Handling the rejection of a grant proposal can be even more frustrating, simply because often there are limited options for where to apply. It can be easy to feel that if you got rejected for an NSF grant, for example, that there is no point in applying again for fear of the same result. If you apply again to the same NSF program, is it likely that you will be rejected again?

Maybe, but maybe not. There are a lot of factors involved in deciding who gets awarded grants. Panelists evaluating the proposals differ from year to year and hence may take different views of your project ideas. The pool of proposals can also vary wildly from year to year. In a given year, there might be an unusually high number of very strong proposals, for example, but the following round could be different.

Some of the same advice that applies to rejected papers applies here: read any reviews that you get on the proposal and, after some time delay, assess what might be helpful for future proposals. On one of my first attempts at applying for an NSF grant, I had two main themes for projects. My reviewers agreed that one of the projects was much more interesting and promising than the other. The following year, I chose to develop that direction in more detail. In another unsuccessful proposal, a reviewer objected that the project seemed only to be an incremental development of my previous work. In a subsequent proposal, I was more clear about the differences in the new work and how new techniques were needed.

If you apply for a grant multiple times and continue to be rejected, does it make sense to keep applying? This question is, naturally, a delicate one. I would suggest not giving up after only one or even two rejections. Consider if there are themes that emerge from the feedback that you receive from those different attempts and whether you can improve upon them. Share a draft of your proposal with someone who has been successful getting the same kind of grant and is likely to have reviewed other proposals, and ask for an honest assessment of it. Realistically, getting grants can simply be difficult. Most mathematicians do not have grants, and even many highly respected researchers have had grant proposals turned down.

In any of these situations, it is important to keep some perspective in mind. Most of us have had papers or proposals rejected at one time or another. Thus, while rejections can be disappointing, they are part of the experience of being a mathematician.

Julia E. Bergner

Credits

Author photo is courtesy of the author.

"We Regret to Inform You…": What to Do If Your Paper or Grant Is Rejected

Karen Lange

An email from the journal you submitted to months ago appears in your inbox. Awash with hopeful anxiety, your heart drops as you read the opening line—your paper has been rejected. Receiving a negative decision on a paper you've worked hard on for months or even years is disappointing, but how do you productively move forward upon receiving such news? Here I outline some strategies that have helped me make the most out of a rejection, whether of a paper or a grant proposal.

Getting to a Receptive Place

You won't be able to productively assess the feedback you've received until you can view it with an open mind. If you are feeling defeated by the news (or some comment in a referee report particularly chafes), it's worth taking a short time to process your feelings. Remind yourself that the rejection is not of *you* but of the *submission* and that rejection is a normal (and expected!) part of the peer review process. (If you are never rejected, perhaps you are not aiming at fancy enough journals or applying for large enough grants!) Venting to an academic friend who can remind you of these facts can be beneficial.

Understanding the Decision-Maker's Perspective

Once you are in a more receptive place, you can begin assessing any feedback you've received along with the rejection. As best you can, view your mission as understanding the perspective of the editor, referee(s), and fellow researchers. The express purpose of peer review is to decide whether

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to publish a paper in a particular journal or fund a proposal for a specific grant opportunity. This charge typically permeates all the feedback you receive. Your rejection may take a range of forms, from a desk rejection (in which an editor rejects the paper without a full referee report) to a rejection with the possibility of resubmission. If you are lucky, you may receive a referee or panel report with your rejection. Such reports provide invaluable information about how your work was perceived. I describe my process for analyzing such reports below, but later I'll discuss what you can do should you not be so fortunate as to receive a report.

Analyzing a Referee or Panel Report

I find it useful to write my own separate notes on the report and to make a few passes over all the comments (since it's easy to misunderstand comments in a given reading). After glancing at any easy-to-fix typos or grammar issues, I categorize the more substantial comments according to the questions below and write the referee's reasoning in my own words.

The referee's take. Does the referee think:

1. (Value of the work) the results and line of inquiry are interesting?
2. (Validity of proofs) the proofs are correct?
3. (Comprehensibility) the paper or proposal is well written and comprehensible?
4. (Overall recommendation) the work is a good fit for the journal or grant call?

After reading over the report a few times and compiling my notes, I write down possible courses of action for each category. Here are questions to ask yourself:

Value of the results. If the reviewer doesn't find the results interesting, can you more clearly articulate why the proofs are interesting? Are there possible generalizations or applications that reinforce the value of your results? If the reviewer believes the results are already known, verify whether that's the case. If so, is the proof essentially the same or is this a different approach?

