

GRANT PROPOSAL GUIDE

Office of Sponsored Programs & Research (SPAR)

I. Researching Grant Opportunities

In the earliest stages of the grant development process, it helps to conceive of your research in its broadest possible areas of application. It is extremely rare to find a program or a Request for Proposals (RFP) that is an exact match to your research plan; therefore too narrow a focus at this stage can lead you to overlook worthwhile opportunities. Think in terms of potential outcomes rather than the actual research design. Some useful questions to ask at this stage:

- *What potential benefits are there from this research or project?*
- *Who would be interested in the results of this research or project?*
- *What potential applications are there for this research?*

These are the questions sponsoring agencies are asking when they formulate their funding guidelines, even when they seek to fund basic research. Thinking in terms of how your project addresses the needs and goals of a sponsor from the outset will help you throughout the grant development process.

On a related note, SPAR often gets requests, particularly from administrators and program directors, to find funding to support a particular program or to buy or upgrade equipment. This is an unproductive way to approach grant funding. While there *is* funding available to support programs and program development and improve facilities, this money is distributed according to many of the same criteria as research funding. As with a research proposal, you need to think of your program development activities and equipment needs in terms of a specific *project*, an activity or activities *limited in duration* with *specific, measurable outcomes*. The three questions posed above still pertain, and there are some other questions you should keep in mind as well:

- *Who will benefit from this project?*
- *Does the project improve on existing practice at Baruch or elsewhere?*
- *Will the project produce outcomes that might be reproduced at other institutions?*
- *How will curriculum development or major equipment purchases improve retention and/or assist students in a pipeline to advanced study in a particular field or discipline?*
- *Can the institution support the program after the funding period?*

Again, the key at this stage is to focus less on what you want to do with the money and more on why a sponsor might want to support a particular activity. Baruch has the advantage of being classified as a "Minority Serving Institution" under the Higher Education Act, and thus eligible for a wide range of programs designed to support minority and traditionally underrepresented groups pursuing higher education.

A final note on funding opportunities: sometimes money for research can come from unexpected sources. The State and City fund no basic research and instead award funding in the form of contracts for work they need performed. By law, CUNY (and SUNY) researchers have priority in the awarding of State contracts. The key to deciding if it is worth your while to pursue State or City funding is to look at the type of data you will need to gather to carry out a particular contract, or the population segment to whom you will provide services. Performing such services for the State or City can provide you with funds and resources to collect data to which you would otherwise not have access and that data can be used for your own particular research purposes in addition to whatever work you are contracted to perform.

Note: Flexibility is key when trying to identify funding opportunities.

II. Proposal Preparation: Preliminary Stages

All Federal RFPs, virtually all State and Local RFPs, and most private foundations include the name and contact information of a program officer or another party to contact with questions about your proposal. **Contacting these individuals is essential at this stage of the proposal development process.** Unfortunately, it's the part of the process most likely to be overlooked, especially by less experienced applicants.

The process of submitting a grant application should not be confused with submitting an article to a peer-reviewed journal. In the latter case, scientific merit is the only evaluation criterion (at least ideally). While scientific merit is a primary criterion in the grant review process as well, many things in addition to scientific concerns are taken into consideration during the grant review process. Researchers who have served on review panels state that in a typical round of funding, only 5% of all proposals have science that is so strong and of such obvious merit that funding is assured. 30% are dismissed out of hand for not meeting some type of administrative, budget or submission requirement. The remaining 65% are proposals with good science that could yield interesting or important results if funded. There are always more worthwhile projects than there is available funding. Contact with the sponsor's program officer will clarify what additional evaluation criteria exist and help you develop your proposal to address them effectively.

