Research Statements

What Is a Research Statement?

The Research Statement (or Statement of Research Interests) is a common component of academic job applications. It is a summary of your research accomplishments, current work, and future direction and potential of your work.

The statement can discuss specific issues such as:

- funding history and potential
- requirements for laboratory equipment and space and other resources
- potential research and industrial collaborations
- how your research contributes to your field
- future direction of your research

The Research Statement should be technical, but should be intelligible to all members of the department, including those outside your subdiscipline. So keep the "big picture" in mind. The strongest Research Statements present a readable, compelling, and realistic research agenda that fits well with the needs, facilities, and goals of the department.

Research Statements can be weakened by:

- overly ambitious proposals
- · lack of clear direction
- lack of big-picture focus
- inadequate attention to the needs and facilities of the department or position

Why a Research Statement?

- It conveys to search committees the pieces of your professional identity and charts the course of your scholarly journey.
- It communicates a sense that your research will follow logically from what you
 have done and that it will be different, important, and innovative.
- It gives a context for your research interests—Why does your research matter?

The so what?

- It combines your achievements and current work with the proposal for upcoming research.
- Helps hiring committees assess:
- · areas of specialty and expertise
- potential to get funding
- · academic strengths and abilities
- compatibility with the department or school
- ability to think and communicate like a serious scholar and/or scientist

Formatting of Research Statements

The goal of the Research Statement is to introduce yourself to a search committee, which will probably contain scientists both in and outside your field, and get them excited about your research. To encourage people to read it:

- make it 1–2 or more pages, 3 at most
- · use informative section headings and subheadings
- use bullets
- use an easily readable font size
- make the margins a reasonable size

Organization of Research Statements

Think of the overarching theme guiding your main research subject area. Write an essay that lays out:

- The main theme(s) and why it is important and what specific skills you use to attack the problem.
- A few specific examples of problems you have already solved with success to build credibility and inform people outside your field about what you do.
- A discussion of the future direction of your research. This section should be really
 exciting to people both in and outside your field. Don't sell yourself short; if you
 think your research could lead to answers for big important questions, say so!

• A final paragraph that gives a good overall impression of your research.

Writing Research Statements

Style:

- Avoid jargon. Make sure that you describe your research in language that many
 people outside your specific subject area can understand. Ask people both in and
 outside your field to read it before you send your application. A search committee
 won't get excited about something they can't understand.
- Write as clearly, concisely, and concretely as you can.
- Keep it at a summary level; give more detail in the job talk.
- Ask others to proofread it. Be sure there are no spelling errors.

Content:

- Convince the search committee not only that you are knowledgeable, but that you are the right person to carry out the research.
- Include information that sets you apart (e.g., publication in *Science, Nature*, or a prestigious journal in your field).
- What excites you about your research? Sound fresh.
- Include preliminary results and how to build on results.
- Point out how current faculty may become future partners.
- Acknowledge the work of others.
- Use language that shows you are an independent researcher.
- BUT focus on your research work, not yourself.
- Include potential funding partners and industrial collaborations. Be creative!
- Provide a summary of your research.
- Put in background material to give the context/relevance/significance of your research.
- List major findings, outcomes, and implications.
- Describe both current and planned (future) research.
- Communicate a sense that your research will follow logically from what you have done and that it will be unique, significant, and innovative (and easy to fund).

Describe Your Future Goals or Research Plans

- Major problem(s) you want to focus on in your research.
- The problem's relevance and significance to the field.
- Your specific goals for the next 3–5 years, including potential impact and outcomes.
- If you know what a particular agency funds, you can name the agency and briefly outline a proposal.
- Give broad enough goals so that if one area doesn't get funded, you can pursue other research goals and funding.

Identify Potential Funding Sources

- Almost every institution wants to know whether you'll be able to get external funding for research.
- Try to provide some possible sources of funding for the research, such as NIH,
 NSF, foundations, private agencies.
- Mention past funding, if appropriate.

Be Realistic

There is a delicate balance between a realistic Research Statement where you promise to work on problems you really think you can solve and over-reaching or dabbling in too many subject areas. Select an over-arching theme for your Research Statement and leave miscellaneous ideas or projects out. Everyone knows that you will work on more than what you mention in this statement.

Consider Also Preparing a Longer Version:

- A longer version (5–15 pages) can be brought to your interview. (Check with your advisor to see if this is necessary.)
- You may be asked to describe research plans and budget in detail at the campus

interview. Be prepared.

• Include laboratory needs (how much budget you need for equipment, how many grad assistants, etc.) to start up the research.

Samples of Research Statements

To find sample Research Statements with content specific to your discipline, search on the Internet for "your discipline" + "Research Statement"

University of Pennsylvania Sample Research Statement: http://www.vpul.upenn.edu/careerservices/gradstud/sciother1.pdf

Advice on writing a Research Statement (Plan) from the journal *Science:* http://sciencecareers.sciencemag.org/career_magazine/previous_issues/articles/2002-07-26/nodoi.4611149009600202486