Validity of proofs. If the reviewer thinks the proof is incorrect, determine whether there is an error or a misunderstanding. If the proof is wrong, can it be fixed? If it is correct, how can you better explain the argument to clarify the issue that the reviewer raised?

Comprehensibility. If the reviewer feels the proofs aren't clear, can you create a better framework to improve reader understanding? For example, could you break a long proof into a series of lemmas that highlight the structure of the argument? Is there a definition that encapsulates some big ideas? Could the addition of thoughtful examples or introductory remarks help with motivation? You should also assess whether the introduction and background sections and the overall paper structure support comprehension. Perhaps the paper or proposal needs better copyediting in general.

Overall recommendation. Once you've had some time to ponder the above questions, revisit the reviewer's overall recommendation. If they do not think the paper or proposal is a good fit, can you see where they are coming from? Are there ways to address this fit issue, or can you find other journals or grant opportunities that better match the paper/proposal's profile?

Your (and your allies') take. Once you've processed the referee report on your own, ask yourself how you want to proceed. What changes seem doable and worthwhile to make given the feedback? What comments are you ambivalent about (or do you strongly disagree with)? What seem like reasonable next steps (based on the kind of rejection this was)? At this point, especially if there are issues you don't know how to address, get feedback from a mentor or friendly colleague in your field. Share with them the unresolved issues and your take on them. One tricky issue of a rejection is that, unless you are resubmitting to the same journal, you are likely to have different reviewers in the future. Professional allies can help you understand not only this particular reviewer's viewpoint but others' as well. Editors and grant officers can be good resources in certain situations, although be respectful of their role, judgment, and time. For example, suppose your NSF grant is not funded, but two panelists disagree wildly on where the value lies in your proposal. You could ask the grant officer for their take on how you plan to revise your submission in light of this feedback. However, be specific in such queries, and avoid questions along the lines of "how should I revise my proposal so that it will be accepted?".

What if you don't receive a report? A rejection with no report at all can be especially frustrating. Advice from allies is especially useful in these cases. You may also want to ask the editor or grant officer for additional information. For example, was the issue the choice of venue or the quality of work? You may want to review your paper or proposal with an eye towards the above issues. However, substantially reworking the paper without more information first may not be worthwhile. For example, if the editor indicates the paper isn't a good fit for their more general journal and it's the paper's first rejection, you may want to simply resubmit your paper to a more specialized journal.

Taking Action!

Once you've analyzed the feedback you've received and have a sense of what revisions, if any, make sense, you need to decide and enact your next steps.

If you received a rejection with the possibility of resubmission, you may want to try the same venue after making substantial changes. The editor was open to the paper, or they wouldn't have allowed for a resubmission. Moreover, your paper likely will be sent to the same reviewer, which can make the reviewing process go faster. In this case, be sure to send along a letter detailing your changes and explaining how you addressed the reviewer's comments. You

may disagree with the reviewer on some points. Be careful to diplomatically express your point of view (making it clear you've heard the feedback) and possibly make changes that bolster your perspective.

In the case of an outright rejection, you will need to choose where next to submit your work (if it makes sense to do so). Again, ask for advice from mentors and trusted colleagues about your options (different journals, grant opportunities, etc.). Keep in mind what you can change about a draft and what you can't (depending on how much work you are willing to put in). Sometimes it may not be worth the effort to revise and resubmit (e.g., when you find out from the referee that your results are already known using similar tools). While this is unfortunate, your time may be better spent pursuing another line of research rather than trying to find some way to publish this particular material.

The most likely scenario is that you will choose to revise your work using all the information you've gleaned from the process above. I would err on the side of making more substantial changes before submitting your paper or proposal again rather than fewer. Although you are likely to have new reviewers in the future, you may not, and it leaves a bad impression when you don't address past feedback. Be sure to take into account the requirements of the particular journal or grant opportunity you've decided to target. After revising, read through your paper carefully for typos and continuity errors. Once again, see whether an ally might take a look at your revisions, and ask them specifically about how they hold up to the feedback you received.

Although you want to be diligent about revisions, your goal is to resubmit your paper or proposal. No work is ever perfect, so send out your revision as soon as you feel good about how the new version addresses the feedback you've received.

Concluding Words

Although no one enjoys getting a rejection, I hope that you'll find that a rejection can lead to substantially improved work and professional growth. Past rejections of mine have led to better theorems, much clearer papers, and new research questions. I am grateful to all those who contribute to this progress, from mentors and friendly colleagues to editors and anonymous referees.

Karen Lange

Credits

Author photo is courtesy of the author.