles:

- Research Data Management programme**: Includes a 3D bar chart and text about the RDM Programme's strategic aims.
- Why is data management important?**: Features a word cloud with terms like 'Data', 'management', 'research', 'value', and 'access', along with text on the importance of managing research data.
- Data management planning**: Shows a circular diagram with 'Data Management Planning' at the center, surrounded by 'Plan', 'Share', 'Archive', and 'Document'. Text describes tools for planning activities.
- Storage & backup solutions**: Includes an image of server racks and text about RDM file stores for archive data.
- Sharing & publishing data**: Promotes 'Edinburgh DataShare' with a colorful circular logo and text about tools for describing and depositing data.
- Research data management training**: Shows a large lecture hall and text about training programs like RDM7000.
- Help & support**: Includes an image of staff assisting a user and text about contact details for help.
- A Guide to the Research Data Service**: Features a diagram of the RDS architecture and text about a new guide.

At the bottom of the page, it states: 'This article was published on Aug 13, 2015.'

RDM SERVICES – NTU LIBRARIES

NTU RESEARCH DATA POLICY – ROLE OF LIBRARY #6.4

- Provide **TRAINING** and **ADVICE** on research data management including metadata description, DMP preparation, copyright and licenses.
- Develop, revise and maintain the **NTU DMP TEMPLATE** and other data management tools.
- Develop and manage the **NTU DATA REPOSITORY** for submission of final research data and maintain the Registry of NTU Research Data deposited in external open access data repositories.

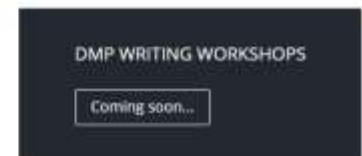
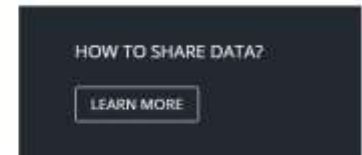
Support on DMP Writing

- Library is working with RSO to conduct **DMP WRITING WORKSHOPS**.
- Other services include one-to-one **CONSULTANCY**, face-to-face or via email.
- Research Data Management **GUIDE** via the **NTU LIBRARIES HOMEPAGE** <http://www.ntu.edu.sg/Library/>
- **CONTACT** email: scholarlycomm@ntu.edu.sg

NTU
Libraries



There is an increasing emphasis on managing and sharing research data. This guide will help researchers learn more about the various aspects of research data management and sharing. It will also guide NTU researchers in meeting the university as well as funders' requirements.



**ACTIVITY 3 – HOW NTU SUBJECT
LIBRARIANS CAN BE A PART OF THIS?**

Group Discussion

1. In your groups, spend not more than 10 minutes to discuss the following question:

As a NTU subject librarian, what are the possible approaches to support your researchers in their preparation or writing of the NTU DMP?

