

Writing the Research Statement for Graduate School Applications

Please take a few minutes to answer the following questions:

1. What is the purpose of the "research statement" in graduate school applications?

2. If you were part of the review committee that looks at applications, what are the qualities you'd look for in best graduate student candidate in the discipline?

What is it?

The **Research Statement**--requested in job applications for academic positions at universities/colleges), graduate programs, or grant-funding institutions for those working in STEM or humanities fields--is a short formal account describing research interests, approaches, and future plans.



Research statements for grants: Grantors are interested in providing funding for research: they also want the best bang for the money. Thus applicants who write research statements need to demonstrate that their research is important/needed; the research is new or contributes significantly to the

field; and they are able to execute the research with the funds provided. Often past and present and current research are detailed with aims, methodologies, and results.



Research statements for graduate programs: Universities are more interested in the researcher (the student) and whether the student is able to thrive in rigorous graduate school programs.

- Why is the student applying? What is the student's **motivation** to research in this particular field? Statements of research interest does not commit you to that specific area! It gives the the university of your interest and what you studied so far.
- How is the student **qualified** to continue research in the graduate program? (what academic experiences, knowledge, qualities make this student ready for graduate school?)
- What makes this student a **good fit** for the particular graduate program? Does the student know what the university offers, the people who work in our program, the resources the university has?

Tips

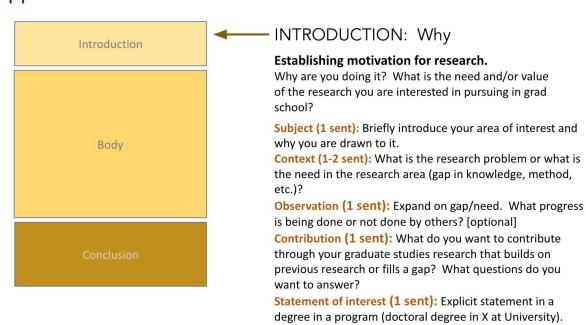
<u>Be specific and be concise.</u> Applicants who write research statements should <u>succinctly</u> describe academic research and research-related experiences and clearly indicate how those experiences helped form skills, knowledge, and qualities that make the student a good graduate candidate. Be specific about resources that you will use at the university. <u>Show don't just tell</u>. Passion for a field is important, but stating it is not enough. You should *show* that your passion is justified through concrete anecdotes that demonstrate that passion or engagement.

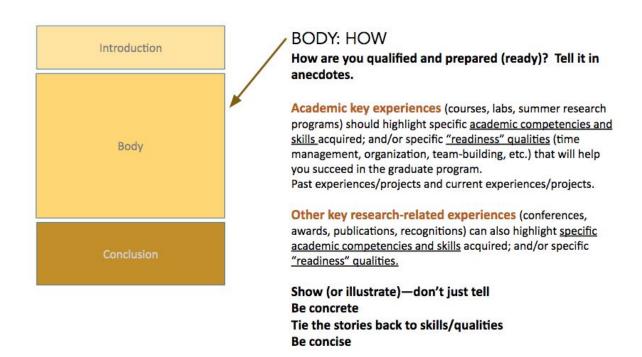
<u>Follow every anecdote with a concrete take-away</u> that connects the reader to the skills, knowledge, or readiness qualities you have. This will remind readers how you are qualified as a

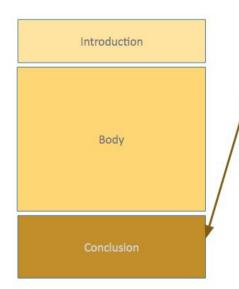
graduate student.

Avoid jargon. Readers may or may not be in the field.

Organization of a Research Statement for Graduate School Application







CONCLUSION: WHAT

Recap motives for applying

Refer back to your interest in the graduate program

What will you do in the program? What do you imagine you'd do in the program (your potential research direction)? Who would you work with? Be explicit about people (do your homework!).

Describe how the university has the necessary resources to support you (i.e. labs, research teams, related departments, space, funding sources, etc.)

