Objectives & Method

In the Spring 2014, the Lamar Soutter Library distributed a survey to UMMS medical and graduate students to gauge their attitudes toward and awareness of research data management best practices. Similarly, in the Fall of 2014 and using the student instrument as a guide, the library surveyed UMMS faculty to gauge their attitudes and practices around research data management. Using both of these sources of data, we compared student and faculty attitudes on the management and sharing of research data at UMMS. Our goal was to identify differences in attitude between students and faculty as well as common areas of need among them.

Demographics

The response rate for students was 12.6% (n=141). Of these respondents, 58% reported that they are actively involved in research.

The response rate for faculty was <1% (n=84). Of these respondents, 61% report that their primary responsibility is to conduct research.

Results

**Average self-score (1-100 scale) for familiarity with Data Management Activities:**

- **68.36** faculty
- **57.15** students

**Average self-score (1-100 scale) for awareness of Data Management Best Practices:**

- **49.91** faculty
- **41.09** students

**Data Management Challenges**

- Submitting data: 61% faculty, 64% students
- Versioning: 61% faculty, 64% students
- Locating/retrieving files: 61% faculty, 64% students
- Security: 61% faculty, 64% students
- Writing DMPs/planning: 61% faculty, 64% students
- Sharing: 61% faculty, 64% students
- Preserving/archiving: 61% faculty, 64% students
- Collecting: 61% faculty, 64% students
- Documenting/describing: 61% faculty, 64% students
- Storing/backing up: 61% faculty, 64% students

**Data Management Training Topics**

- Locating/retrieving files: 28% faculty, 31% students
- Versioning: 28% faculty, 31% students
- Submitting data: 28% faculty, 31% students
- Sharing: 28% faculty, 31% students
- Documenting/describing: 28% faculty, 31% students
- Preserving/archiving: 28% faculty, 31% students
- Security: 28% faculty, 31% students
- Writing DMPs/planning: 28% faculty, 31% students
- Collecting: 28% faculty, 31% students
- Storing/backing up: 28% faculty, 31% students

**Time Spent on Data Management**

- >10 hours per week: 6% faculty, 6% students
- 5-10 hours per week: 2% faculty, 2% students
- 1-5 hours per week: 4% faculty, 4% students
- <1 hour per week: 20% faculty, 20% students
- N/A: 11% faculty, 11% students

**Faculty respondents’ primary responsibility**

- Faculty that provide training: 79% faculty, 79% students
- Faculty that have received training: 79% faculty, 79% students

**Student respondents involved in or considering research overall**

- Faculty that provide training: 60% faculty, 60% students
- Faculty that have received training: 40% faculty, 40% students

**Student respondents’ awareness of funding agency requirements**

- Faculty that provide training: 42% faculty, 42% students
- Faculty that have received training: 16% faculty, 16% students

Conclusion

Faculty and student responses to data management surveys at UMMS point to potential service areas for data management support and opportunities for institutional collaboration. This feedback has been instrumental in informing the library’s Strategic Agenda for Library-based Research Data Support Services.

For example, data management education emerged as a strategic area due to the lack of uniformity of training opportunities and the lack of training received by students. To this end, the library has developed two training tools: a for-credit Flexible Clinical Experience elective offered through the School of Medicine on “Research Data Management Fundamentals,” and an online instruction tutorial developed with the Quantitative Methods Core on preparing “Analysis-Ready Data Sets” (beta).

To continue to build on the environmental data that we have collected, future research might include a survey of lab-specific data management practices and training procedures, and a more detailed investigation into the data management practices of the students who report being actively involved in research.