

NIH Grant Writing Process

Before you write

You have identified a RFA, a NIH Institute and division and have an innovative and impactful idea in mind. You have discussed it with senior mentors and others in the field and feel ready to start writing. There are a few things you may want to do.

Each IC has a distinct mission that focuses on a specific disease area, organ system, or stage of life. The mission and priorities of each IC are stated on their individual [websites](#). Prospective grantees should do their research to identify the ICs that might be interested in their research idea. Many research topics may be of interest to multiple ICs, so [make contact with different scientific program officials](#) around NIH. They can help you determine the best IC home for your idea.

Once you have a brief summary and write up a draft of the specific aims, you are strongly encouraged to reach out to the program officer(s). The program officer(s) will be identified in any RFA and if this is an investigator-initiated project, you might know the program officer. If you do not, here are some resources:

- [List of 27 NIH Institutes, Centers, and Offices](#). Look at the organizational charts of each NIH institute or center to get an idea of who is who.
- Use [RePORTER](#) and its matchmaker tool to find NIH-funded grants related to yours and you can find contact information for NIH program officials on the details tab for each grant in the search result. Here is the video that demonstrates how to use matchmaker: <https://report.nih.gov/tutorial/matchmaker.aspx>.

Another very good idea is to submit a letter of intent. This allows the program officer to identify appropriate

[Example of a Letter of Intent](#)

Sitting down to write

You have planned, you have researched, and you understand the application...now it's time to write. A well-written, well-formatted application is an important key to success: [NIH Formatting Requirements](#)

TIP #1: Make Your Project's Goals Realistic

Don't propose more work than can be reasonably done during the proposed project period.

- Before you start writing the application, think about the budget and how it is related to your research plan. Remember that everything in the budget must be justified by the work you have proposed to do.
- Be realistic. Don't propose more work than can be reasonably done during the proposed project period. Make sure that the personnel have appropriate scientific expertise and training. Make sure that the budget is reasonable and well justified.
- Provide a timeline.

TIP #2: Be Organized and Logical

Why? Reviewers are accustomed to finding information in specific sections of the application. This creates an efficient evaluation process and saves reviewers from hunting for required information.

Start with an outline, following the suggested organization of the application. The thought process of the application should be easy to follow.

Note: Upon submission, NIH Systems will automatically add: headers, footers (time stamping, tracking number, FOA number, and page numbers). Therefore, do not include headers or footers.

- Write clear headings.
- Use sub-headings, short paragraphs, and other techniques to make the application as easy to navigate as possible. Be specific and informative, and avoid redundancies.
- Bookmark major sections.
- Use diagrams, figures and tables, and include appropriate legends, to assist the reviewers to understand complex information. These should complement the text and be appropriately inserted. Make sure the figures and labels are readable in the size they will appear in the application.
- Use bullets and numbered lists for effective organization. Indents and bold print add readability. Bolding highlights key concepts and allows reviewers to scan the pages and retrieve information quickly.
- Utilize white space effectively.

TIP #3: Write in Clear Concise Language

Why? A reviewer must often read 10-15 applications in great detail so your application has a better chance of being successful if it is easy-to-read and well written.

- Write a clear topic sentence for each paragraph with one main point or idea. This is key for readability.
- Make your points as direct as possible. Avoid jargon or excessive language.
- Write simple and clear sentences, keeping to about 20 words or less in each.
- Be consistent with terms, references and writing style.
- Use the active, rather than passive, voice. For example, write, "We will develop an experiment," not "An experiment will be developed."
- Spell out all acronyms on first reference.
- If writing is not your forte, seek help!

TIP #4: Sell Your Idea on Paper

Capture the reviewers' attention by making the case for why NIH should fund your research!

- Include enough background information to enable an intelligent reader to understand your proposed work.
- Support your idea with collaborators who have expertise that benefits the project.

TIP #5: Edit Yourself, but also Enlist Help

You've most likely been looking at the same words, sentences and paragraphs repeatedly! Allow someone with fresh eyes read your content, check your punctuation, and give you feedback on whether the content flows.

- Have zero tolerance for typographical errors, misspellings, grammatical mistakes or sloppy formatting. A sloppy or disorganized application may lead the reviewers to conclude that your research may be conducted in the same manner.
- **Remember the Details!** There are format requirements, such as font size, margins, and spacing. Make sure you are familiar with them before submitting your application and label sections as directed. You don't want your application delayed because any of these details are not incorporated.
- If more than one investigator is contributing to the writing, it would be helpful to have one editor not only review for punctuation errors, but ensure that the application has a consistent writing style.

TIP # 6: Share for Comments

You've most likely been looking at the same words over and over! Allow someone with fresh eyes read your content, check your punctuation, and give you feedback on whether the content flows.

- Request your colleagues or mentors review a first draft of your specific aims early in the process. This step can save lots of valuable time.
- Allow time for an internal review by collaborators, colleagues, mentors and make revisions/edits from that review. If possible, have both experts in your field and those who are less familiar with your science provide feedback.
- Ask those who are providing a review to use a critical eye and evaluate the application using the peer review criteria
- Allow sufficient time to put the completed application aside, and then read it from a fresh vantage point yourself. Also, try proofreading by reading the application aloud.
- Conduct your own review based on the NIH's five peer review criteria. How would you rate your own application?
- Prior to submission, look over the entire grant application one final time. Remember, you want a convincing proposal that is also formatted according to the application guidelines, punctuation error-free, clear to read, and is to the point!

Some NIH Videos on the Subject

[Introduction to Grant Writing I: Demystifying the NIH Grant Review Process](#)

[Introduction to Grant Writing II: Strategies for Effective Training and Research Plans](#)

For a better understanding, review the attachment of an [actual application with the actual peer review](#) comments.

Examples of other well-written applications from NIH website:

[Sample NIH Proposal 1](#)

[Sample NIH Proposal 2](#)

This is an annotated R01.

[Sample NIH Proposal 3](#)

[Sample NIH Proposal 4](#)

[Sample NIH Proposal 5](#)

[Sample NIH Proposal 6](#)