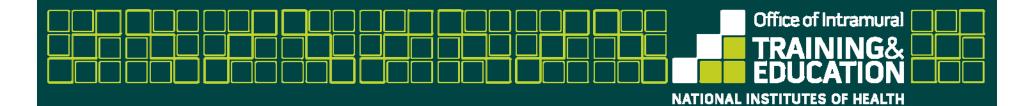
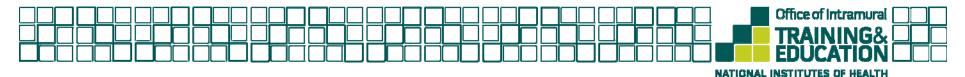
## Writing Personal Statements for Graduate School

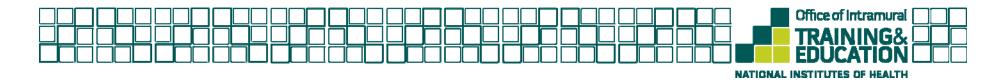
Pat Sokolove, PhD sokolovp@mail.nih.gov





#### Why Does a Graduate School Ask for a Personal Statement?

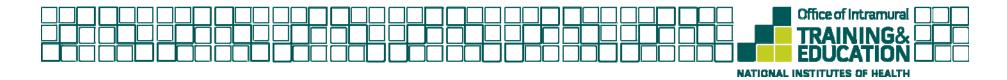
- To get to know you, not your record
- To see if you can think logically
- To see if you can write well
- To try to determine if you are likely to succeed
  - □ What do you know about doing research?
  - How effectively can you talk about science?
  - □ What do you know about the program?
  - How sophisticated are you about graduate school?
  - Do you have <u>characteristics that favor success</u>?
- To see if you will be a good fit for the school



#### **Desirable Characteristics**

- Creativity
- Problem solving ability
- Tenacity
- Ability to work in a team
- Independence
- Self-motivation
- Good communication skills
- Project management skills
- Relevant background knowledge
- Flexibility

- A positive attitude
- Resilience
- Organizational skills
- Attention to detail
- Ability to see the big picture
- Ability to prioritize
- Time management skills
- Appreciation for diversity
- Good interpersonal skills
- Maturity

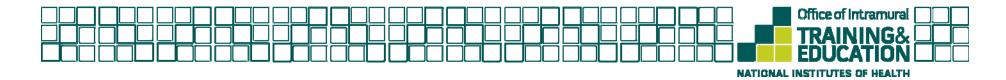


#### Getting Ready to Write

- What sets me apart from other applicants?
- How did I learn about this field?
- Why am I interested in this field?
- What experiences have stimulated and enhanced my interest?
- What skills or personal characteristics do I possess that would enhance my chances for success?
- What are my biggest accomplishments?
- What are my career aspirations?
- Why THIS school and program? Do I have any connections?
- What will I be doing between now and next fall?
- Have I overcome relevant obstacles in my life?
- Are there any gaps or discrepancies in my academic record?



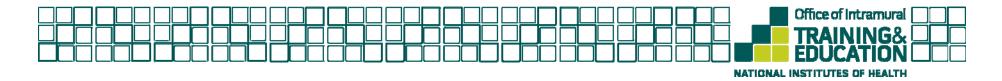
#### What do I want the Admissions Committee to Know?



#### The General Structure

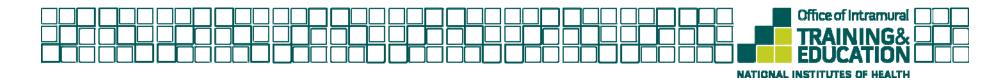
#### The "hook"

- Introduce yourself
- Explain why you want to go to graduate school
- The substance
  - Explain your science
  - □ Highlight other relevant experiences
- The future
  - Explain "why this program"
  - Briefly describe your career goals



