

## Steps to Success: Writing a Winning



# Statement of Purpose

For students in the science, technology, engineering, and math (STEM) fields.



# Personal Statement (PS) vs. Statement of Purpose (SP)





# Personal Statement (PS)

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





# **Statement of Purpose (SP)**



SP describes your "brain," the scientist 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.



# **Becoming a Scientist**

## Your Research Is Your Purpose





"The big questions — how to control a cell's function, how to interfere with a cell becoming a cancer, how to stop heart disease — are still out there to be answered. The key is bringing fresh ideas along with new tools and technologies to the same old problems."

-Mike Teitell, Pathology and Laboratory Medicine



# Who Reads Your Application?

Each department has its own review process.

Science Faculty: Your future community.



"When you recognize your interdependence and changing nature, you no longer see yourself as separate from another person, and this is the foundation for building stronger communities."

—Susan Smalley, Neuropsychiatric Institute



## Who Should Proofread Your Application?



- "Nanotechnology is in our watches, cars, hospitals and it shuffles information around. But it's also about therapies and new ideas the next big thing that's going to change the world in 20 years."
- —Jim Gimzewski, Chemistry and Biochemistry

- Advisors and Professors
- Faculty letter writers
- People from different disciplines
- Each other:

The stronger they are, the stronger you are.



## WRITING STRATEGIES



**Trust Yourself & Dream** 

Celebrate your work in your SP!

This the fun part.



# **Imagine**

- The "Wow" Factor
- Did an article or book inspire you?
- Read the faculty's research, then contact them.



An artist's impression of a supermassive black hole at the center of a galaxy. (NASA/MAXIM)



Andrea Ghez, Astronomer, answered one of astronomy's more important question by reporting that a monstrous black hole resides at the center of the Milky Way galaxy.



## **Be Free**



Free Write

Do not expect your first SP draft to be perfect. Keep writing, put it away for a few days, and edit later.

Be Forgiving



# **Tooting Your Own Horn**

Now you decide not to tell anyone?





## Format / Content

You must think of yourself as a scientist.

 Every paragraph should somehow be related to your research area, interest, experience, and future.





# Metaphors/Themes to Link Ideas

- Let images that flow throughout your SP.
  - Steps to Success...
  - The chemical structure of water...
  - Themes
  - Linked Images

All should be related to your interests and research



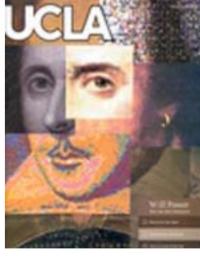
## **Personal Information**

 Personal information should be minimized, if not eliminated, if not relevant to research.



 Do not compare the content of your SP with friends applying to social sciences, humanities, law, medicine and health related programs.







# **Extenuating Circumstances**

"Extenuating circumstances that may have resulted in less than ideal academic credentials for graduate school."

Dr. Liza Cariaga-Lo, Assistant Dean, Yale Graduate School of Arts and Sciences

http://career.berkeley.edu/Article/041112b-so.stm

**Keep this Brief** 



# Spin ~ Spin ~ Spin

• Make what is negative positive.





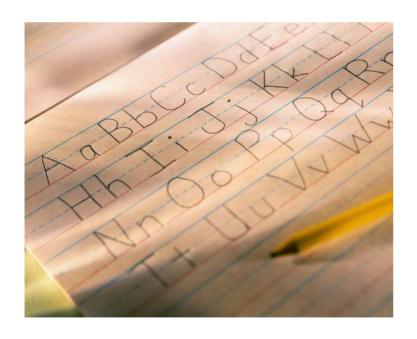
# What to Include

Weak vs. Strong





## **Avoid Excuses**



I had to work two jobs to support my family because my father was injured. My grades suffered.

NOTE: Someone always has a more painful story.



## Better but...

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.





## **Yawn Effect**

I love science. I love to study it, to breath it, to be it. Science is the foundation for all that we are. I have worked long hours pursuing my goal to become a Ph.D.

NOTE: Don't tell me you are passionate and a hard worker, show me how you are and what you did.





## Content

- What is the purpose of your graduate study?
- **Specialized** areas of interest? Who did you work with, what did you do: internships, projects, employment, research and publications?
- What **skills** do you have: using, testing, designing or researching equipment?
- Future goals?
- Tailor to Dept: What makes you uniquely suited for this particular department, this specific institution?



# Include Future Faculty & Fields

- Including faculty with whom you want to work, this shows you have done your homework.
- Contact faculty before you apply to build a relationship.
- Mention a few fields/areas that you are interested in.
- Write specifically for a department: you do not want an overly a general statement.



## Strategy: Summarize Poster Abstracts

#### One paragraph per abstract

- Explain why your work is important set the context and preempt the question "So what?"
- **Describe the objective(s) of your work.** What are *you* adding to current knowledge?
- Briefly explain the methods. This should not be a major focus of your abstract.
- Succinctly state results, conclusions, and recommendations. This is
  what most people want to know. Do not say "We present the results of our
  study and recommendations for action" tell them what you found and
  recommend!
  - http://www.ncsu.edu/project/posters/NewSite/EffectiveAbstract.html



## Follow the Rules

- Fill out forms <u>completely</u> before giving them to your professors, provide them with stamped envelope.
- Do not exceed the word limit.
- Single space is fine.
- 2 pages should be your target length.



