



To: Distribution List

From: Faculty Research Development Office (FRDO)  
Office of the Vice President for Research

Subject: Limited Competitions: NSF: Harnessing the Data Revolution (HDR): Data Science Corps (DSC)  
Building Capacity for HDR NSF 19-518

Date: November 7, 2018

Good Afternoon,

The Office of the Vice President for Research is requesting pre-proposals for the NSF, "Harnessing the Data Revolution (HDR): Data Science Corps (DSC) - Building Capacity for HDR" Big Idea funding opportunity. **Only one proposal is permitted per organization, and an individual may participate in only one proposal as PI, co-PI, or Senior Personnel.** Complete details can be found at the following link:  
[https://www.nsf.gov/pubs/2019/nsf19518/nsf19518.htm?WT.mc\\_id=USNSF\\_25&WT.mc\\_ev=click](https://www.nsf.gov/pubs/2019/nsf19518/nsf19518.htm?WT.mc_id=USNSF_25&WT.mc_ev=click).

The Data Science Corps is one of the components of the HDR ecosystem, focusing on building capacity for harnessing the data revolution at the local, state, national, and international levels to help unleash the power of data in the service of science and society. The Data Science Corps will help build a strong, national data science infrastructure and workforce. As a first step in establishing the Data Science Corps, **this solicitation focuses specifically on enabling participation by undergraduate students in the Data Science Corps by providing student stipends for participation in data science projects and supporting integration of real-world data science implementation projects in a community of interest**, e.g., rural community, urban community, academia, industry, or government, into classroom instruction. These efforts may also include providing hands-on training to community members to impart best practices in data science, e.g., for data collection, data management, data analysis, and data-driven decision making. The interactions between data scientists and communities will be mutually beneficial—supporting transfer of data science techniques to local communities, while providing insights and practical experience to participating data scientists and students. This partnership between communities and data scientists can help produce a better workforce-ready cohort of data scientists.

**Proposals responding to this solicitation must be structured to include one coordinating organization, and one or more implementation organizations.** The lead PI's organization will serve as the coordinating organization and undertake responsibilities related to coordination, monitoring, and evaluation. One or more implementation organizations should be affiliated with each coordinating organization. A single organization may occupy both roles—coordinating and implementation. However, participation by more than one organization is expected in each Data Science Corps award. Each implementation organization will implement Data Science Corps in one or more of its undergraduate data science courses, or related course(s), at the organization. It is expected that the coordinating organization and the corresponding implementation organizations will work together on the overall Data Science Corps award, including the details of introducing Data Science Corps into existing courses, and adjusting course curricula accordingly; identifying project organizations and recruiting suitable projects; and developing a common set of criteria for awarding Data

Science Corps stipends to students. Projects should involve hands-on work with real-world datasets in any setting, e.g., industry, government, academia, non-profit, international.

A particular Data Science Corps project could be included in multiple data science (or related) courses within a given organization. Similarly, a given project could also be included in courses at multiple organizations. Data Science Corps awards must assess issues of student learning and other outcomes, as well as evaluate program effectiveness.

The submission window dates for full proposals to the agency are January 28, 2019 - February 04, 2019. HDR:DSC budgets will typically be in the range of \$1,000,000 to \$1,200,000 for 3 years.

If you anticipate that you will be submitting a pre-proposal for this internal competition, **please send a statement of interest via e-mail to [limited@unm.edu](mailto:limited@unm.edu) by Thursday, November 15, 2018 listing all anticipated senior personnel.** This will help us to arrange a review committee and maximize the amount of time available to prepare a submission to NSF. **Please submit your 3-page pre-proposal (in a SINGLE PDF file, 11 point font) addressing the review criteria below, a budget overview, and an NSF-style CV for the PI and Co-PIs by NOON on Thursday, November 29, 2018 to [limited@unm.edu](mailto:limited@unm.edu) with the subject line indicating: HDR\_your name.** No late submissions will be considered.

**Pre-proposals should include these major sections and review criteria to be used by the limited competitions selection committee:**

#### **1. Project Personnel and Collaborating/Implementing Organizations**

- Provide a list of project personnel, participating organizations and other relevant stakeholders whom you would involve in this project.
- Describe the overall goals, objectives, and expected outcomes for the award as a whole, and for each participating organization and explain why the particular set of organizations was selected as the team for the project.
- Briefly describe the proposing team's prior experience with implementing data science projects in academia, industry, government, non-profit, and/or other relevant sectors.

#### **2. Integration into Curriculum in Data Science**

- Explain how the Data Science Corps projects/experiences will be integrated into the current curriculum, and into courses/course sequences at each of the participating organizations.

#### **3. Participant/Student Preparation**

- Describe your plan for preparing students at different levels of skill and maturity for projects in order to facilitate mutually-beneficial experiences.

#### **4. Projects/Communities**

- Describe how Data Science Corps projects will be sourced, vetted, and developed.
- Describe which data science communities will be served and how these communities will be integrated into the project design and implementation phases.
- Describe how students will be matched to the projects, based on project needs and student skill levels.

#### **5. Student/program assessment**

- Describe plans for assessing student learning and for overall award evaluation.

Note: Please indicate in the budget overview how funds will be divided between participating organizations.

*If you are affiliated with HSC, please contact Corey Ford ([CFord@salud.unm.edu](mailto:CFord@salud.unm.edu)) or Cassandra Misenaar ([CMisenaar@salud.unm.edu](mailto:CMisenaar@salud.unm.edu)) for more information.*