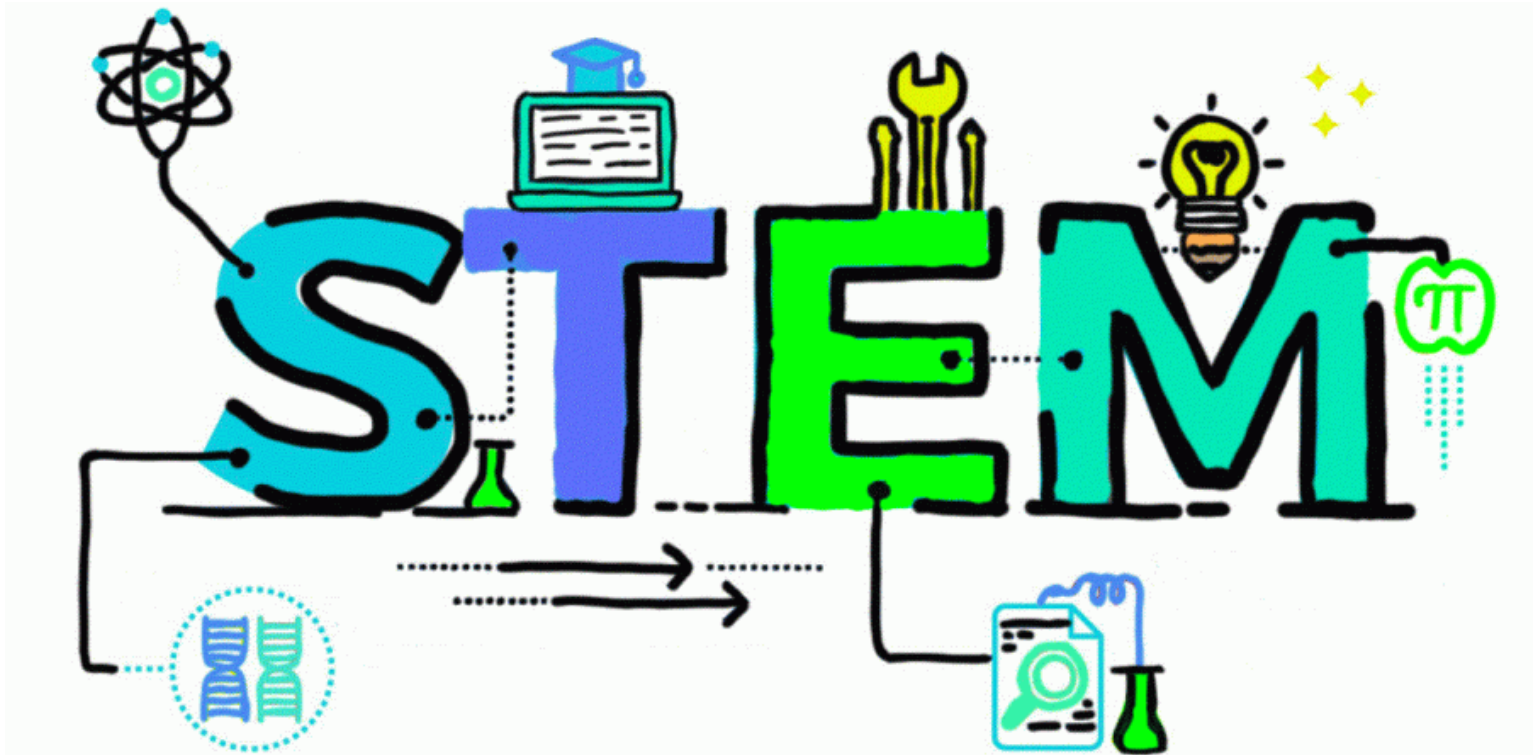


*How to write a unique statement of purpose that highlights YOU:  
tips for writing a statement of purpose and a statement of  
research in STEM fields.*



# Outline

- What is the difference between a personal statement and a statement of purpose?
- Who reads your SOP?
- Writing strategies
- Content
- Things to avoid
- Masters vs PhD
- Examples of statements
- Begin writing your own



# What is a personal statement?

- One way to think about personal statement is that, in general, **undergraduate** programs are interested in you as a person and what you may offer to enrich their overall university community.