Given that evaluation and judgement are key components of the grant review process, there is a bias towards seeing the relationship between sponsor and applicant as adversarial. Keep in mind that it is in the sponsor's best interest to receive the largest possible number of strong proposals that meet their specific objectives, and the job of the program officer is to insure that this happens. Even in instances where the guidelines are clear and you do not have any specific questions about the application process, personal contact with a program officer is still important at this stage. A round of funding might yield, as an example, ten proposals evaluated as "fundable" during peer review when funding exists for only three. It is the program officer's responsibility to decide among them, and your personal contact can work to your advantage, particularly if you have never received funding from the agency before. Some other purposes this contact serves:

- Agencies with broad mandates or which issue general guidelines in support of research in a large disciplinary area usually have expectations about the types of proposals they would like to see and will tell you what these are if you ask. For example, the Department of Defense recently issued an RFP for research into behavioral and

biomedical factors affecting leadership, an area where Baruch has significant expertise. The RFP included a long list of potential areas of research, including sleep disorders. However, when a Psychology faculty member doing research in sleep deprivation inquired, she was told that the agency would not be particularly receptive to a sleep deprivation study at this time. While that was not the answer we wanted to hear, it saved the faculty member the enormous effort it would have taken to prepare a proposal for the rapidly approaching deadline and got us to consider alternatives. Often, program officers have suggestions about more appropriate funding resources for your proposal.

- The NIH publishes a list of its review panels on its web site at www.csr.nih.gov. Program officers are your best source for this information at other agencies. While there's never any guarantee your proposal will be sent to any one particular review panel, getting some sense of who may be reviewing it can be extremely useful during the development process.
- Most requests for proposals will tell applicants the total funding available during a particular round and the total number of anticipated awards. Program officers can provide additional guidance about appropriate budget requests (see the section on budgeting, below, for more on this).
- A conversation with a program officer about program objectives can often reveal the vocabulary in current use at the agency. What words or phrases does the program officer use to describe programmatic goals or methodologies? Incorporating that vocabulary into your proposal demonstrates that you are in tune with the current priorities at the agency and not just within your field.

Initial contact with the program officer can be via either email or telephone. If you get no response to one, try the other, but keep in mind a real conversation is ultimately more revealing than an email exchange.

Increasingly, governmental agencies offer informational meetings for potential applicants. Unfortunately, Federal agencies rarely offer these sessions in New York (Boston is a frequent site, as are locations in the D.C. area). The college has no dedicated travel funds for this purpose, but under certain circumstances the Chairs and Deans may consider requests for regular travel funds, especially if the award is large enough and attendance at such a meeting is an application requirement. In any case, if you know of a meeting you would like to attend, do let SPAR know. We can inquire about the possibility of videoconferencing, etc.

If you do research in an area that is regularly supported by one of the Federal agencies, it behooves you to make contact with the program officer even if you don't currently have plans to submit a proposal. Try to arrange a meeting if you are ever in the Washington area. Program officers travel to research sites to meet investigators as well. The Research Foundation's Office of Research Development can identify a group of CUNY investigators (both funded and unfunded) in your area and help coordinate a meeting. As a long-term career strategy, establishing yourself as a review panelist at the Federal agencies is an excellent way to gain an inside track and get a valuable perspective on the review process before you submit a proposal of your own. You can volunteer your services directly to a program officer, but you will be more successful if another panelist or funded researcher recommends you.

The effort you make to establish contact with the program officer during proposal development can reap enormous benefits after the review process is concluded. Most projects in this highly competitive arena will not be funded the first time around. If yours is one of them, the program officer can provide you with much more detail than the reviewer's comments as to why it was rejected; you can also gain insights into non-scientific factors that may have affected the review process. These insights can be crucial as you revise to resubmit. Program officers at this stage will often provide you with a realistic assessment of whether it is worth your while to revise and resubmit.

