

# **Grant Application Guidelines**

This document lays out the content and formatting requirements when writing a grant proposal to the Alfred P. Sloan Foundation for the following types of projects:

## **Research Projects**

A research project is any project the output of which could be appropriately published in an academic journal.

Projects that involve *both* a research component *and* a non-research component (for instance, you plan both to conduct research and hold a conference to disseminate this research) are considered research projects for the purpose of which guidelines to use.

If your project is not a research project, this is not the correct set of guidelines for your grant proposal. Please visit our <u>Grant Proposals</u> page to download the correct guidelines.

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## Elements of a Complete Grant Proposal Packet

All grant proposal packets to the Alfred P. Sloan Foundation must contain the following elements. Proposal packets that are missing any of these elements (other than unneeded optional appendices) are not complete and will not be considered for funding until all elements have been submitted.

- 1. Proposal Cover Sheet
- 2. Proposal
- 3. Commitment to Diversity, Equity & Inclusion
- 4. Budget and Budget Justification

- 5. Required Appendices
- 6. Optional Appendices
- 7. Proposal Administration Form

The first six elements should appear in a single document in the order indicated above. (Proposal cover sheet first, then proposal, then the commitment to diversity statement, etc.) The Proposal Administration Form (element 7) should be submitted as a separate document.

## Formatting Requirements

Proposal packets must

- Be double-spaced
- Be in an 11-point font
- Have 1-inch margins
- Have page numbers

### **Section Page Limits**

The elements of a grant proposal packet may not exceed the following lengths.

Cover Sheet	1 page
Proposal	If amount requested ≤ \$250,000, 10-15 pages If amount requested > \$250,000, 20 pages
Commitment to Diversity, Equity & Inclusion	1-2 pages
Budget & Budget Justification	As needed
Required Appendices	
List of Citations	As needed
Curriculum Vita(e)	Maximum 3 pages per person

Conflicts of Interest	As needed, generally 1 page
Empirical Methods	As needed, generally 3-8 pages
Information Products	As needed, generally 2-4 pages
Optional Appendices	
Workshops & Conferences	As needed
Letters of Support	2 pages per letter
Proposal Administration Form	2 pages

### **Proposal Packet Cover Sheet**

All grant proposal packets must be accompanied by a completed Proposal Packet Cover Sheet Form. <u>Visit the Forms section</u> of the Alfred P. Sloan Foundation website to download a Proposal Packet Cover Sheet Form.

## **Proposal**

The grant proposal must be divided into sections that address the following questions.

- 1. What is the research question and why is it important? The proposal should start with a discussion of the research question(s) that the proposer expects to address. It should go on to discuss why these questions are important (e.g., fill gaps in the literature/knowledge/data) and how they are related to the Foundation program that would provide the grant support.
- 2. What is the state of the research on this question? The proposal should contain a summary of the existing literature on the research question(s) being addressed. This summary should include references to the important papers in the literature. Gaps in the literature should be identified. This literature review should refer to key papers written both by the proposer(s) and by other scholars in the field.
- 3. Why is the proposer qualified to address the research question for which funds are being sought? The proposer's education, teaching, previous research accomplishments, etc., related to the proposed research should be discussed briefly.
- 4. What is the research methodology? The proposal should contain a discussion (understandable to a non-expert) of the theoretical framework, data sources, sampling methods, and empirical analysis methodologies that will be used to answer the research questions. Of course, methodologies will be appropriate to the nature of the research. If the research, for example, includes statistical analysis, the proposal should specify and justify the empirical models and statistical methods that will be deployed.

Issues such as sample selection, endogeneity, treatment of dichotomous variables, and error structure assumptions should be included in this discussion. Additional technical detail (at the "expert" level) must be attached as an Empirical Research Methods Appendix.