# What is a statement of purpose?

- **Statement of purpose** describes your “brain,” the scientist or engineer you have become and will grow to be. You are now the scientist and any personal information should be related to your scientific approach and how you will enrich the scientific world.
- You are describing your purpose within the scientific community.



# Who reads your SOP?

- Every department and university is different, but in research based fields it is typically the science faculty that make the ultimate decisions.
- Your future community



# Who should proofread your SOP?

- Advisors and Professors
- Faculty letter writers
- People from different disciplines
- Each other (exchange emails with students here and form a editing group)



# Writing strategies - General

- Trust yourself
- Celebrate your work and successes
- Think about your “wow” factory
- Did an article, book, class, recent experience inspire you?
- How does your research fit within the faculty members research interests?
- Remember: it's ok to toot your own horn. If you don't write it down, the reader won't know you did it.



# Writing strategies

## 1) Do your homework

- Browse department websites, read faculty research articles, talk to potential faculty mentors

## 2) Reflect and brainstorm

- What led to your current research interests? Who are your role models? Why did you choose your undergrad major? What are your career goals? What do you hope to accomplish? What motivates you?





# Writing strategies

## 3) Outline your statement

- Determine a theme/topic that stands out from your brainstorming.
- Use bullet points to organize your ideas. Your outline should cover:
  - What aspects of the school/program appeal to you?
  - What are your research interests?
  - How/why did you become interested?
  - How did you prepare to address these issues (i.e. research experiences)?
  - What are your goals for grad school (MS or PhD)?
  - What are your career goals?
  - How can the school department help you accomplish those goals?
  - What do you bring to the school/program?

# Writing strategies

## 4) Write a draft

- Always use positive language when referring to yourself
- Give detailed concise examples
- Use proper spelling and grammar!
- Do not use fancy SAT/GRE words
- Refrain from repeating yourself
- Stay within the required page limit (usually 2 pages, but depends on the university). Read directions!
- Example: “In your best prose, state what you wish to accomplish in CSUN's MSc in Biology Program.”

## 5) Ask for critiques

- Read it out loud to yourself
- Ask friends and mentors to read your edited draft. Do not give them an incomplete draft.

# Writing strategies

- Your first draft will not be perfect.
- That is OK!
- Keep writing, put it away for a few days, come back and edit it later.



# Content

- You must think of yourself as a **scientist**.
- Everything in your statement should be related to your research area, interest, experience, and future.
- Minimize personal information that is not relevant to your research.
- Do not compare your statement to your friends in humanities, social sciences, or health related programs. They are very very different.

# Things to avoid

- Childhood stories
  - *I always loved nature as a child.*
  - *I loved playing with Legos as a child so I knew I was going to be an engineer.*
- Broad/bland statements
  - *I have excellent research experience.*
  - *[Science discipline] has always excited me.*



# Instead...

- Talk about your relevant research experience.
- Explain why you want to go to grad school.
- Tell us specific examples.
- Use action sentences.
- I developed this hypothesis...
- My research culminated in...
- This project enabled me to...
- I employed a creative solution to this difficult question by....



