Data literacy training needs of biomedical researchers

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APPENDIX

National Institutes of Health Library: data services needs assessment

Welcome

Thank you for taking the time to complete this survey. We appreciate your feedback in helping us develop data services and training that will benefit the National Institutes of Health (NIH) community.

This survey should take about 15 minutes to complete.

The results of this survey may also be used for research purposes, but your responses will be combined with others and will remain anonymous. If you have any questions, please contact Lisa Federer at 301.594.6283 or lisa.federer@nih.gov.

Our privacy policy can be found at http://nihlibrary.nih.gov/AboutUs/Pages/PrivacyPolicy.aspx.

Data management tasks

Below are descriptions of general data management tasks. For each, please indicate:
- the relevance of this task to your work
- your current level of knowledge or expertise with this task

Capture and create metadata (descriptive information about your data, how it was collected, and other contextualizing information)

	Very low	Low	Medium	High	Very high	Not sure
Relevance to your work	O	O	O	O	O	O
Your level of expertise	O	O	O	O	O	O

Use common data elements, ontologies (formal models of concepts within a domain and their relationships), or other predefined terms for describing your data or variables

	Very low	Low	Medium	High	Very high	Not sure
Relevance to your work	O	O	O	O	O	O
Your level of expertise	O	O	O	O	O	O

Organize, tag, and track data so multiple team members can work on the same dataset

	Very low	Low	Medium	High	Very high	Not sure
Relevance to your work	O	O	O	O	O	O
Your level of expertise	O	O	O	O	O	O

Below are descriptions of general data management tasks. For each, please indicate:
- the relevance of this task to your work
- your current level of knowledge or expertise with this task

Conduct research through data mining (using computational methods to discover patterns in large datasets)

	Very low	Low	Medium	High	Very high	Not sure
Relevance to your work	O	O	O	O	O	O
Your level of expertise	O	O	O	O	O	O

Locate and obtain other researchers' shared data to use in your research, and clean or process it to meet your research needs

	Very low	Low	Medium	High	Very high	Not sure
Relevance to your work	O	O	O	O	O	O
Your level of expertise	O	O	O	O	O	O

Demonstrate, analyze, or communicate your research results through data visualization

	Very low	Low	Medium	High	Very high	Not sure
Relevance to your work	O	O	O	O	O	O
Your level of expertise	O	O	O	O	O	O

Below are descriptions of general data management tasks. For each, please indicate:
- the relevance of this task to your work
- your current level of knowledge or expertise with this task

Create a plan for long-term storage and retention of your data

	Very low	Low	Medium	High	Very high	Not sure
Relevance to your work	O	O	O	O	O	O
Your level of expertise	O	O	O	O	O	O

Publish and deposit data in a repository suited to your research field

	Very low	Low	Medium	High	Very high	Not sure
Relevance to your work	O	O	O	O	O	O
Your level of expertise	O	O	O	O	O	O

Write a formal data management plan, including selecting file formats, choosing a standard for data description, and planning for storage and preservation

	Very low	Low	Medium	High	Very high	Not sure
Relevance to your work	O	O	O	O	O	O
Your level of expertise	O	O	O	O	O	O

Data management and sharing practices

Please answer the following questions about your data management and sharing practices.

Have you ever had any formal training in data management?
O Yes
O No

Do you currently use any NIH-sponsored (such as LiveLink) or commercial programs (such as Excel) for managing your data?
O Yes, I use NIH-sponsored programs
O Yes, I use commercial programs
O Yes, I use both NIH-sponsored and commercial programs
O No
If yes, please list the programs you use.

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* Have you ever uploaded your data to a public repository?
O Yes
O No
If yes, please list the repository or repositories to which you have uploaded data.

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* Have you ever shared data with another researcher, either informally or through a formal agreement, such as a material transfer agreement or data sharing agreement?
O Yes
O No

Data sharing

You have indicated that you have never shared your data nor uploaded to a repository. Please indicate the reason(s) for not sharing your data. Please check all that apply.
O I would be willing to share my data, but I haven't had an opportunity to do so
O My data contain personally identifiable information and sharing would compromise my subjects' privacy
O I am prohibited from sharing my data for some reason other than subject privacy
O I don't know any repositories that accept the kind of data I produce
O It's too difficult to prepare my data and documentation for sharing with others
O I don't know how to prepare my data and documentation for sharing with others
O Repositories' requirements for format or description of data are too difficult to meet
O I don't feel I would get credit for sharing my data
O I put in a great deal of time and effort to gather my data, and I don't want to give it away
O I'm concerned that another researcher could beat me to publication if I share my data
O My data has commercial value, so I don't want to give it away for free
O I don't think anyone else would have any reason to use my data

O It isn't customary to share data in my research field
O I'm concerned another researcher might find errors in my data
O I'm concerned another researcher might misinterpret my data
Other (please specify)

Thinking about a recent time when you uploaded data to a repository or shared with another researcher, please answer the questions below.

What was your motivation for sharing your data? Please check all that apply.
O To assist a known colleague
O To assist a junior researcher
O To advance science in a particular area
O To collaborate with a researcher who requested the data
O To enhance my professional standing
O To comply with a requirement to share as a condition of my grant funding or employment
Other (please specify)

How much time did you or your staff spend preparing your data so it would be ready to share or upload?
O None, my data were already in a form that could be shared
O None, my data were not in a form that another researcher would understand, but I made no changes
O 1–2 hours
O 3–5 hours
O 6–10 hours
O More than 10 hours

Did you provide any additional materials or information besides the dataset? Please check all that apply.
O Software or program required to access or analyze the data
O Code used with the data, such as R code
O Codebook explaining variables
O Contextualizing information about the data
O Nothing, the data required no additional materials to be useful to the requester
O Nothing, the data required additional materials to be useful to the requester, but I did not send them
Other (please specify)

If another researcher published or presented on results from your shared data, how were you acknowledged?
O Coauthorship
O Citation in bibliography

O Recognition in the acknowledgment section of the publication
O I received no acknowledgment
O No publication arose from sharing data
Other (please specify)

Demographic information

What is your preferred mode for taking a class? Please check all that apply.
O In person at the NIH Library (located on the south side of Building 10)
O In my lab or office, with my whole group or department
O Live webinar
O Prerecorded online video tutorial
O Written instructions or documentation
Other (please specify)

Please indicate your scheduling preferences for classes. You may select multiple days and times.

O Monday	O Early morning (8–10 a.m.)
O Tuesday	O Mid-morning (10 a.m.–noon)
O Wednesday	O Lunch hour (noon–1 p.m.)
O Thursday	O Early afternoon (1–3 p.m.)
O Friday	O Late afternoon (3–5 p.m.)

*What institute or center is your primary affiliation?

*Which one of the following best describes you?
O NIH employee
O Contractor
O Fellowship appointment
O Guest researcher
O Summer student
O Volunteer
Other (please specify)

*What is your position category?
O Administrative, management, or support staff
O Clinical research staff
O Scientific staff
Other (please specify)

If you are involved with research, what is your general area of study?

_____

Is there anything else you'd like us to know about data management services or classes you would like to attend?

_____

Thank you!

Thank you for your participation with this important survey. Your feedback will be valuable in helping to provide data services and training to the NIH community.

For more information about data management training at the NIH Library or to register for a session, please visit the NIH Library's Training page.

If you would be willing to be contacted to further discuss your data management needs, please provide your name and email. Your survey responses will remain anonymous for research purposes.

Name (optional)

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Email (optional)

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