The other pivotal step at the preliminary stage is a preliminary review of the resources necessary to carry out a project. Some factors to consider:

- *Expertise:* Do I have the necessary expertise and credentials to serve as sole PI on the project or do I need to team up with another researcher in the College, at another CUNY campus, or at another institution? Junior faculty in particular should be aware that agencies fund investigators whom they have supported in the past and naming yourself as Co-PI on a project headed up by an investigator with a proven track record significantly increases your chances of success. The RF's Office of Research Development can be instrumental in putting you in touch with funded investigators at other campuses.
- *Facilities:* Does Baruch have the facilities necessary to conduct the project? If not, partnering is once again an effective strategy. Major equipment purchases are sometimes appropriate budget requests. However, your proposal will be less attractive if it competes with institutions that already own the equipment/facilities in question (unless the RFP is specifically targeted to improving facilities and research capacity). If major equipment is requested, contact your department chair and dean to consider if and how the College will be able to accommodate it.

There very well may be times when you come across an RFP you have the expertise to pursue, only to discover the College lacks the appropriate resources to conduct the project. *You should always let SPAR know when this happens.* Resources to improve the research infrastructure at Baruch are limited, but they do exist, and SPAR takes a proactive role in ensuring that the resources that do exist are put to effective use. In order to set College priorities, the administration needs to know what *specific* opportunities faculty members would pursue if they had the appropriate resources.

III. Proposal Development: Drafting Stages

Get as early a start as possible! In most instances SPAR cannot provide you with any meaningful feedback regarding the scientific content of your proposal, so ideally you should try to get input from another researcher in your field, at Baruch or somewhere else. The four faculty liaisons established by the three Schools for grant development can provide important insights into your proposal as well. The liaisons are:

Zicklin School of Business:	Michael Palley (Computer Info Systems)
Weissman School of Arts and Sciences:	Peter Orland (Natural Sciences)
School of Public Affairs:	Shoshanna Sofaer

Give the liaisons at least two weeks to review your proposal.

Beyond the strictly scientific content of the proposal, you can strengthen the narrative portion of your proposal by keeping the following in mind:

- Proofreading counts!
- Sponsor space, type, margin and font requirements must always be respected. Proposals are rejected outright if you try to squeeze things; the NSF Fastlane system will not allow a proposal to be submitted unless its requirements are strictly observed.
- Know your audience. Scientific review panels are typically composed of both experts in your research area and experts in your general discipline. Define terminology that may be unfamiliar to non-experts. This is even more critical in curriculum development and institutional proposals, where the reviewers are likely to be drawn from among experts in education rather than a particular discipline.
- Write the proposal in “one voice.” E-mail has made it considerably easier to work on proposals with collaborators at other institutions. However, it is jarring to reviewers if the component sections of a proposal differ widely in tone or style and may lead to doubts about the collaborators’ ability to coordinate their activities. The problem is particularly acute in interdisciplinary proposals, in which collaborators may have entirely different professional vocabularies. In such instances, use the vocabulary most appropriate to the agency to which you are applying.
- Avoid “boilerplate” language or statistics in the proposal narrative (though boilerplate is often necessary in other sections). Institutional and programmatic proposals will typically need information about the College, its mission, facilities, faculty and student body that you will need to cull from other sources. It is important to select only the information that has a direct bearing on your proposal, even when other information sounds impressive.
- Look for opportunities throughout the proposal to stress the ways in which your project meets the stated objectives of the sponsor. Many proposals state at the beginning that they address one or another funding priority and never allude to those priorities again. More than simply stating which priorities your proposal will address, sponsors like you to *demonstrate* how specific aspects of your proposal meet their priorities. While it is probably counterproductive to structure your proposal around such a demonstration, there will almost certainly be natural places where the contiguities between your proposal and sponsor goals can be emphasized as you revise subsequent drafts.
- Evaluation and dissemination plans are key factors during the review of institutional and program development proposals. Reviewing proposals in your area funded by the same sponsor is almost always a worthwhile step, especially if you have never submitted a proposal of this type before. Investigators will usually respond favorably to requests for copies of their proposal on those occasions when the proposal is not readily available on a sponsor web site.