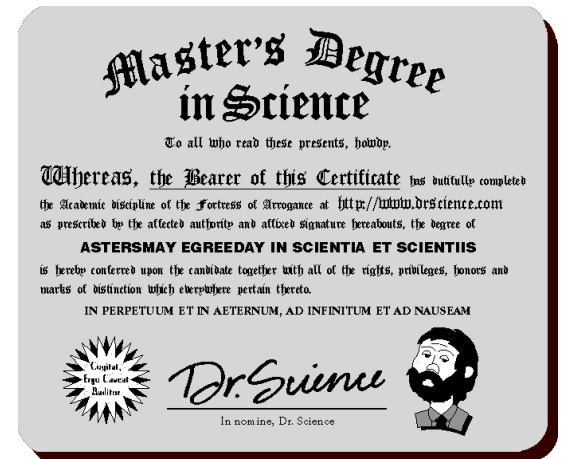
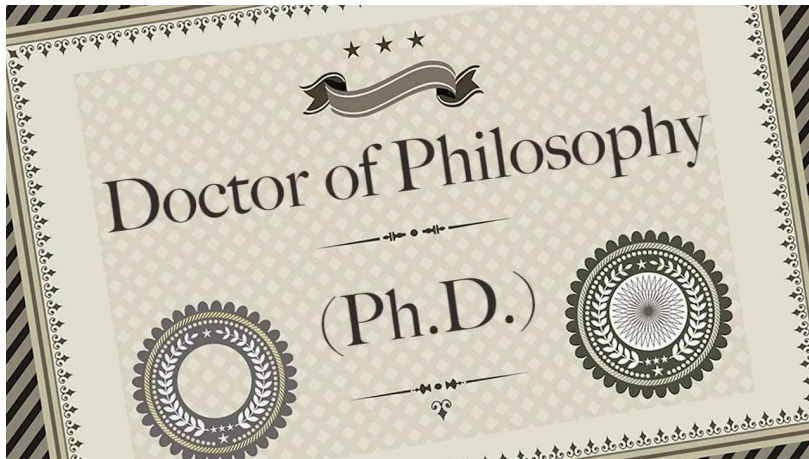
# Extenuating Circumstances

- Extenuating circumstances that may have resulted in less than ideal academic credentials for graduate school
- Keep this brief
- Spin it to a positive and avoid excuses.
- Avoid: *I had to work two jobs to support my family because my father was injured. My grades suffered.*
- Better: *I maintained a B average while working in Dr. Sprout's botany laboratory despite having to work forty hours a week as a waitress to support my family.*



# Masters vs PhD

- Statements for both programs are written the same way.
- Biggest differences is in your research development and research experiences.
- PhD > MS



# Example Statement of Purpose for STEM

- Take a few minutes to read the 3 statements
- What did you like about the statements?
- What could be improved?

Why do YOU want to go to grad school?



# Begin writing

Take one of the following statements and turn it into a few **specific and unique** sentences.

- 1) I love science/engineering/math.
- 2) I have experience with research.
- 3) As long as I can remember, I've always wanted to be a scientist.
- 4) I have worked long hours pursuing my goal to become a Ph.D.

Share with your neighbor and offer advice for improvement.

Share with the class.



**Will White**

@j\_wilson\_white

Following



**Emma Strand**

@EmmaStrand4

Following

Replying to @NSilbiger

at the end it should only be applicable to you - anyone can say they love coral but not everyone can say I've worked on this, presented here, with this team, etc. & the result of those specific points has led them to explanation of why grad school & career goals

6:39 PM - 7 Sep 2018

Replying to @NSilbiger

Since I was a young child I dreamed of writing this Statement of Purpose.

12:00 PM - 7 Sep 2018



**Will White**

@j\_wilson\_white

Following



**Dr Sydney Glassman**

@sydneyglassman

Follow



Replying to @NSilbiger

Don't talk about how much you loved nature as a child, do talk about previous research experience, do explain why you want to go to grad school

Replying to @NSilbiger

But seriously I use these basically as writing samples, so I am looking for topic sentences logical flow of ideas, clear message. I don't expect students to have some kind of vision or personal philosophy or anything.

12:02 PM - 7 Sep 2018



**Jason Silbiger**

@JSSilbiger

Following



Replying to @NSilbiger

Thoroughly research the professors you will be interacting with. Read their papers. Find a common specific interest and integrate it into your statement sincerely.

5:22 PM - 7 Sep 2018

# Helpful websites

- <https://www.cientificolatino.com/stem-life/2017/8/17/ds7nppo97o2ppltfc2gk6mcgs6tqzd>
- <http://web.mit.edu/msrp/myMSRP/docs/Statement%20of%20purpose%20guidelines.pdf>
- <https://www.studential.com/personal-statement-examples/engineering-personal-statements>
- <https://grad.ucla.edu/asis/agep/advsoystem.pdf>