- 5. What is the work plan? For complex projects or projects with more than one investigator, the proposal should discuss the project timeline and how it will be implemented. This should include an account of who will do what and when, project oversight and management, and who will have what duties, powers, and responsibilities. Key project milestones should be identified. If the proposal involves collaboration with other individuals or organizations, those collaborators and their expected contributions to the project should be listed. The proposal should also describe, if applicable, the status of the work to date and plans for dissemination and/or sustainability.
- 6. What will be the output from the research project? The proposal should include a discussion of anticipated papers, conferences, briefings, training of Ph.D. students and postdoctoral researchers, etc., that the research is expected to yield. A more thorough discussion of the expected outputs should be attached as an <u>Information Products Appendix</u>.
- 7. What is the (summary) justification for the amount of money requested? The proposer should justify the budget request and why it is consistent with the research and associated output that the funds will support. This should be a general discussion, with additional detail provided in the <u>detailed</u> budget justification.
- 8. What other sources of research support does the proposer have in hand or has he/she applied for to support the research team? If funds are being provided or requested from other sources, the proposal should list those sources, amounts, and the status of funding from each. This narrative information can be integrated into the previous question, with detail provided in the budget.

When a current or former Sloan grantee seeks funds for a new project in an area related to their Sloan grant, or if a grantee is seeking renewed or expanded funding for an ongoing project supported by Sloan, an additional section should be included in the proposal answering the following question:

9. What is the status and output of current and/or previous Sloan grants? The proposal should include a discussion of the work that has been produced (or is in process) in connection with previous Foundation grants. This discussion should include a list of publications (working papers, articles published in journals, books, Ph.D. dissertations, etc.) and other products (conferences, presentations, films, training, etc.) designated as output or outcome metrics from current and/or previous grants.

## Commitment to Diversity, Equity & Inclusion

The Foundation's investments in research, education, and public understanding of science, technology, and economics are guided by two core principles. First, that these areas are crucial drivers of the nation's health and prosperity. And second, that such prosperity relies on full and equitable participation in these fields by those who have and continue to be excluded, particularly women and

Black, Latino/a, and Indigenous populations. We expect Sloan grantees share these principles, and that they work meaningfully to advance greater diversity, equity, and inclusion in their own spheres of endeavor.

To this end, proposals must include a 1-2 page section describing current and planned efforts to ensure racial/ethnic and gender diversity *and* inclusion in the proposed project. In this section of the proposal, Foundation staff will be looking for *concrete* plans to ensure that the project under consideration will promote diversity, equity, and inclusion. *Mere provision of the diversity or equal opportunity policy of one's institution is insufficient, as is a statement of commitment without specific details to support it.* 

As appropriate, proposers may wish to discuss:

- The demographic makeup of the project team and/or strategies that will be used to ensure a diverse team
- Current or planned strategies to ensure an equitable and inclusive work environment within the project team itself and/or in the broader institutional context
- The proposer's experience or track record on issues of diversity, equity, and inclusion that will inform the proposed work
- How the proposed project will contribute to reducing gender and racial/ethnic inequities in the relevant field
- Ways in which the content of the proposed project addresses issues of racial and gender inequity

Please note that this section will not count toward the 20-page proposal limit. Should proposers want to include more information and/or samples of work related to DEI, they may do so in an appendix.

## Budget & Detailed Budget Justification

This section should include a tabular budget, broken down by year for multi-year projects. A detailed written discussion that explains and justifies the amount requested should follow the tabular budget. Line items in the budget should be explained (what they cover, how they were arrived at, etc.). A sample budget form can be found in the <u>Forms section of the Foundation's website</u>.

Budgets should also meet the following requirements.

• Salary Support: Requests for salary should adhere to the following restrictions based on the type of staff seeking support. (See next page)

Type of Staff	Max Support	Notes	
Faculty (on a 9-month academic salary)	For senior¹ faculty: No more than one month summer salary per year of full-time equivalent salary.  For junior¹ faculty: No more than two months summer salary per year of full-time equivalent salary.		All faculty supported through a Sloan grant must receive a standard benefits package customary for their institution.  Budgets must include the number of faculty supported, the full-time equivalent salary of each, and the percentage of the faculty member's time that will be devoted to work on the grant.  The Foundation discourages budget requests to pay summer salary for senior1 faculty. Proposals may request (and must justify) up to one month of summer salary support for senior1 faculty members in the amount of either 1/9 of academic-year salary or \$35,000, whichever is lower. The Foundation may make exceptions to this policy in extraordinary circumstances, but a strong case for such an exception must be made in the budget justification.  For faculty on unpaid leave, the Foundation may consider modest academic-year salary support.
Project Staff	As needed, up to 100 percent of full- time salary		All project/research staff employed by the grantee institution must receive a standard benefits package customary for the institution.  Budgets should list the number of staff supported, the full-time salary of each, and the percentage of the staff member's time that will be devoted to work on the grant.
Postdoctoral Researchers	As needed, up to 100 percent of full-time salary.		Salary must be customary for the department and institution employing the researcher.  Budgets must include the number of positions supported, the full-time salary of each supported researcher, and the percentage of the researcher's time that will be devoted to work on the grant.

