# Research Statements
## PDCO Career Resources

The research statement gives you the space to expand on the specifics of your research - and what excites you about your work - that you were unable to include in the cover letter due to space limitations. The research statement also requires you to think more actively about your future career as a research scientist by charting out long-term research goals, both for yourself and your proposed laboratory. It asks you to think about the tangible ways you will contribute to scientific advancement as a member of faculty at the department and university to which you are applying. If the application requests a research proposal, the document should provide more details on future work.

Successful research statements do not simply cover the "highlights" of your graduate or postdoctoral work. You need to show the search committee that you are utilizing research expertise you acquired throughout your academic career to take your research in creative and innovative directions. You need to propose new research questions and avenues for the research you plan to undertake at their institution. Provide the search committee with a convincing and realistic plan of your future goals, using your academic history as an indicator for your potential success as an emerging research scientist in your field. The research statement should answer three questions:
1) What is your research to date?
2) Why is your research important?
3) Where is your research going in the future?

The research statement should aim to get search committees excited about your research. It is essential that you avoid jargon that faculty outside of your immediate subfield will have difficulty understanding. Try to pitch your research statement to a broad, but informed scientific audience.

Finally, keep your research statement clear and concise. Eliminate any miscellaneous threads that will distract your reader from your primary narrative.

**Key Piece of Advice:** The most common structure for a research statement is chronological order, but this is NOT the most effective structure. Research statements are more effective if they are structured around research problems or focus areas, rather than strictly chronologically. Start with the current state of research in your field, then progress to what is and is not known, your research idea, your research, work planned for new ideas, potential funding opportunities, and your 'fit' with the institution. Be sure the reader understands what your most surprising scientific finding was and why they should care about it.

## Tailoring your research statement

As with your curriculum vitae and cover letter, you should tailor your research statement to the department and university you are planning to apply to. Consider the following questions as you construct your research statement:

- How will you be able to adapt your research to your new institution?
- What resources does the university have that you will be able to utilize for your future projects?
- What resources does the university lack that you require in order to complete your research?
    - You can propose to secure external funding for new laboratory equipment, where applicable.
- Which faculty members would you plan to collaborate with on research projects and grant proposals?
- How will you incorporate opportunities for undergraduate and graduate research in your laboratory (particularly at teaching-focused institutions)?

## General tips for formatting your research statement

- Research Statements are typically between 2-5 pages in length. The exact statement length may be specified in the job advertisement.
- Do not use academic letterhead for your research statement.
- Use a professional font (Times New Roman, Arial), with appropriate margins (at least .5 inches on all sides).
- Diagrams and figures can often explain your research better than words.

**First section:**

- Begin your statement with a paragraph abstract about the overarching theme of your past research and how it connects with your future research plans.
    - What do you research? Why is it scientifically significant? What tangible contributions and advancements has your research made to your field?
        - Think carefully about how to make your research exciting and compelling to non-specialists.
    - What methods and approaches from your past research will inform your future research endeavors? What approaches were novel?

**Second section:**

- Suggested length: 1-2 paragraphs
- Provide a summary of your past research:
    - What specific research methods did you use?
    - What did you discover? What were your conclusions?
    - What were the most important conceptual advances of your research and your most significant contributions to your field?
- Include figures and diagrams to make your statement more visually appealing and more accessible to non-specialists.

- Reference your most successful publications and their impact factor and citation rate where applicable.

**Third section:**
- Suggested length: 4-6 paragraphs (depending on number of future projects proposed)
- Set specific (and realistic) goals for your first 3-5 years at your proposed institution
  - Outline 2-3 potential projects for future research, both for you and your proposed laboratory:
    - Describe the ways in which your proposed research builds on and expands out from your previous research.
    - If you have preliminary data for any of the proposed projects, include it in your research statement.
  - How will you adapt your research to the university to which you are applying?
    - What resources does the university have that will help you with your future research?
    - Indicate specific opportunities for potential collaborations with professors and centers at the university.
    - Will you be working primarily with undergraduate students? If so, how will you involve undergraduate researchers in your proposed laboratory?
    - Indicate how might you secure funding for specific kinds of equipment, where applicable.
  - Indicate potential sources of funding for your proposed laboratory:
    - List grants you have successfully applied for in the past (especially the K99, R01, NIH).
    - Outline plans to write new grant applications for your laboratory. Which funding agencies will likely support you in your new position and why?
  - Cite current publication productivity to estimate future publication productivity.

## Resources
- ['Writing a Research Plan'](#)
- ['Writing a Research Statement'](#) Cornell University, Office of Postdoctoral Studies
- ['How to Write a Research Statement'](#)
- [Writing a Research Plan](#)
- [Duke University – Dr. Mohamed Noor](#)