BITSS **Berkeley Initiative for Transparency in the Social Sciences**

2016 Grants for
Social Science Meta-Analysis and Research Transparency (SSMART)
Request for Proposals

Quick Reference

Link to Online Application: https://cega.submittable.com/submit/52942
Deadline: 11:59 pm US Pacific Time, Monday, March 28, 2016
Total Grant Money Available: $230,000
Individual Grant Ceiling: $30,000

Executive Summary

The Berkeley Initiative for Transparency in the Social Sciences (BITSS) invites researchers to submit proposals to the Social Science Meta-Analysis and Research Transparency (SSMART) grant initiative. The main objective of the SSMART grants is to support and encourage important meta-research in the social sciences, with the ultimate goal of strengthening reliability and validity of social science research findings.

There is a total of $230,000 available for this call, with a $30,000 ceiling for individual grants (inclusive of indirect costs).

The deadline to submit an application is: **11:59 pm U.S. Pacific Time on Monday, March 28, 2016.**

Background

Despite major knowledge gains through high quality research, unreliability of scientific evidence in the social sciences remains a challenge, as widely documented across the fields of public health and medicine (J. P. A. Ioannidis 2005), psychology (Rosenthal 1979; Simmons, Nelson, and Simonsohn 2011), political science (Humphreys, Sierra, and Windt 2013; Broockman, Kalla, and Aronow 2015), and economics (Leamer 1983; Chang and Li 2015).

BITSS was formed in 2012 in response to these problems, and has developed into an international network of researchers and institutions committed to improving the standards of rigor and integrity in economics, political science, psychology, and related disciplines. Central to its efforts is the identification of useful tools and strategies for increasing transparency and reproducibility in research, including the use of study registries, pre-analysis plans, version control, data sharing platforms, disclosure standards, and replications. BITSS identifies these tools and strategies by engaging the academic

community through outreach and events including conferences, workshops and trainings, as well as funding research related to advancing the supply of and demand for transparency in social science research.

Scope of Research Funded

In collaboration with the Laura and John Arnold Foundation (LJAF) and Hewlett Foundation, BITSS is pleased to announce the 2016 Request for Proposals for SSMART.

Funding will be primarily directed to research projects that advance understanding and design of new methodological approaches in transparency for reproducibility and reliability, as well as meta-analysis using existing data and literature to expand the evidence-base according to the following categories:

(1) **Develop new methodology**

What innovative methods can be used to transparently conduct research?
How can researchers improve the transparency and credibility of their research findings?
BITSS invites proposals that advance an understanding of how to implement research transparency by identifying threats to the credibility of research or by developing techniques to strengthen the reliability of research findings. Proposals could develop statistical and/or methodological tools to reduce false positives or statistical cherry picking, more clearly document the issue of publication bias, adjust published effect sizes to control for publication bias, or transparently display the sensitivity of analysis to different assumptions.[1]

(2) **Produce new meta-analysis**

How can research systematically use existing data to produce new knowledge?
BITSS invites proposals that apply transparent research tools (including, but not limited to those mentioned above) to systematically learn from bodies of existing literature and data. This could include:
- Application of extreme bounds or sensitivity analysis to existing bodies of research to document the variability in results.[2]
- Inter-disciplinary meta-analysis of effects not previously analyzed with comparable methodologies.[3]
- Investigations into the external validity of bodies of research.[4]
- Systematically meta-analyzing large collections of papers or data from organizations such as journals or funders that archive data from published papers, including but not limited to: *Psychological Science*, *American Journal of Political Science*, *Review of Economics and Statistics*, Innovations for Poverty Action or others on Harvard's Dataverse[5], University of Michigan's ICPSR[6], TESS[7], Millennium Challenge Corporation's Evaluation Catalog[8], or the Open Science Framework.[9]

(3) **Study research culture and adoption of new methods**

Why do some researchers adopt transparent research practices but not others?
How can incentives or norms be structured to encourage transparent, reproducible research?
BITSS invites proposals that investigate the adoption of transparency methods by researchers, including research that (1) identifies how the norms, attitudes and incentives of researchers, funding agencies, university departments and journal editors shape the body of evidence or (2) studies how norms can be changed to increase adoption of transparent and reproducible research practices. Examples could include:
- Experiments or surveys of the research community that investigate failure to follow stated ethical norms, or meta-analysis of questionable research practices.[10]
- Analysis of various trial registration or pre-specification practices, including impacts on reported research findings, as this practice comes into greater use within the social sciences.[11]
- Experiments exploring interventions that promote adoption of technology, transparent practices, and public goods creation (e.g. open data) – testing the relevance of framing, incentives, and information in promoting change in the research community.

