**GOALS**
- Identify and address the diversity in disciplinary practices
- Provide disciplinary context to RDM educational approach for librarians
- Engage liaison librarians and corresponding departments in RDM

**STRATEGIC APPROACH**
Currently, a strategic approach for RDM service and infrastructure is being developed by the UTL RDM Working Group. Part of the RDM strategic approach includes the formation of training and engagement initiatives to provide UTL staff general background on the landscape, associated terms, and service for RDM support. In the sciences, there already has been preliminary engagement with liaison librarians including:
- Communication • Digest sent to UTL science listserv to communicate RDM developments and projects • meetings with liaison librarians to discuss RDM in science disciplines
- Education • delivery of a graduate level introductory RDM workshop to UTL staff • presentations offered covering concepts of RDM and RDM activities and projects at UTL
- Project engagement • Science liaisons involved in the development of an RDM survey of science faculty and postdoctoral fellows • offered subject expertise for question development • presented survey purpose to departmental chairs and at departmental meetings

Expanding on these activities, the broad UTL-wide program will formalize RDM education and offer further opportunities for partnership with liaison librarians.

The benefit in providing disciplinary packages to complement this training is to help contextualize broad concepts into specific areas, assisting with understanding practices and helping liaisons to develop tailored outreach and service within a department.

**BACKGROUND AND PURPOSE**
Research can vary greatly between disciplines, especially within the sciences. The nature of these diverse approaches can make it difficult to develop applicable training for liaison librarians engaging in research data management (RDM) conversations. At the University of Toronto Libraries (UTL), disciplinary packages are being developed to give background information to liaison librarians, with a focus on astronomy and astrophysics, chemistry, computer science, earth science, engineering, mathematics, physics, and statistical sciences. While a general RDM training program is being developed to educate and familiarize all library staff with RDM, these disciplinary packages are meant to supplement this general information with subject specificity. This will give liaison librarians context and insight into disciplinary practices and provide examples and talking points for engaging with faculty, students and researchers.

**DISCIPLINARY PACKAGES**
These packages contain discipline-specific information gathered from literature and research, as well as through internal service and outreach programs. Packages are to be given to liaison librarians for review, followed by discussion in a meeting between liaison librarians and RDM librarians to discuss trends and differences within the disciplines. This meeting provides an opportunity for the exchange of information, such as:
- The nuances of current research practice within the discipline (information RDM librarians can learn from liaison librarians)
- What information liaison librarians wish to learn more about (information RDM librarians can more actively communicate)
- Knowledge gaps that exist from both RDM and liaison perspectives (information RDM and liaison librarians still need to gather)

RDM librarians will also provide context into the development of RDM service and infrastructure, and current projects underway by the RDM Working Group. Liaisons may also provide information on current projects underway within their departments, and areas for collaboration in RDM service delivery or project partnership.

**FUTURE DIRECTIONS**
Packages can be updated by both RDM and liaison librarians as new information arises, maintaining a current snapshot of practice and attitudes within specific disciplines.

The development of these disciplinary packages is also extendable to other disciplines within UTL, such as liaison areas within the arts, humanities, social science, and health and biological sciences.

**INFORMATION SOURCES**

**INTERNAL INFORMATION SOURCES**
- Journal policy assessment looked at ~1000 journal policies in high impact journals in the sciences (health excluded) to examine sharing requirements and evaluate U of T researchers publishing in these titles
- Faculty and postdoctoral fellows in the sciences (health excluded) RDM survey results. Purpose was to gain insight into disciplinary practice and opinions and discover institutional variances. Survey being rolled out at multiple institutions across Canada (results 2016)
- Evaluation of graduate workshop feedback from two years of delivery of “Introduction to RDM”, a three hour general overview offered through the Graduate Professional Skills program
- Combination of knowledge gathered from engagement efforts and informational interviews and focus groups with faculty and students
- U of T publications, including announcements of projects, department or faculty strategic directions or reviews, and institutional statistics for funding and funding sources

**EXTERNAL INFORMATION SOURCES**
- Literature reviews
- Initiatives from other institutions, such as reports, communications and programs
- Information from professional associations (e.g. library related, e.g. ALA, ARCL, and discipline related, e.g. ACS, AGU, IEEE), including information/data literacy competencies and news announcements
- Publisher requirements detailing recommended practice, found in the instructions for authors or news announcements
- Tri-Agency Canadian funding mandates (CIHR, SSHRC, NSERC)
- Examining comparable US and UK funding mandates for subject area requirements and suggested practice
- Using re3data.org to discover disciplinary repositories
- Specific data repositories detailing standards for submission, types of suitable data for deposit
- Consulting the Data Curation Profiles to gain insight into practice, terminology, and methodology for specific projects in particular disciplines
- Research Data Alliance (RDA) Metadata Standards Directory (in development)

**PACKAGE STRUCTURE**

**SECTIONS WITH INFORMATION SOURCES**
Disciplinary packages are broken into six separate sections, created using information from the internal and external sources below.

1. Researcher Practices • RDM survey results • Digital Curation Profiles • literature reviews • initiatives from other institutions • graduate workshop feedback • interviews and focus groups
2. Funding Overview • Canadian funding mandates • US and UK funding mandates • RDM survey results • U of T publications
3. Journal Requirements • journal policy assessment • publisher requirements
4. Repositories • re3data.org • data repositories • publisher requirements • RDM survey results • literature reviews • US and UK funding mandates • Canadian funding mandates
5. Metadata Standards • RDA metadata standards directory • Data Curation Profiles • data repositories • interviews and focus groups
6. Educational Approaches • graduate workshop feedback • interviews and focus groups • initiatives from other institutions • professional associations

**Note:** internal sources denoted on program structure by • and external sources denoted on program structure by ◆