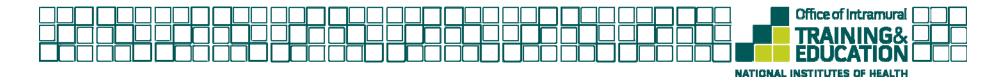
#### **Explaining Your Science**

- Include your IC and the name of your PI or mentor
- Present the big picture the overall goal of your group or lab
- Describe your project
  - □ What specific question are you trying to answer?
  - □ What techniques are you using?
- Present your results, briefly
- Indicate what your results mean and/or possible future research directions



#### **General Thoughts**

- Answer the questions that are asked
- Tell a story but content over style
- Analyze don't just list
- Give concrete examples
- Share credit when appropriate
- Personalize each statement to the school and/or program
- Be concise rather than long-winded
- Make your statement easy for committee members to read

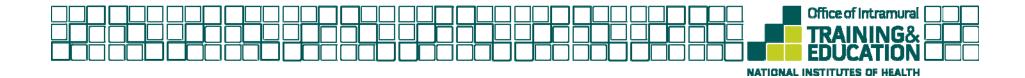


#### Statement of Purpose

Describe in your statement of purpose:

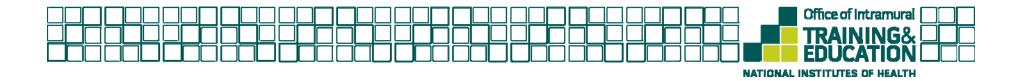
- Your reasons for applying to the proposed program at <u>Stanford</u> and your preparation for this field of study
- Your research and study interests
- Future career plans and other aspects of your background and interests which may aid the admissions committee in evaluating your aptitude and motivation for graduate study

Your statement should not exceed two pages in length (single spaced).



#### **Statement of Purpose**

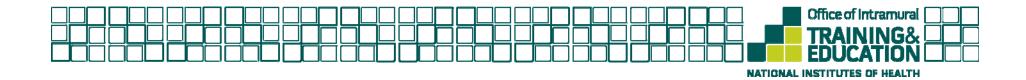
Please describe your aptitude and motivation for study in your field of specialization, including your preparation for this field of study, your academic plans or research interests in your chosen area of study, and your career goals. Please be specific about why <u>UC</u> <u>Berkeley</u> would be a good intellectual fit for you.



#### **Personal History Statement**

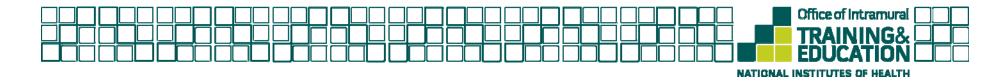
Please describe how your personal background informs your decision to pursue a graduate degree. Please include information on how you have overcome barriers to access opportunities in higher education, evidence of how you came to understand the barriers faced by others, evidence of your academic service to advance equitable access to higher education for women, racial minorities, and individuals from other groups that have been historically underrepresented in higher education, evidence of your research focusing on underserved populations or related issues of inequality, OR evidence of your leadership among such groups.

Should not duplicate the Statement of Purpose (also from the UC Berkeley application)



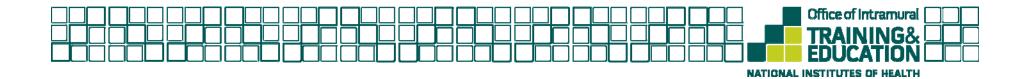
Please describe your previous academic work in your proposed field of study and include a personal statement regarding your goals for graduate study and a professional career. In your response, list memberships in honor societies and professional organizations; scholarships, prizes, honors, or other recognition; and give titles of publications, major papers, or theses of which you are author or co-author (if published, give citation). Please also describe any relevant research experience and what you have learned from it, and other educational and life experiences that you feel are important and relevant. If you have specific interests in your proposed field of study or are interested in working with any particular faculty members, please tell us about them. (University of Illinois)

Please limit your response to 1500 words.

