CDI FY17 Request for Proposals

Data Management Training Clearinghouse

Submission Title: Data Management Training Clearinghouse

Lead PI: Cassandra Ladino

Mission Area: Core Science Systems

Region: Southeast Region

Organization: Eastern Geographic Science Center

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City: Reston State: VA

Co-PIs and Collaborators:

Science Support Framework Element 1: Data Management

Science Support Framework Element 2: Applications

Science Support Framework Element 3: Communities of Practice

In-Kind Match: \$14,660.00

List of anticipated deliverables from the project: Improved search, browse, and submission user interfaces; Social capabilities such as user rating and commenting; Enhanced search analytics capabilities; Increased inventory including the potential for new learning material types; A series of presentations to increase awareness and use of the Clearinghouse.

Lead Cost Center: Eastern Geographic Science Center

Notes, Comments:

Project Description: The team will enhance the user experience of the Data Management Training Clearinghouse, an online inventory of training resources related to data management in the Earth sciences. The Clearinghouse currently provides basic browse and search capability. We propose a set of tasks that will provide a more intuitive user experience and will promote use and adoption of the Clearinghouse. The user experience will be enhanced with social feedback capabilities, improved interfaces, and sophisticated taxonomies for search capabilities.

Total Budget: \$39,951.00

Community for Data Integration Statement of Interest for Fiscal Year 2017

Project Title: Data Management Training Clearinghouse

SECTION 1. PROJECT ADMINISTRATIVE INFORMATION

CDI SSF elements: Science Data Lifecycle Model, Computational Tools and Services

Name of lead USGS cost center: Eastern Geographic Science Center

Name of Principal Investigator:

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Additional PIs:

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Collaborators:

Amber Budden (DataONE, aebudden@dataone.unm.edu), Sophie Hou NCAR, hou@ucar.edu), David Bassendine, Blue Dot Lab, david@bluedotlab.org, Matt Mayernik (NCAR, mayernik@ucar.edu), Erin Robinson (Federation of Earth Science Information Partners, erinrobinson@esipfed.org)

Short description of the project: The team will enhance the user experience of the Data Management Training Clearinghouse, an online inventory of training resources related to data management in the Earth sciences. The Clearinghouse currently provides basic browse and search capability. We propose a set of tasks that will provide a more intuitive user experience and will promote use and adoption of the Clearinghouse. The user experience will be enhanced with social feedback capabilities, improved interfaces, and sophisticated taxonomies for search capabilities.

<u>List of anticipated deliverables</u>: Improved search, browse, and submission user interfaces; Social capabilities such as user rating and commenting; Enhanced search analytics capabilities; Increased inventory including the potential for new learning material types; A series of presentations to increase awareness and use of the Clearinghouse.

SECTION 2. ESTIMATED BUDGET

| Budget Category | Federal Funding "Requested" | Matching Funds "Proposed" |
|---|-----------------------------|------------------------------|
| 1. PERSONNEL (SALARIES including benefits): | | |
| Federal Personnel Total: | \$10,000 | |
| Contract/Collaborator Personnel Total: | \$20,000 | \$4,500 |
| Total Salaries: | \$30,000 | \$4,500 |
| 2. TRAVEL EXPENSES: | | |
| Travel (Per Diem, Airfare, Mileage/Shuttle) x # Trips: | \$4,000 | \$2,000 |
| Other Expenses (e.g. Registration Fees): | \$0 | \$1,660 |
| Total Travel Expenses: | \$4,000 | \$3,660 |
| 3. OTHER DIRECT COSTS: (itemize) | | |
| Equipment: hosting and hardware allocation | \$1000 | \$3000 |
| Publication Costs: | \$0 | \$0 |
| Office Supplies, Training, Other Expenses (specify): | \$0 | \$0 |
| Total Other Direct Costs: | \$1,000 | \$11,160 |
| Total Direct Costs: | 35,000\$ | \$11,160 |
| Indirect Costs: | \$4,951 | \$3,500 |
| GRAND TOTAL: | \$39,951 | \$14,660 |

Community for Data Integration Statement of Interest for Fiscal Year 2017

SECTION 3. PROJECT SUMMARY

Thanks to seed funding from CDI for Fiscal Year 2016, the Data Management Training (DMT) Clearinghouse has been successfully launched at http://dmtclearinghouse.esipfed.org. The Clearinghouse provides a basic facet to search and browse learning resources that were compiled by key partners (USGS Data Management, DataONE, and the ESIP Federation), as well as a metadata submission form to facilitate submissions to the inventory of learning resources. While the Clearinghouse has been used by relatively few people at the point of this SOI submission, it is already clear that there are enhancements in functionality and opportunities for outreach, marketing, and service analytics that would greatly increase the Clearinghouse's effectiveness and continued success.

The key enhancements we propose are based on user feedback (from both content searchers and submitters) that has already been provided. These include improvements in the branding capabilities for partners and collaborators, the inclusion of other learning material types such as data management webinars events, social capabilities such as user rating and commenting, and further development of more robust workflows for the crowd-sourced submission and review processes to assure quality control and currency. Additional enhancements could include the enabling of automatic link checking, the development of push and pull capabilities for metadata found in external systems, and the enabling of search analytics capabilities through sophisticated taxonomies for the Clearinghouse and its individual learning resources.

There are clear opportunities for fostering more awareness of the Clearinghouse. The coordinating group has been approached to collaborate with other organizations working on data management training. With the help of our partners, we will develop a multi-platform communication strategy including the use of websites, social media, and live presentations.

Additional community benefits could include agreement on core skills for data professionals. This action would further the coordinating group's interests in identifying topics that are not yet covered by learning resources, and would provide incentive for the creation of learning resources on those topics. The coordinating group is also looking at funding opportunities to engage in several promising user experience test cases in conjunction with the ESIP Federation's Data Stewardship Committee and its Usability Cluster. Any information gleaned from these efforts will inform the direction and scope of the enhancement choices that could be made were the Clearinghouse to receive funding for a second year by CDI.

| | Objectives | Timeline |
|---|---|-------------|
| 1 | Test user experiences (UX) with Clearinghouse functionality and continue | Nov. 2016 – |
| | expanding the Clearinghouse inventory. | Mar. 2017 |
| 2 | Assess the findings from the UX tests; identify which enhancements would be | MarApr. |
| | most productive and feasible during the CDI grant period; and begin interface | 2017 |
| | designs for Clearinghouse. | |
| 3 | Begin development implementation of new Clearinghouse functionality; | Apr. 2017 |
| | automate and put in place workflows for more efficient processes for content | _ |
| | submission, content review / editing and publication. | |
| 4 | Presentations at CDI Annual Workshop and ESIP Summer Meeting; application | May - Aug. |
| | testing; planning for online communication strategy with partners | 2017 |
| 5 | Integration of new functionality into production environment; public release; and | Sept. 2017 |
| | communication activities. | _ |