# What happens when...



Rushed

**Tired** 





**Trying to Impress** 

Please Don't Hurt Your Thesaurus



# What you can do to a cloud...

The (potentially dreaded)

#### Prepositional Phrase: PASSIVE VOICE

- Around the cloud
- About the cloud
- Of the cloud
  - Of
    - Of
      - Of





## The "I" Factor



Do not over use "I": we already know it is your SoP.



## Yadda, Yadda, Yadda

- Platitudes & Clichés
   I want to cure cancer. Knowledge is power.
- Quotes & Passages
   Social sciences and humanities applicants overuse this strategy (i.e., passages from Shakespeare and the Bible).
- Contractions
   Avoid in informal writing: don't, can't, won't
- Colloquialisms & Email Speak
   The kids in my family. Like, you know....LOL.



# Do Not Assume Knowledge

of (all things) Acronyms

Always spell out the first reference

University of California, Los Angeles (UCLA)

NYU, NB, CSU, FBI, NASA,

DOD, NSF, NIH, ASAP



# Help Each Other

### Each One, Reach One, Teach One!





## **UNLOCK: Writer's Block**

- Pretend you are writing about a friend.
- · Email your SP to a friend.



 Ask a friend to give you an artificial time limit.



# **Auditory Assistance**

#### **READ OUT LOUD**

Start with your last sentence then proceed to the beginning of your SP.

You will often hear your errors.

Try not to stop while you are reading, jot down notes, and make corrections later.



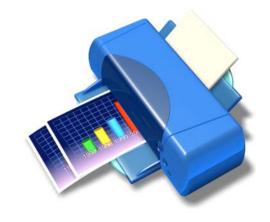
Be patient: This is difficult, but useful tool.



## Print, Edit, Recycle, Repeat

- Always print out your essay.
- Double space.







### **BE NICE TO YOUR FACULTY**

- Please, please, do not present faculty with messy and incomplete drafts.
- Present a package that reflects you: The Professional.



Professors of excellence – Arnold Scheibel, Susan McClary, Ivan Szelenyi, Kris Gutierrez and Utpal Banerjee.



## The First & Final Words



Each university, department, program and person is different.

Ultimately, you have to decide.



## Research Websites

## Great UC Search Engines

- UC Irvine's Summer Research (go to "off-campus")
   http://urop.uci.edu
- UC Experts by Campus

http://www.universityofcalifornia.edu/news/spanishexperts/subjects/agriculture.html

- UCLA Faculty Research
  - http://www.research.ucla.edu/faculty/
- UCLA Research Centers

http://www.research.ucla.edu/labs/index.htm



# Helpful Websites

- Continuing the Journey
  - http://www.ucop.edu/journey
- UCLA Career Center
  - http://career.ucla.edu
- UC Berkeley Career Center
  - http://career.berkeley.edu
- UC Davis Career Center
  - http://icc.ucdavis.edu/
- General Grad School Information (lists areas of study)
  - www.gradschools.com
- Interactive Grad School Information
  - http://www.phds.org
- CSU San Marcos (detailed article)
  - http://www.csusm.edu/CATSS/gradschool\_info.htm
- Project 1000 (assists w/ application & GRE waivers)
  - http://mati.eas.asu.edu:8421/p1000/
- UCSC Online Personality Assessments
  - http://www2.ucsc.edu/careers/student/careerplan.html





## Generous thanks to...

National Science Foundation's Alliances for Graduate Education and the Professoriate (AGEP)



#### Pictures from

http://www.magazine.ucla.edu

**UCLA Marching Band. Photo by Clint Karlsen.** 

http://www.oct-net.ne.jp/~postpet/dog/Barbell.html

http://www.ee.ucla.edu/~roh/photos.html

http://www.mvnu.edu/academics/natsocsci/chemistry/Boyer.html

http://arjournals.annualreviews.org/doi/abs/10.1146/annurev.biochem.6

http://www.infed.org/images/illustrations/artists\_models.jpg

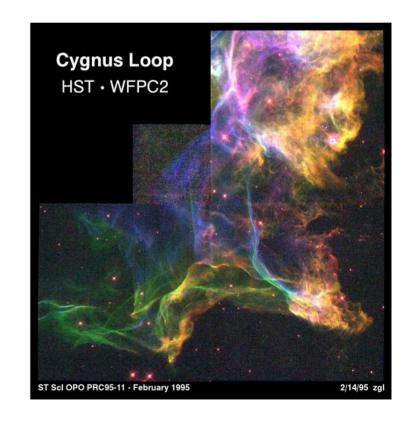
http://archives.colum.edu/portfolio/albums/jordanastevian/aah.jpg

www.google.com



# **Thanks**

You Are Our Future Scholars, Researchers, Scientists



Created by Dr. Barbara K. Ige, July 2007