In addition to the narrative portion, there is certain standard information sponsors typically request with a proposal:

- Biographical Sketches. Federal proposals typically limit biographical information to just two pages per key project personnel. Two pages is much shorter than the typical

academic vita. It is a mistake to create an all-purpose two-page vita for use with all your grant applications. There may be small differences in the information requested each time and each application biography should be tailored to highlight those elements of your professional background most directly relevant to the proposal. Sometimes this emphasis can come at the expense of mentioning more prestigious professional attainments if they have no direct bearing on the proposal or occurred more than five years ago.

- Current and pending support. Be sure to list PSC-CUNY awards and special equipment funds you may have been awarded. Investigators with substantial support already in place or pending may raise questions in the sponsor's mind as to whether they would be able to perform the work involved. If you report more than one or two current or pending awards, include information on reassigned time and the percentage of your effort reported on each of them. Effort on all projects plus teaching and other duties cannot exceed 100%.
- Facilities and resources. Anything the College has or services it provides that can contribute to the project. Don't mention facilities or equipment that have no direct application to the project, but don't overlook things such computing facilities, which are relevant to almost any project.
- Review of the literature: At a recent talk given by former Federal review panelists, there was a consensus that **nothing** dooms a proposal more effectively than a failure to cite a panelist who feels they should have been cited. Unfortunately, there is no way to be certain who will ultimately review your proposal, and NIH is the only agency that routinely publishes lists of its review panelists. To minimize this possibility, make sure your references list is thorough and up to date. If you are consciously failing to cite a particular researcher's work for scientific reasons, you should request that person not be asked to review your proposal.
- Potential reviewers: Sponsors will usually honor your wishes when it comes to people whom you don't want to review your proposal. You should use this section to name anyone who might have a conflict of interest in reviewing your proposal. Sponsors are less likely to honor requests regarding whom you do want to review your proposal, but there's never any harm in asking.

IV. Budgeting.

Basically, you as the investigator need to decide what you need to spend money on; SPAR can perform reassigned time, summer salary, fringe benefit and indirect cost calculations if you make your request at least two weeks prior to the sponsor deadline.

SPAR has created a spreadsheet template, available for downloading at our website. The spreadsheet allows you to enter in your annual salary and number of month's summer salary or courses of reassigned time and does the calculations for you. The template is a tool for those who wish to use it and *not* a required form for grant application submission. Using the template allows you to play around with the numbers and see what totals you get and lets you see immediately whether or not your budget is coming in too high. Many items in a typical grant application budget will be fixed. If you need a particular piece of equipment or the services of a particular vendor or subcontractor to carry out a project, you are obligated to request whatever that piece of equipment

or those services will actually cost. Consequently, in most cases the only areas where a budget can be trimmed are in the areas of summer salary and reassigned time for PI's and Co-PI's and items such as conference travel. For a Full Professor, a proposal budget is reduced in increments of around \$25,000 for each course of reassigned time or month of summer salary (once fringe benefits and the corresponding reduction in the indirect costs are factored in). For this reason, SPAR encourages faculty to take a "hands on" approach to budgeting. It is preferable for you, the faculty member, to decide for yourself that you can forgo some summer salary or reassigned time to bring the budget in lower rather than have the Director suggest it to you.

Another issue that arises frequently during the budgeting process concerns the appropriateness of particular budget items. The National Science Foundation will fund up to two month's salary per faculty investigator on each award, which faculty may take as either reassigned time or summer salary. This is a reasonable rule of thumb for applications to other agencies as well. Beyond that, there really are not many hard and fast rules about budget requests. Agency program officers can provide important guidance in this area. Keep in mind that program officers are extremely reluctant to discuss budget issues independently of programmatic issues and therefore will *always* want to discuss the budget with you as the investigator rather than the Director or some other administrator. Most often, what you need is guidance in demonstrating that an unusual budget request is warranted by the objectives of the project. Program officers are happy to provide this guidance and will usually be fairly direct in letting you know if a particular budget request is a deal breaker or not.

