Speaker Transcript: Julie Goldman

Slide #1: Coordinating Data Services in the Lab: Connecting The Research Lifecycle

Hello. I am Julie Goldman, Research Data Services Librarian at Countway Library of Medicine, Harvard Medical School. I am happy to be presenting at MLA22, my first time back since 2018 when I first talked about working towards coordinated research data management at Harvard. Today I am pleased to say we have come a long way in four years, and am excited to share the fruits of our efforts.

Slide #2: Coordinated Services

I would describe Harvard as a network of different groups that are either directly supporting data services or indirectly supporting various aspects of data management. So how do we bring these groups together? We have established a collaboration between the Library, IT, and the research community in order to offer coordinated services in three levels. [click] Our network offers targeted services to their local communities. [click] We support each other through open communication avenues such as working groups and committees. [click] Of course, this is all reinforced by funding opportunities and driven by policy. Bringing together multiple stakeholders enables us to provide solutions for data reproducibility.

Slide #3: Service Partners Across the Lifecycle

When we talk about data services, we often refer to the lifecycle of data. Here on the slide is a depiction of the research data lifecycle created by our local working group. This particular model that our group created, includes stages for research planning, active research work, and dissemination of research. We have includes Store and Manage in the center grey circle to illustrate how storage is integral to the entire research project. This is surrounded by pieces connected by arrows, representing the stages. The stages include Plan and Design in dark blue, Collect and Create in light blue,

Analyze and Collaborate in dark green, Evaluate and Archive in light green, Share and Disseminate in red, and Access and Reuse in orange.

Slide #4: Service Partners Across the Lifecycle

We have built out this model to include the many activities, resources and entities that may be involved. For example, under Plan and Design we include data management plans, project onboarding, documentation and metadata, and data use agreements. However, researchers are often unaware of the services available to them due to this hard to navigate landscape.

Slide #5: Service Partners Across the Lifecycle

Through coordination, we are working towards a clearer picture of all our services throughout the lifecycle. [click] For example, for data collection, the Library helps with data organization and documentation practices, typically through classes or consultations. Research Computing assists with storage and offers classes on high performance computing. [click] For sharing, the Library assists with curating, sharing, and depositing data in repositories. Research Administration ensures compliance with regulations and policies.

Slide #6: Service Offering: Tailored Resources

One way we are leveraging our partnership is to develop and maintain data management templates at various points throughout the research process. We have found many benefits in creating tailored resources for researchers to adapt to their own needs. Templates can enhance research production and consistency, reduce duplication or unnecessary retention of data, and even facilitate data sharing and reuse. Two areas we focused on were project Onboarding and Offboarding. We found our traditional employee orientations do not discuss data, and that data accessibility and findability are hindered by improper offboarding. By creating these templates, we are motivating researchers to succeed, and with procedures already outlined, implementation becomes less of a burden. [click] For example, we worked

with The George Church Lab in the HMS Genetics Department to adapt the checklists to streamline and improve existing lab procedures. A quote from their Lab Data Manager says "The transition to the new checklist has been seamless, and feedback from lab members on the new forms has been overwhelmingly positive."

Slide #7: Service Offering: Tailored Resources

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Slide #8: Planning Ahead: NIH DMSP

Additionally, our partnership allowed us to preemptively generate templates for creating data management plans in DMPTool in order to prepare labs for new data management requirements stipulated by the National Institutes of Health, coming in 2023. [click] By using the institutionally supported templates with organization-specific guidance, resources, and examples, researchers will be poised to successfully manage data across projects and grants. [click] The carefully calculated response from stakeholders across the institution demonstrates a united effort to meet researcher needs and establish consistent messaging. [click] By leveraging existing resources and expertise, we are trying to lessen the burden of this culture changing policy.

Slide #9: Coordination & Collaboration is Key

Finally, I would say collaboration and coordination is the key to successful data services. If institutions can foster collaboration between the library, research infrastructure and information technology, the more visible and accessible those data services become. Then services can be [click] cataloged, [click] centralized, and ultimately [click] integrated across workflows to serve the research mission of an institution. [click] We

encourage other institutions and groups to utilize our templates to create their own suitable versions. [click] You can find those in the Open Science Framework

Slide #10: Coordinating Data Services in the Lab: Connecting The Research Lifecycle

Thank you for listening to my MLA22 lightning talk. Please feel free to contact me and explore the work we are doing at Harvard!