- Experiments involving the research community to reveal the effects of researcher degrees of freedom or specification searching on study outcomes.

Proposal Requirements

(1) **Submission of Proposals**

Applications must be received by **11:59 pm U.S. Pacific Time on Monday, March 28, 2016**. Applications must be submitted electronically, as one pdf document, using submittable.com. Applications will not be accepted in any other format or by any other means of submission.

(2) **Content and Format of Proposals**

Main contents of the proposal, defined as the study description, budget narrative, work plan and outputs, and team description should be a maximum of 5 pages, double-spaced, 10-12 point standard font with one inch margins. Cover page, abstract, references, curriculum vitae, and budget do not count toward this limit. Proposal must include the following items, in the following order:

Cover Page. The cover page should not be longer than one page and should include the title of the proposal, the name(s) and contact information of researchers, the name and contact information of the institution or organization's authorized representative, and the funding amount requested.

Study Abstract. The study abstract should be no longer than 200 words and should provide a brief summary of the study.

Study Description. The study description should provide a brief description of the proposed study. It should provide detailed information about:
- Problem statement(s) of what the intended research will address
- Primary research questions, linked directly to one (or more) of the three research questions listed in the Scope of Research Funded section of this RFP.
- Methodology (description of empirical strategy, define outputs/outcomes in analysis, power calculations and sampling, etc.)
- Description of primary and/or secondary data source(s)

Budget Narrative. Explain and justify the budget. Please note the following:
- UC Berkeley based research: Indirect Costs have already been budgeted between BITSS and the donors. Therefore budgets may go up to the full $30,000 ceiling exclusive of Indirect Costs.
- Non-UC Berkeley based research: Indirect Costs must be included in the budget. Indirect Costs must not exceed 10% of Total Costs. The means that Total Direct Costs may not exceed $27,000 and Indirect Costs may not exceed $3,000.

Work plan and outputs. The proposal should include a brief summary of the key timeline/milestones for the study, as well as clear description of how the study will meet reporting and other grantee requirements as per Grant Information and Administration Section below.

Team Description. This section should list the members of the research team, and briefly describe the research team's capacity for success in accomplishing the research objectives. Any statements made here should be directly linked to team members' Curriculum Vitae provided in the Appendix.

References. Include a list of references for any works cited in previous sections.

- Curriculum Vitae: Include for all team members.
- Budget Details: Complete the budget template for this appendix.

Assessment Criteria

BITSS will conduct a pre-screen of all applications. Applications will be removed from consideration for review if they do not fit into any of the three research categories detailed above. The following three criteria will be used to evaluate proposals:

(1) **Relevance and Significance**
Is the stated problem consistent with BITSS's research priorities as per the three main categories listed above? What will the study add to the existing literature on transparency and how important is the contribution? Do the policy or relevant implications of the paper have the potential to improve research and publishing norms on a large scale? Will the results be meaningful regardless of whether they confirm the hypothesis?

(2) **Soundness of methodology**
Is the methodology rigorous? Is the statistical significance of the results methodologically sensitive? Does the study present power calculations that convincingly demonstrate the reliability of the evidence presented? Are the assumptions motivating the analysis reasonable? Is the research design clear and well articulated?

(3) **Transparency**
Have the authors prepared a clear plan for adhering to registration and openness requirements of the grant?

In addition to this criteria, BITSS will take the following into account when making a recommendation for award: (i) balance across disciplines, (ii) balance across research categories, (iii) balanced gender representation across SSMART grantees, and (iv) balanced representation of grantees from Global South.

Review Committee and Selection

An interdisciplinary review committee will be established with at least two experts per discipline: (i) economics, (ii) political science, (iii) psychology, and (iv) public health/biostatistics. For each discipline, one expert will be internal to BITSS, drawing from BITSS Executive Committee and Advisory Board members, and one expert will be external to BITSS leadership.

Proposals will be assigned to experts based on discipline, regardless of research category. Reviewers will be asked to rank proposals from highest to lowest funding priority based on the three assessment criteria described above. BITSS staff will use reviewers' rankings to inform a 'Recommendation for Award' for the top proposals for the Review Committee.

Grant Information and Administration

(1) **Funding**

Funding for grants made under this request for proposals is provided by an agreement between the Laura and John Arnold Foundation (LJAF) and the William and Flora Hewlett Foundation and the University of California Berkeley. BITSS anticipates funding a total of $230,000 during this round, with a maximum of $30,000 per grant.

