FUNDING OPPORTUNITY FOR FACULTY AND RESEARCH STAFF

Every field has data. We use data to discover new knowledge, to interpret the world, to make decisions, and even to predict the future. The recent convergence of big data, cloud computing, and novel machine learning algorithms and statistical method is causing an explosive interest in data science and its applicability to all fields. This convergence has already enabled the automation of some tasks that improve human performance. The novel capabilities we derive from data science will drive our cars, treat disease, and keep us safe. At the same time, such capabilities risk leading to biased, inappropriate, or unintended action. The design of data science solutions requires both excellence in the fundamentals of the field and expertise to develop applications which meet human challenges without creating even greater risk.

The Data Science Institute (DSI) at Columbia University is a world leader in the theory and practice of the emerging field of data science. We advance the state of the art in data science; transform all fields, professions, and sectors through the application of data science; and ensure the responsible use of data for the benefit of society. It is in this context that DSI promotes "Data for Good": using data to address societal challenges and bringing humanistic perspectives as—not after—new science and technology is invented.

PROGRAM GOALS

The DSI Seed Funds Program supports new collaborations that will lead to longer term and deeper relationships among faculty in different disciplines across campus. Aimed at advancing research that combines data science expertise with domain expertise, the program's funded research should embody the spirit of the Institute's mission. We are interested in the application of data science to all domains and bringing ideas from other domains to bear on data science. Aligned with these efforts, we are particularly interested in proposals that address one or more of DSI's focus areas: Business and Finance, Climate, Foundations of Data Science, Health, and Social Justice.

DSI is pleased to announce a call for proposals from Columbia University faculty and research staff for its Seed Funds Program. We seek proposals that represent new collaborations, which will ideally lead to future proposal submissions to government, industry, or foundations. As such, DSI Seed Funds may be viewed as planning grants for upcoming solicitations from DARPA, NIH, NSF, etc. We encourage proposals that address the technical challenges in the fair and ethical use of data.

STATEMENT ON RACIAL EQUITY

DSI is committed to racial equity and justice. Proposals should explicitly state that the project will uphold these values, e.g., stating that the methods used to collect and analyze project data, and the project outcomes reported are fair, just, and ethical.

FUNDING

This year, DSI will provide two levels of funding. We will accept proposals with budgets up to $25,000, as well as proposals with budgets up to $75,000, annually, for a maximum of two years. The $25,000 grants are intended for projects where significant salary support of Ph.D. students, postdoctoral researchers, or research scientists is not needed. As a condition of funding, awardees will be required to submit quarterly financial reviews and biannual progress reports. Eligibility for continued funding for a second year will also require a progress report. All reports must include progress on external funding proposal submission(s) and other related activities (presentations, publications, etc.).

Budgets are encouraged to request support for DSI research scientists and for the university's Bridge to the Ph.D. Program in STEM program.

DSI research scientists and scholars represent a wide range of expertise, from the foundations of data science to domains where data science is heavily used. Collaborating with a DSI research scientist or scholar may accelerate your research project.

The Bridge to the Ph.D. Program in STEM is a structured, post-baccalaureate opportunity aimed to diversify the STEM professoriate and workforce. By including one of their scholars as part of your DSI Seed Funds research proposal, you contribute towards increasing pathways for underrepresented students to advance in STEM disciplines. The Office of the Vice Provost for Faculty Advancement covers 70% of the scholar's salary and fringe, with 30% (~$17K) expected from the sponsoring principal investigator (PI). Your DSI Seed Funds budget is eligible to cover the PI's expected cost for sponsoring a scholar.

PROPOSAL PROCESS

The deadline for proposal submission is **Monday, November 8, 2021 @ 3 p.m. ET**. We will not accept incomplete or late submissions. Please submit the following materials via email in a single .doc or .pdf format to **dsi-seed@columbia.edu**: application cover page, project proposal, racial equity statement, budget, and CVs for faculty / collaborators (two-page, NSF-style format).

We anticipate notifying award recipients by December 21, 2021.

APPLICATION COVER PAGE

CONTACT INFORMATION (PIs and Collaborators)

First Name	Last Name	Title	Dept.	Email	Phone

If additional contacts are needed, please check here   and provide supplemental listing before CVs.

SCOPE OF PROPOSAL

Title of Proposal	External Funding Sought	External Proposal Deadline(s)
	Proposals must identify specific large-scale funding opportunities for which the applicants will compete.	

Funding Amount Requested:	Anticipated External Funding Award Amount:
$75,000.00 per year, two-year maximum. **Eligibility for second year conditional upon demonstrated progress.**	**DSI Seed Funds provide support to develop successful, large-scale funding opportunities.**

PROPOSAL REQUIREMENTS

Please provide the following information:

- A. Completed application cover page
- B. Project Proposal* (five-page maximum, single spaced, 12 pt. font, Times New Roman)
- C. Explicit statement on how the project will uphold DSI's commitment to racial equity and justice
- D. Budget with narrative Note: Racial equity statement, budget/narrative, and references are not included in the five-page proposal limit
- E. CVs for PIs and collaborators (two-page, NSF-style format)

* The following criteria will be used to rank and select submissions for seed funding:

1. Why is proposed project novel? Contrast to prior work is recommended.
2. Why is seed funding essential to the success of this project?
3. How is the project necessarily inter-/multi-disciplinary?
4. Describe the novelty of the collaboration in terms of people, disciplines, and/or schools.
5. What is the intended follow-up for this project to obtain future funds, especially plans to submit to large-scale funding opportunities?
6. Describe the projects adherence to DSI's commitment to racial equity and justice.

All projects must be relevant to advancing and/or applying data science as a field.