Constructing your research statement

• Goals of a research statement
• What is your unique story?
• Research experience
• Proposed research program
• Checklist for your statement
• Revise and repeat
Goals of a Research Statement

• **Introduce you...and your research program**
  – You should convince us that you have unique accomplishments that ideally suit you to do the proposed research

• **Explain the importance of your research interests to scientists outside your field**
  – What would success in your field facilitate?

• **Spell out what is novel & exciting about your past & future research**
  – What are your accomplishments, how do they propel you towards new goals?

• **Summarize your research goals**
  – Five year plan, leading to a career trajectory
Put yourself in the shoes of a supportive advocate

• The document should help someone explain your research and make a case for you
  – Put words in the mouth of your champion
  – What would you like this person to say about your in a meeting?
    • Make sure these statements appear clearly in your document
    • Otherwise, your champion may inadvertently misrepresent you

• Can I scan the page and find a sentence that states your:
  – General research area
  – Important research contributions
  – Areas of expertise
  – Long and short-term research goals
  – Importance and implications of your research: past, current, and future
Rules of thumb

• Use the first person
• Avoid using jargon
• State clearly important questions in the field you have and will address
• Use succinct paragraphs and boldface important points:
  – Research question
  – Important finding
  – Implications
• Cite your own publications
• Provide specific statements about the importance of your research
  – This provides ammunition for a supportive committee member
• Stick to 2 pages
What is your unique story?

*Broad brushstrokes…*

- What is the general motivation behind your research interests?
  - A basic science question? A particular application? Developing technologies?
  - Why should we care about it?
- What training and experience do you have to support your question?
  - Do not focus only on your most current research; try to present a unifying story or trajectory driving your training?
  - Breadth can be a strength if explained well: diversity enables discovery
- What specific research questions do you want to study and how?
  - How will this help achieve your long-term goals?

*Write one or two sentences for each point, then use them to construct an introductory paragraph*
Describe your research accomplishments

Goals

• Help others assess your talent and experience
  – Prior work in a field not directly related to your research program can provide useful information about your abilities

• Accurately describe your own research contributions
  – Either overstating or understating the importance of your work can be a problem
  – This isn’t about being boastful or modest, just an honest assessment
  – If you have difficulty with this, pretend you are writing about a respected friend or colleague
  – Can you frame your work in a broader context?
  – Can you explain the importance of your work to non-experts?
Describe your research accomplishments

• In a sentence or two, provide an overview of each research area
  – What are the general questions and methods?
  – Why should we care?

• Succinctly explain your research in a few paragraphs:
  – In a sentence, what is the “big deal” for each of your publications or projects?
    • Major hypothesis supported?
    • Novelty--first evidence of…?
    • These should be independent of the particular methods used
  – In a couple sentences, explain your specific contribution or insight
  – Report specific methods and results only generally if it helps explain the findings
  – Explain broader implications of your findings
Summarize your proposed research program

Goals

• Demonstrate that you have honed your ideas into tractable and fundable chunks.
  – Have you identified a critical question and a methodology for answering it?
  – What specific short-term goals do you have that would open up a new research area?
    • Think about the first few papers you would like your lab to publish

• Explain how the proposed work facilitates novel long-term research directions

• Demonstrate that you are ideally suited to perform the research
  – The research should arise naturally from your prior accomplishments
  – You must have a good idea AND be the right person to perform the work
Summarize your proposed research program

• In a sentence or two, provide an overview of each proposed research area
  – What are the general questions and methods?
  – Why should we care?
  – How does it combine your prior expertise?

• Succinctly explain your research goals in a few paragraphs:
  – In a sentence, what is the “big deal” for each proposed project?
    • Major hypothesis?
    • Novelty—first evidence of…?
    • Specific aims?
  – Generally, what methods will you use?
  – What results would be exciting?
  – What would be the broader implications?
Checklist for your statement

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Evaluate, revise, and repeat

• Start early
• Be prepared to make many drafts
• Get feedback often and early from friends and colleagues
  – Have them do the checklist
  – Give it to them before you’ve spent hours going in the wrong direction
  – Don’t spend time refining something that you may need to completely overhaul
• Don’t be too attached to what you’ve written
  – Starting over once you’ve honed your messages can provide the most succinct and clean document
  – Identify the key ideas for each paragraph and put them in the first sentence
  – Often research statements start out too specific and then broaden over a number of drafts, or vice-versa
Evaluate, revise, and repeat

• Make sure you’re excited
  – Let your passion and positive attitude come through in the writing
  – Negative thoughts and doubts will also come through

• Give yourself time to process between evaluating and rewriting
  – Studies show that simply waiting after receiving information enhances the salience of information presented, and the choices we make with that information

• Read other people’s statements
  – Identify specifically what you like or dislike
  – Can you read it and quickly present a 5-minute summary?
  – Choose a format that works for you
Good Luck!