

Alignment of library services with the research lifecycle

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APPENDIX D

Health sciences library leadership survey instrument

The purpose of the study is to investigate how health sciences libraries can expand their role in supporting the creation of knowledge within the research lifecycle. We are asking for one response per health sciences library from the director, deputy director, associate director, or comparable leadership level. Completing the questionnaire will take approximately twenty-five minutes. To assure confidentiality, I will not refer to your institution or your name in the data analysis and final report. You are heavily encouraged to devote at least ten minutes to the open-ended questions at the end of the survey.

Introductory questions

1. Name:
2. Institution:
3. How many years have you served at your current institution?
4. What is your work title?
 - a. Director
 - b. Deputy director
 - c. Associate director
 - d. Other (Please specify)
5. Skip logic based on the response for question 4.
 - a. How many years in total have you served as a director, including multiple institutions?
 - b. How many years in total have you served as a deputy director, including multiple institutions?
 - c. How many years in total have you served as an associate director, including multiple institutions?
 - d. How many years in total have you served at this position level, including multiple institutions?

Please indicate below any library services that you provide or plan to add supporting biomedical researchers?

| | Have provided more than 4 years | Have provided more than 2 years | Added in last 2 years | Plan to add in the next 2 years | Plan to add in the next 4 years | No plans to add |
|--|---------------------------------|---------------------------------|-----------------------|---------------------------------|---------------------------------|-----------------|
| Background literature searching | | | | | | |
| Systematic reviews | | | | | | |
| Grey literature searching | | | | | | |
| Citation management | | | | | | |
| Locating data sources | | | | | | |
| National Center for Biotechnology Information (NCBI) tools (BLAST, GenBank, dbSNP, etc.) | | | | | | |
| Seeking grant funding | | | | | | |
| Writing center services | | | | | | |
| Grant budget preparation | | | | | | |
| Methodology | | | | | | |
| Experimental design | | | | | | |
| Data management plans | | | | | | |
| Managing research data | | | | | | |
| Data catalog | | | | | | |
| Data literacy | | | | | | |
| Biosketch creation | | | | | | |
| Institutional review board (IRB) protocols | | | | | | |
| Institutional animal care and use committee (IACUC) protocols | | | | | | |
| Ethics and compliance | | | | | | |
| Identifying collaborators | | | | | | |
| Project planning and management | | | | | | |

| | Have provided more than 4 years | Have provided more than 2 years | Added in last 2 years | Plan to add in the next 2 years | Plan to add in the next 4 years | No plans to add |
|---|---------------------------------|---------------------------------|-----------------------|---------------------------------|---------------------------------|-----------------|
| Methods for organizing and storing information | | | | | | |
| Automated and manual data collection | | | | | | |
| Data documentation (file format, naming conventions, file organization) | | | | | | |
| Metadata standards | | | | | | |
| Ontology/taxonomy | | | | | | |
| Data privacy and security guidance | | | | | | |
| Code versioning (GitHub, etc.) | | | | | | |
| File versioning | | | | | | |
| Electronic lab notebooks | | | | | | |
| Data wrangling/cleaning using open source tools such as R, Python, OpenRefine | | | | | | |
| Data wrangling/cleaning using proprietary software such as SAS, SPSS, Excel | | | | | | |
| Data analysis and visualization using open source tools such as R or Python | | | | | | |
| Data analysis and visualization using proprietary software such as SAS, SPSS, Excel | | | | | | |
| Statistical methods | | | | | | |
| Geographic information system (GIS) | | | | | | |
| High performance computing (HPC) | | | | | | |
| Scientific modeling | | | | | | |

| | Have provided more than 4 years | Have provided more than 2 years | Added in last 2 years | Plan to add in the next 2 years | Plan to add in the next 4 years | No plans to add |
|--|---------------------------------|---------------------------------|-----------------------|---------------------------------|---------------------------------|-----------------|
| Prototyping (3D printers and maker technology) | | | | | | |
| Infrastructure and space | | | | | | |
| Journal selection for publication | | | | | | |
| Open access | | | | | | |
| Conference selection | | | | | | |
| Web and social media marketing | | | | | | |
| Bibliographic styles | | | | | | |
| Preprint archive | | | | | | |
| Author rights and copyright | | | | | | |
| Image and graphics for submission | | | | | | |
| Presentation poster preparation | | | | | | |
| Data archiving | | | | | | |
| Data sharing | | | | | | |
| Long-term preservation of experiment materials | | | | | | |
| Institutional repository | | | | | | |
| Funder public access policy compliance | | | | | | |
| Grant citation | | | | | | |
| Citation metrics (h index, impact factor, times cited) | | | | | | |
| Altmetrics | | | | | | |
| Online research profile management | | | | | | |

Please list examples of other actions (not previously mentioned in the survey) that your library has taken to accommodate the changing needs of biomedical research.

Based on your experience, what new skills should health sciences libraries cultivate in order to more fully support biomedical research?

What additional steps should health sciences libraries be taking in order to meet the changing needs of biomedical research?

Over the course of your career, how has the role of health sciences libraries changed when it comes to supporting biomedical research?