Writing A Research Statement

A research statement is a one to three page document that may be required to apply for an academic job or (less frequently) graduate school. The purpose of a research statement is to describe the trajectory of your research to a selection/search committee.

A research statement allows you to

- show that you can take on independent research

- demonstrate your writing ability, independence as a researcher, and ability to earn grant money

- state your short-term and long-term research goals

Use the research statement only to describe your research. Your research statement is one of a number of documents (e.g., personal statement, teaching statement, statement of diversity, resume/cv, cover letter, etc.) describing your academic career, so be discriminating and strategic about the information you include. Be sure to keep the spotlight on your ideas—not on you as a person (remember, this is not a personal statement).

1. **Long Term Research Agenda**

Clearly articulate the long-term research agenda that has captured your scholarly interest. This should be included in your introductory paragraph/section. Be sure to emphasize what new knowledge will be generated for the discipline. Readers are most likely overworked faculty that have limited time to read through countless statements, so get to the bottom line right away.

Listed below are some common strategies for articulating your research agenda:

a. **An explicitly stated long-term goal:** "My ultimate goal is to bridge the gap between Machine Learning and Bioinformatics."

b. **A clearly stated, specific interest in a field/area of research:** "My primary academic interests are developing biologically-inspired approaches to machine learning and, reciprocally, to use these approaches to better understand learning in biological systems."

c. **A focused statement of a research problem:** "Characterizing nonlinear variation in high dimensional data is a challenging problem and it gives the opportunity for statisticians to develop new methodologies to address it."

2. **What's the story?**

Demonstrate the trajectory of your research plan, to include past, current, and future research—with the primary focus on your future. Try to avoid the novice mistake of spending too much time explaining your past experience. Instead, demonstrate your past knowledge and experience by raising intriguing questions and how you plan to explore them in the future. Be sure to include any recognition your work has received—publications, grants, awards, etc.—and potential funding sources.

We present three strategies for demonstrating a research plan that focuses on your future research:

    a. **Sequence:** Use your dissertation and other major projects to "set the stage" for your future work, making sure to show connections. Consider section headings that relate to time (past, ongoing, future). A temporal organizational scheme highlights your ability to envision, develop, and accomplish your research goals.

    b. **Novelty:** Present your "secret weapon:" what do you have that other researchers don't? How is your research a game-changer for the field? This approach emphasizes the importance of your research in your discipline. It also suggests that you have the ability to work independently, generate funding, and increase the prestige of your department.

    c. **Problem:** Use the "big problem" + "specific challenge" + "your approach" for each of your great research accomplishments. This approach emphasizes the significance of your work by describing a problem (for example, an important gap in your field) and then showing very explicitly how your approach to the problem fills this gap.

3. **To tailor or not to tailor?** There is a debate in the current literature concerning whether or not you should tailor your research statement to the specific institution to which you are applying.

    Example: *My research agenda corresponds well to Stanford's chemical engineering department, particularly the work of Professor X..*

While experts rarely say "don't tailor!" there are varying degrees of recommendation for how much tailoring is appropriate (and explicitly how to do it). The best advice we can give: talk to your advisor.

4. **Design matters!**

Visual design can help your reader smoothly navigate your document. Create an inviting and pleasant reading experience for your audience by using:

- headings to group similar information

- a bold font to emphasize important points

- white space (paragraph breaks, lists, extra space between paragraphs, and adequate margins) to break the text into manageable chunks

Drafting Strategies

- Give yourself plenty of time (approximately three months) to craft your research statement

- Get peers and mentors to read your statement

- Keep your research statement updated like you would a teaching statement