Although the budget template is automated, you will need to describe how we arrive at our rates in the budget justification section of your proposal. For your information:

- CUNY faculty work on a nine-month contract.
- Each month of summer salary is calculated at 1/9 a faculty member's annual salary. Grant applicants in the HEO series are not eligible for summer salary.
- Each 3-credit course at Baruch is calculated as 1/7 (or 14.3%) of a faculty member's workload. The Weissman School allows grant proposals to go out requesting reassigned time recoveries at 9% of annual salary per 3-credit course, with the remaining 5.3% shown as cost sharing. The deans of the other schools will consider less than full reassigned time recoveries on a case by case basis.
- RF Fringe Benefits rates. *Please refer to our website for the latest fringe rates.*
- Guidelines about typical costs for other common budget items, including hourly rates for project employees, are available at our website.
- Occasionally a sponsor will want a budget that calculates reassigned time and/or summer salary as an hourly rate for professional services. To arrive at this rate, divide your annual salary by 36 weeks and then again by 35 hours per week. Multiply this number by 28% to calculate the fringe benefit charge and add the fringe benefit figure to the hourly figure for the final hourly rate. You should be aware that these funds can only be expended from an award as either reassigned time or summer salary. Except for occasional sabbatical support, summer salary payments are the only means faculty may receive additional salary for work on a project administered by the Research Foundation.
- Contact your department chair and dean at least one month prior to deadline if your application has cost sharing requirements, because getting the necessary commitments in place can take some time. However, you should not wait for the commitments to be in

place before you contact SPAR about such proposals. Often, the Director can make suggestions about ways to demonstrate institutional commitment to a project that do not require additional expenditures on the part of the College.

- Most sponsors recognize the fact that higher education institutions incur substantial costs to provide space and administrative support to sponsored programs and reimburse institutions in the form of indirect costs (or overhead) for these facilities and services. These funds are calculated on the projects direct budget and form an additional budget expense. Baruch's Federally negotiated indirect cost rate with DHHS is currently 69%, calculated on a base of salaries, wages and fringe benefits only. Keep in mind that direct personnel costs are only one part of the total project budget and 69% of the personnel expenditures on many proposals results in a relatively low indirect cost request. College policy requires grant applicants to always request the full allowable indirect costs and is cognizant of the fact that many sponsors award indirect costs as rates substantially lower than our Federal rate.

How the budget affects the chances of a proposal's ultimate success or failure is the source of much anxiety on the part of applicants. Reviewers are typically asked to evaluate if the applicant has identified sufficient resources to conduct the project as described, and at this point, coming in too low can hurt your chances just as much as coming in too high. Our indirect cost and fringe benefit rates, etc., will not factor in at this stage of the process. These issues *do* begin to matter when the peer review process has concluded and program officers have to choose among proposals given equal priority ratings by the review panel. Even so, it is not automatically true that funds will go to the proposal that comes in at the lowest cost. Many other factors come into play at this point, including granting funds to investigators whom the sponsor has supported before, supporting minority investigators and/or institutions (if that is stated as a priority in the RFP) and spreading benefits out over a wide geographical area. Remember that Federal agencies and private foundations are not profit-driven enterprises. If they have a budget of \$15 m to give out during a particular funding cycle, they will give out \$15 m, or otherwise they lose it. No sponsoring agency operates under the assumption the way to get the most "bang for the buck" is to distribute some funding to as many investigators as possible. If your budget is reasonable in relation to your objectives and contains no obvious padding or unnecessary expenditures, your chances of rejection for budgetary reasons are probably minimal. However, if your proposal received a high priority rating but was rejected for budgetary reasons, the program officer will tell you so if you inquire. In such instances, you will almost always be given advice about where to cut and be encouraged to apply during the next cycle.