<sup>1</sup> "Senior faculty" = faculty who are tenured or who are more than 10 years beyond attainment of their Ph.D. "Junior faculty" = non-Senior faculty.

		<ul> <li>All Sloan-supported postdoctoral researchers must receive a standard benefits package customary for their institution.</li> </ul>
Graduate Students	As needed, up to 100 percent of full-time salary	<ul> <li>Salary must be customary for the department and institution employing the student.</li> <li>Budgets must include the number of graduate students supported, the full-time salary of each, and the percentage of each student's time that will be devoted to work on the grant.</li> <li>Tuition. The Foundation strongly prefers that funds requested for graduate students be allocated toward salaries, stipends, and other forms of direct support. If tuition coverage must be requested, a clear rationale must be provided in the budget justification. In all circumstances, tuition reimbursement will be capped at the NSF Graduate Research Fellow cost-of-education allowance, as specified in the most recent NSF program solicitation, currently set at \$12,000 per student per year. The Foundation does not pay indirect costs on graduate student tuition.</li> </ul>

- For grant requests of \$50,000 or less, no indirect (overhead) costs are permitted.
- For grant requests in excess of \$50,000, indirect (overhead) costs may not exceed 20 percent of direct project costs.
- If there is a subcontract, there must not be double overhead (i.e., the institution should not charge 20 percent on funds subcontracted to another institution that then also charges overhead costs). A recommended division of overhead where a subcontract is involved is 4 percent for the contracting institution and 16 percent for the institution that makes the final expenditure.
- If the total cost of the project is larger than the amount requested from the Alfred P. Sloan Foundation, the request must include a financial plan for the whole effort that identifies matching financial contributions (either secured or anticipated). When possible, letters of support from other funders should be included indicating their willingness to provide funds and the amount of support to be provided.

## Required Appendices

All grant proposals for research projects must contain (at least) six appendices:

- List of Citations
- Curricula Vitae
- Conflicts of Interest / Sources of Bias
- Empirical Research Methods
- Information Products

### List of Citations

This appendix should contain a list of all papers or other work cited in the proposal. Citations may be formatted in any widely used style (Chicago, APA, etc.)

#### Curricula Vitae

This appendix should include abbreviated CVs or biographies of the principal investigator and any key project staff that will implement or supervise activities.

- CVs should include education, employment history, a list of the proposer's most important previous publications, and important honors (NAS, AAAS, best paper awards, etc.).
- Full CVs are not requested; one to three pages per person is sufficient.

### Conflicts of Interest / Sources of Bias

The proposal must disclose potential conflicts of interest or sources of bias on the part of the primary investigator, all key project staff, and the grantee institution. The following are examples of potential conflicts:

- **Financial interests:** Any significant financial interests (equity holdings, stock options, etc.) in any corporate entity involved with the subject matter of the proposed research;
- Management/advisory affiliations: Any status as an officer, trustee, or member of an advisory committee in any entity involved with the subject matter of the proposed research;
- Paid consulting: Any compensation or honoraria received (within the last three years) from an
  entity involved with the subject matter of the proposed research in exchange for consulting
  services, speaking engagements, or expert testimony;
- Patents: Any planned, pending, or awarded patents the value of which may depend on the outcome of the proposed research.

Do not omit this appendix if there are no conflicts of interest or sources of bias to report. Instead, if there are no conflicts to report, this appendix should consist of a statement to that effect.

### Empirical Research Methods

The Alfred P. Sloan Foundation's mission is to support high-quality research using sound methodologies. In acknowledgment of this core principle, grant proposals to the Alfred P. Sloan Foundation that request support for research of any kind must include a detailed methodological discussion in the form of an appendix.