Exercise 1. Examining Argumentative Moves of a Body Paragraph in the Research Statement

The following table identifies some of the organizational moves that you might consider in your research statement. A real student sample is on the left. Use this table to help you with your own research statement paragraph.

BODY PARA. HIGHLIGHTING ACADEMIC SKILLS, KNOWLEDGE AND READINESS QUALITIES

Use numbers 1, 2, or 3 to identify the following argumentative moves:

- Provides a general overview of the research experiences or involvement discussed in the paragraph (topic)
- Describes specific details of experience (connected to field skills/knowledge, readiness qualities)

I was fortunate to be part of a summer research experience as an undergraduate, which took place in Costa Rica. It allowed me to gain hands-on experience in research while living abroad in the Cabo Blanco Absolute Reserve. My first project introduced me to shell taphonomy; I studied the diversity of shells found in a highly dense portion of the reserve as well as the different damage types found on the shell surface for each family. The results of the study helped us understand the types of families that are most vulnerable to predators within the Pacific coast region. The focus of my second research project in the Reserve was on native reptile species called Ctenosauras similis or black spiny iguanas. I studied activity patterns, dietary preferences, and social behaviors of the iguanas. I performed experimental feeding trials and found that *Ctenosaurs* can distinguish between various types of flavors. I also found that there was a substantial increase in the acceptance rate of samples with added sucrose. This type of research can help us understand the ecological importance of these organisms within the given environment. Aside

- Provides "findings" of the experience (what did you learn?)
- 4. Take-away results/impact on student in terms of field skills/knowledge or readiness qualities. (this is the assessment of the findings)

from research, I participated in a home stay for 10 days while in Costa Rica. I lived with a local family and learned about their culture. The cultural emersion [sic] aspect of the program allowed me to open and be part of a different culture."

CONCLUSION PARA. HIGHLIGHTING FUTURE RESEARCH AT THE UNIVERSITY

Find (mark with 1, 2, or 3):

- References to the university program and future goals (what you want to do with a M.S. or Ph.D.)
- 2. Plans for/interests in research in the program (shows that the university is the right place for you)
- What resources are available at the university

"My goal is to obtain a doctoral degree in Biochemistry and return to industry. I would like to study the effects of mutated proteins or malfunctioning proteins on various diseases including Alzheimer's and cancer. I am interested in researching signal transduction pathway and the effects of proteins malformities on gene expression. UCLA offers a plethora of potential research mentors that can help me pursue my own research goals. I am interested in working with Dr. Gal Bitan, whom [sic] focuses on creating molecular tweezers to prevent amyloid formation. My interests lie in understanding protein folding and how folding governs function. I would like to understand how amyloid formation is caused at the molecular level and would like to find a novel approach in preventing protein misfolding. Similarly, Dr. Lin Jian studies amyloid formation but has a different approach. I have an interest in computational research and would be interested learning more about Dr. Lin Jian's research. Also I am interested in Dr. James U. Bowie and Dr. Pascal F. Egea's research on membrane bound protein mechanisms. I understand that studying membrane protein folding dynamics is difficult and am interested in learning more about current techniques used to study folding mechanisms in biological systems. Other research topics that peak my interest include signal transduction and its relations to cancer. Dr. John J. Colicelli studies different RAS proteins, their roles in signal transduction pathways, and their roles in cancer development. In any case, my own research experiences make me an ideal candidate for many of the faculty in UCLA's Chemistry Department."

Exercise 2. Outline of your Research Statement Introduction--Quick Draft!

Introduction (one-two sentences)

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Briefly introduce your research area and your interest in the field.	
What is the research problem/need?	
What progress in the area is being done by others? [optional]	
What is your contribution (Research done)? What questions do you still want to answer?	
Statement of interest (explicitly state interest in program at university if possible)	

Audit of Your Skills/Qualities		
Field Skills/Knowledge: what specific field skills and knowledge do you want to highlight? (i.e. shell taphonomy). Be specific. Identify at least three.		
List experiences that might demonstrate these skills/knowledge		
Readiness qualities: what specific readiness qualities do you want to highlight (identify two or three)		
List experiences that might demonstrate these qualities		