Finally, because many faculty's first exposure to grant development comes in the form of an application to the PSC-CUNY award program, there is a belief peculiar to CUNY that asking for two or three times what you actually hope to receive is an effective strategy on *any* grant application. This is most emphatically *not* the case. In fact, in instances when the NIH awards funds at less than 90% of the original budget request, the applicant will be requested to scale down the programmatic parts of the proposal proportionately before funds are disbursed. Other Federal agencies are developing policies along similar lines.

V. After Submission.

Most RFPs will state when award announcements will be made; expect to wait six months for a response from most Federal agencies. Sometimes there are delays in making these announcements. A telephone inquiry approximately 2-3 weeks after the announcement date is usually appropriate if you haven't heard. You should also follow up if you haven't received acknowledgement of the receipt of your proposal by the date promised.

Success rates for proposals to NIH and NSF hover at around 30%; the success rate for new investigators with no proven track record at those agencies is around 18%. Agencies such as the Dept. of Ed., NEA and NEH and the more prestigious foundations have still lower success rates. These statistics can discourage faculty from making applications at all. However, these are the statistics faced by *all* investigators at *all* institutions, including CUNY, and your chances of success are just as good as anybody else's.

Junior faculty in particular might come to the conclusion that their time is better spent preparing an article for submission to a peer-reviewed journal, where the odds for success are somewhat better. Sometimes this will turn out to be the case, but it is not automatically true. The final decision about where your efforts are best devoted is yours alone, but there are some things to consider before making it:

- Few things carry more prestige in academia than a research grant, particularly if you work in a discipline in which research is routinely funded.
- The Baruch administration has recently dedicated significant resources to funding and staffing SPAR. This is a long-term initiative whose benefits might take some time to materialize. In the meantime, the faculty, and junior faculty in particular, get significant credit for simply making a grant application in the first place, regardless of the ultimate outcome of the application.
- Think about grant applications as part of the arc of your entire career and not just in terms of immediate benefits. A three-year funded project might provide you with the time and the resources to eventually produce a dozen peer-reviewed articles for more or less the same effort to prepare one peer-reviewed article now.
- Although the chances of any one application's success upon the first submission are not terrific, chances improve as you revise in response to reviewers' comments and other input, and then resubmit. Your chances are nil until you get something down on paper and submit it to a sponsor.

There is no getting around the fact that competitive grant applications take considerable effort to prepare and that rejection is a strong possibility. A few tips for coming to terms with that possibility:

- There are many factors in addition to strict scientific merit that affect the ultimate success or failure of your application, so rejection of a grant proposal may be taken somewhat less seriously than rejection of an article by a peer-reviewed journal.
- Remember that grant proposals are a means to an end, not ends in themselves. Many new investigators agonize over their proposals and frequently delay submission until the next round of funding. Research grant proposals in particular are by nature tentative and exploratory: you are proposing to do something whose exact outcome cannot be predicted. There is no "state of perfection" for a grant proposal and in most instances

you are better off submitting a proposal to get reviewer feedback at an earlier date, rather than tweaking it for another six months or a year and still having to revise and resubmit it. The four faculty liaisons can provide you with an honest appraisal of whether or not your proposal is in a state to submit or not.

- Having several applications pending at one time reduces your investment in the success of any one of them. Recently, a NSF-funded researcher mentioned that he usually has four applications pending, figuring one of them will probably get funded. This is a healthy attitude and good advice given the 30% success rate at NSF. Remember that four pending applications does not necessarily translate to four entirely different proposals.
- Even the most successful researchers sometime get their grant proposals rejected.

Finally, never accept a rejection as a final step in the grant application process. If a sponsor provides you with reviewer comments, they do so, among other reasons, in hopes you will revise and resubmit. Call the program officer to discuss the feedback you receive in further detail and remember that a program officer is more likely to expand on the details of your proposal's evaluation if they have previously spoken with you.

The Baruch College Office of Sponsored Programs and Research is prepared to do whatever it can to assist you in the application process and welcomes your feedback on the contents of this guide.

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