Proposers should expect the review of their empirical methods to be similar to the scrutiny given such matters by NSF scientific panels or by top research journals. In fact, the Sloan Foundation often calls on the same kinds of methodological experts to help evaluate proposals. Proposers who plan on collecting data, running experiments, or conducting evaluations, and whose research team does not already include someone with statistical expertise, should consider enlisting one before submitting a proposal.

The Sloan Foundation expects empirical research proposals to describe both explicit hypotheses and sound methods for testing them. While collecting data about a phenomenon is better than not doing so, it is just a start. The key question is rarely what happened, but rather what happened compared to what would have happened anyway or under other circumstances. Working with counterfactuals can be challenging, of course. Causal inferences, though always desirable, should not be claimed without careful justification.

The methodological portion of a proposal or this appendix need not follow a prescribed format or organization. Examples of the kinds of questions that should be addressed are listed below, although which questions are relevant certainly depends on the nature of the research. Proposers should be explicit about assumptions, plans, and methods.

#### Model and Research Design

- What conceptual frameworks or institutional analyses support your model?
- What are the equations and parameters you will investigate?
- What distributional and error structure assumptions do you make and why?
- Which variables are exogenous, and which are endogenous?
- Are there omitted, confounding, or unmeasurable factors to consider?
- What statistical hypotheses will you test and why?
- If you will be using alternatives to the classical techniques and approaches of frequentist statistics, what techniques will you be using and how is this choice justified?
- What randomized, controlled, quasi, or natural experiments could help?

### Sampling and Data

- What is your population? Control group? Unit of observation? Of analysis?
- If you are not collecting population data, what is your sampling strategy?
- If you are not randomly sampling, what are potential sampling biases?
- What power calculations show that your sample size is sufficient? Please note that the answer to data insufficiency is not simply to declare your project a pilot.
- Can you commit in advance to a given strategy, say, by registering your trial?

How will data and code be shared, annotated, cited, and archived, and how will findings
otherwise be made reproducible by other researchers? These should be discussed in the
Information Products appendix.

#### Identification, Estimation, and Robustness

- Why are the datasets you will study capable of answering the questions you pose?
- Will observed distributions uniquely determine structural parameter estimates?
- What techniques will you employ to estimate parameter values and why?
- To what extent could endogeneity be a problem? Might instrumental variables or other methods help?
- Can you use, for example, regression discontinuity design or differences-in-differences?
- What kinds of sensitivity analysis or robustness tests do you plan?
- What other threats to validity can you anticipate? What can you do about them?

### **Information Products**

Scientific progress depends on the sharing of information, on the replication of findings, and on the ability of every individual to stand on the shoulders of her predecessors. While not everything can or should be free, maximal and appropriate openness remains a core value of the Sloan Foundation. In this Information Products appendix, potential grantees are asked to attend to the outputs their research will create and how those outputs can best be put in service to the larger scientific community.

What information products will be created by the project? The appendix should delineate, in list form, all information products anticipated to be produced by the project. This includes articles, working papers, datasets (original or modified), software written or adapted for the project, code, video or photographic footage, original artistic work, websites, and pedagogical materials like presentations, curricula, and study guides.

For each type of information product to be created, the appendix should include information as detailed below.

### Articles & Working Papers

- Where will you aim to publish articles?
- Will you circulate or make available pre-publication versions of your articles (e.g., preprints or working papers), and if so where and under what license(s)?
- Will a copy of the article be archived in an institutional repository? Are you subject to an institutional mandate?

#### **Datasets**

- Where will project data be stored or archived at the conclusion of the project?
- What format will data be archived in?
- What metadata will be uploaded to explain/describe the archived data?

Are there any legal issues that will complicate sharing and access to the archived data?

#### Software & Code

- Where will project software and code be stored or archived at the conclusion of the project?
- Will software be maintained after the grant funding ends? If so, by whom?
- What metadata will be associated with the archived software/code? The appendix should be specific about how the computational environment in which software or code was originally executed will be described/archived.
- What intellectual property license will software and code be archived under?