The period of performance for grantees under this call is anticipated to be June 1 - December 31, 2016, unless otherwise agreed. Funds may not be spent past that date without written approval.

Contracts will be established between the University of California Berkeley and the recipient grantee institution or organization.

(2) Eligibility

Principal investigator (PI)/Co-Principal Investigator (Co-PI) must hold a Ph.D. or equivalent academic degree, or be enrolled in Ph.D. studies at a Ph.D.-granting institution. We strongly encourage submissions from PI/Co-PIs based in the Global South.

(3) Disqualification

Applications that exceed the budget ceiling, do not address the topic domain, or otherwise do not follow guidelines as detailed in the RFP are not eligible for funding under this RFP. SSMART funding may not be used to finance staffing costs for employees of BITSS or its institutional home, the Center for Effective Global Action (CEGA).

(4) Award Notices

Applicants will be notified of grant award status on or about May 2016. Due to anticipated volume of proposals, detailed comments may not be provided for submissions not accepted.

(5) Grantee Requirements

Registration and Openness. Grant recipients must establish an account with the Open Science Framework ("OSF" http://osf.io), and make a new project page for the research funded by this grant. The OSF webpage must include a pre-analysis plan describing the hypothesis or hypotheses to be examined in the research study, the statistical model(s) and methodologies to be used, and further details as specified in Section IIA of the document "Guidelines for Investments in Research".[12] Following completion of pre-analysis plan Grantees must pre-register using the "OSF-Standard Pre-Data Collection Registration Template". Data must be version controlled and shared on the study OSF webpage within six (6) months of the publication date of a final report, subject to IRB or other confidentiality agreements. All code used to analyze data used under this grant, as well as any final results, such as papers or reports, must also be posted on the OSF within one year of the end of data collection, unless otherwise agreed.

Reporting. Grantees must produce a final analysis report and publish the report on the OSF study page. Any other publications that result from analysis under this grant should also be linked to the OSF study page as available.

Dissemination Events. Recipients must anticipate participating in BITSS dissemination events, such as the BITSS Summer Institute, usually hosted in June, and the BITSS Annual Meeting, usually hosted in December, in Berkeley, California. We request the budget include travel costs for one research team member to one event in Berkeley, California.

(6) Other Terms and Conditions

BITSS reserves the right to negotiate with project investigators and/or their institutional representative. Any publications produced as a result of this grant shall include the language "Funding for this research was provided by the Berkeley Initiative for Transparency in the Social Sciences and the Laura and John Arnold Foundation." or "Funding for this research was provided by the Berkeley Initiative for Transparency in the Social Sciences and the William and Flora Hewlett Foundation." BITSS will provide grantees with specific information upon award.

(7) Questions

Questions relating to this announcement should be sent to BITSS Program Coordinator Alex Wais via e-mail at **awais@berkeley.edu**.

[1] Examples include: Casey, Glennerster, and Miguel (2012) looking at the use of pre-analysis plans to tie researchers' hands and reduce the ability to cherry pick results; Balzer, Laan, and Petersen (2015) on adaptive pre-specification and its potential for use in the social sciences; Simonsohn, Nelson, and Simmons (2014a); Simonsohn, Nelson, and Simmons (2014b) on development of the p-curve to test for false positives in published research; Ioannidis and Trikalinos (2007) on the Test for Excessive Significance, which estimates and then compares the number of expected studies with statistically significant results to the number of observed significant studies; Schimmack (2012) on the Incredibility Index, using the number of studies in a single paper. Another example is testing the sensitivity of results to analysis conducted by groups of independent researchers, as in Silberzahn et al. (2015)

[2] See Leamer (1983), Leamer (1985); Open Science Collaboration (2012)

[3] For example, see Hsiang, Burke, and Miguel (2013)

[4] See Vivalt (2015), Alcott (2015).

[5] Available online at https://dataverse.harvard.edu/

[6] Available online at http://www.icpsr.umich.edu/icpsrweb/ICPSR/index.jsp

[7] Available online at http://www.tessexperiments.org/previousstudies.html

[8] Available online at http://data.mcc.gov/evaluations/index.php/catalog

[9] Available online at https://osf.io/

[10] See Anderson, Martinson, and Vries (2007), Fanelli (2009), and Franco, Malhotra and Simonovits (2014)

[11] Similar research from medicine includes Laine et al. (2007), Ioannidis (2005), Mathieu S et al. (2009)

[12] Available online at http://www.arnoldfoundation.org/wp-content/uploads/2015/05/Guidelines-for-Investments-in-Research.pdf

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