2. Post your key discussion points in brief and point form at:

http://padlet.com/ntu_nmg/PDSession_Apr_2016

3. Identify a representative in your group to briefly share your key discussion points.



End-of-Session Questions/Reflections

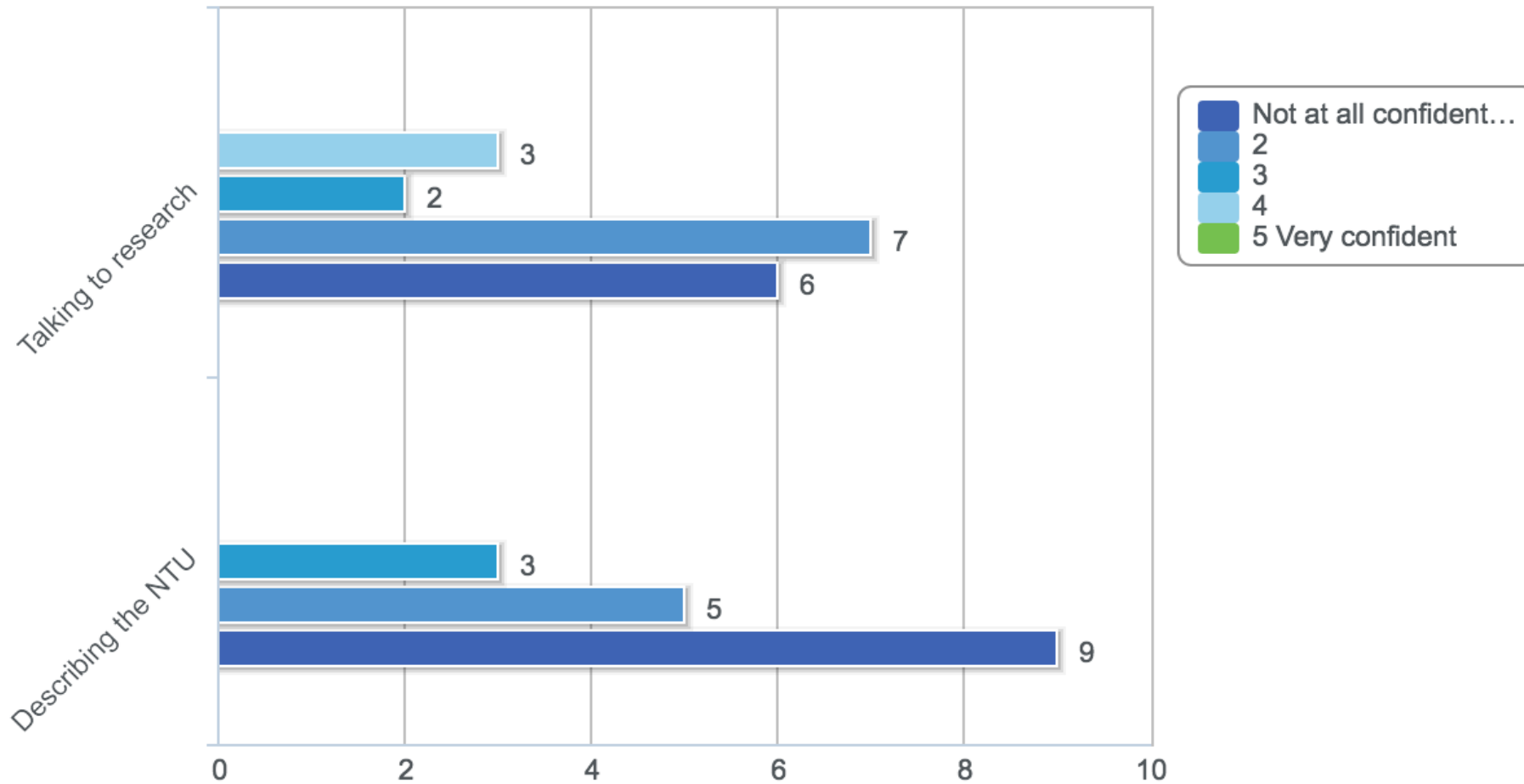
Please help to give us your responses now using the same set of pre-session questions. URL:



<http://blogs.ntu.edu.sg/lib-pdblog/2016/04/01/ntu-data-management-plan/>

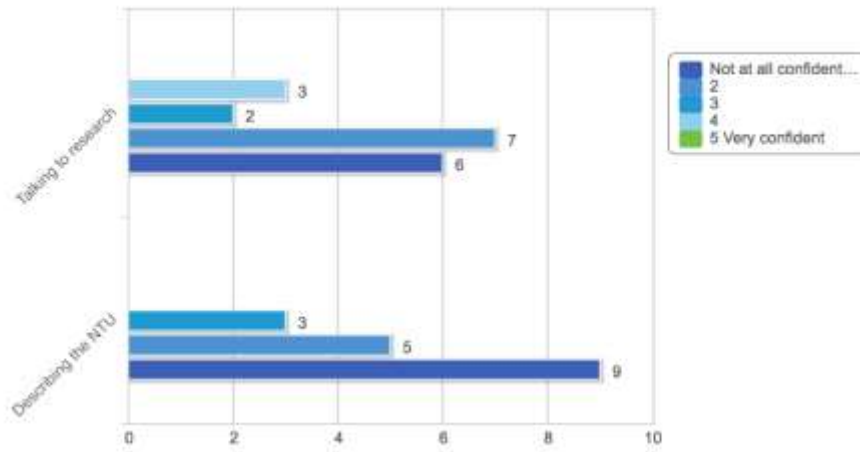
WRAPPING UP BY HEAD, SCG

Pre-Session Questions/Reflections



As at 6pm on 6 Apr 2016

End-of-Session Questions/Reflections



*Thank
You*