### Artistic Work, Photography, Video Footage

- Where will final products be stored or archived?
- Who will own the copyright? Under what license(s) will works be made available to the public?
- Will raw/unedited versions of the work be archived, and if so where?
- What will own the copyright of the raw/unedited version?

### Websites & Web Content (including presentations, slide shows, curricula, study guides, etc.)

- Where will project-related websites be hosted?
- How long will project websites be maintained after the completion of the project? With what funds?
- Who will be responsible for maintaining project-related websites?
- Who will own the intellectual property (IP) of any web content? Under what license will they be made available to others?

### **Optional Appendices**

The following appendices are optional only in the sense that they do not necessarily apply to all research projects. If one or more applies to your project, you must provide it as part of a complete grant proposal packet.

- Appendix for Projects that Support Workshops, Conferences, or other Large Meetings
- Letters of Support

### Workshops, Conferences, or Other Large Meetings

The following documents must be included in an appendix to any grant proposal requesting support for a workshop, conference, or other large meeting:

- Draft conference agenda;
- Draft list of conference invitees listing the name, title, and institutional affiliation of each;
- Draft letter of invitation;

- Draft list of invited speakers, presenters, and/or panel participants listing the name, title, and institutional affiliation of each;
- Draft call for papers (if applicable);
- Draft anti-harassment policy;
- Participant Survey or Evaluation plan.

#### **Attention to Diversity**

The Foundation's investments in research, education, and public understanding of science, technology, and economics are guided by two core principles. First, that these areas are crucial drivers of the nation's health and prosperity. And second, that such prosperity relies on full and equitable participation in these fields by those who have and continue to be excluded, particularly women and Black, Latino/a, and Indigenous populations. We expect Sloan grantees share these principles, and that they work meaningfully to advance greater diversity, equity, and inclusion in their own spheres of endeavor.

The Foundation urges conference organizers to be mindful that African Americans/Blacks, Hispanics/Latinx, Native Americans, and women are often underrepresented at conferences, especially as panel chairs, speakers, and panel participants. Conference organizers should strive for diversity when drafting conference agendas, invitation lists, lists of speakers, and outreach plans. The Foundation also strongly encourages the establishment of a formal anti-harassment policy for every conference.

#### Evaluation & Participant Survey

All proposals should contain an evaluation plan that includes a survey of conference participants at the conclusion of the conference. The details of participant surveys will vary depending on the nature and aims of the conference, but the survey should be designed so that conference organizers can use the collected survey data to evaluate which panels, plenaries, lectures, workshops, breakout groups, networking dinners, or other events were attended, the perceived quality of those events, what participants thought most valuable about the conference, where there is room for improvement, how the conference compares to similar conferences the participant has attended, and whether the conference achieved its overarching goals.

Should the grant proposal be successful, a discussion and analysis of participant survey data must be included as part of the grantee's final report to the Foundation.

### Letters of Support

If the success of the project depends on the support of key figures or institutions other than the principle investigator or project team, the proposal must include an appendix with a letter from each institution articulating the nature of their relationship to the project and their understanding of the role they expect to play in the project's success.

## **Proposal Administration Form**

To process a successful grant proposal, the Foundation needs certain administrative information about your institution, in particular, its EIN number, tax status, and payment address. Universities should include sponsored research contacts in the approval areas. For institutions with 170(c)1 status, please include the IRS letter documenting such. <u>Visit the Forms page</u> of the Alfred P. Sloan Foundation website to download the Proposal Administration Form.

To ensure prompt payment upon a successful grant application, a completed Proposal Administration Form must be submitted with (ideally) or soon after the grant proposal. The Proposal Administration Form should be submitted as a separate standalone document.

### How to Submit a Completed Grant Proposal Packet

Grant proposals invited by a program director of the Alfred P. Sloan Foundation should be submitted as an email attachment, preferably as a single file, directly to him or her. If a program director has not invited you to submit a proposal, please do not submit a proposal. Instead, compose and submit a Letter of Inquiry to the relevant program director via email. For guidelines on Letters of Inquiry, please see the Foundation's website.

### Confidentiality

The Foundation requests that prospective grantees treat grant proposals as confidential during the application process and refrain from publicly distributing their proposals (in whole or part) or disclosing their status in the application process until the Foundation has completed its evaluation and made a funding decision.