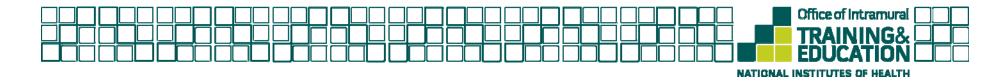


#### **General Thoughts**

- Answer the questions that are asked
- Tell a story but content over style
- Analyze don't just list
- Give concrete examples
- Share credit when appropriate
- Personalize each statement to the school and/or program
- Be concise rather than long-winded
- Make your statement easy for committee members to read

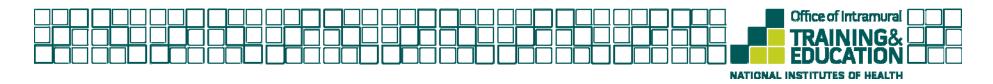


Five graduate-level courses are required for the Ph.D. Formal course work is generally finished in the first twelve to eighteen months, permitting students to begin full-time research early in their career. Courses are selected according to the special interests and needs of each student. <u>Penn State's chemistry department</u> is noteworthy in its effort to break down unnecessary barriers; hence, there are no formal divisions between chemistry areas. Lists of suggested courses are provided for concentration in specific areas of chemistry (analytical, biological, chemical physics, inorganic, materials, organometallic, organic, physical, polymer, surface, theoretical). Students are encouraged to begin research as soon as they are ready and to choose courses that strengthen their research capabilities.



#### **General Thoughts**

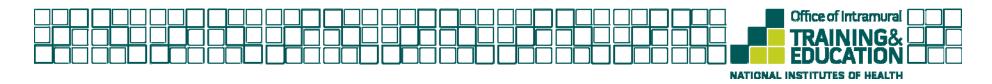
- Answer the questions that are asked
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### Dealing with the Elephant in the Room - I

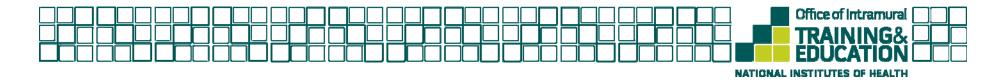
Attempt this only if the problem is

- In the past
- Resolved
- Sympathetic
- Unlikely to come back



### Dealing with the Elephant in the Room - II

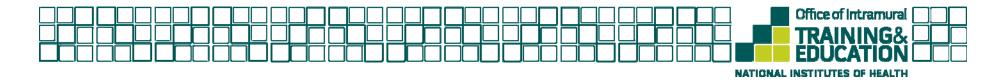
- Use either your personal statement or an attached letter to the Graduate Program Director
- Avoid making excuses or assigning blame
- Point out more recent evidence showing that you are a good candidate
  - Success in graduate level courses
  - Steady improvement in your GPA\*
  - Success in the lab
- Offer to discuss this further with the Program Director



#### Polish Your Draft

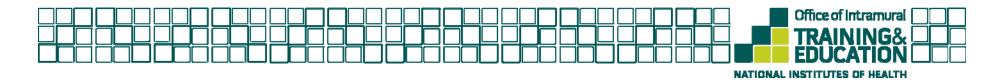
# <u>After you have edited</u>, have your statement read by

- Friends and non-scientists for general writing and flow
- Your PI, your IC Training Director, OITE staff, undergraduate teachers for <u>content</u> and style
- Someone with experience on an admissions committee



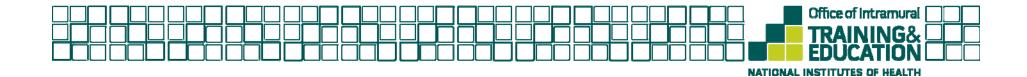
#### **Common Mistakes**

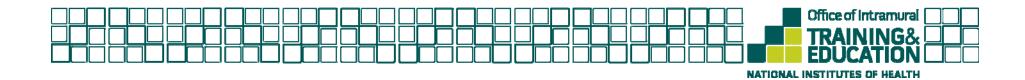
- Not enough intellectual depth
- Too much humor (or drama)
- Too long too short
- Failure to answer the question(s) asked
- Failure to explain a weakness in your application
- Trying to impress the committee with big words
- Poorly written, written in the passive voice, or wordy



#### Things to Avoid

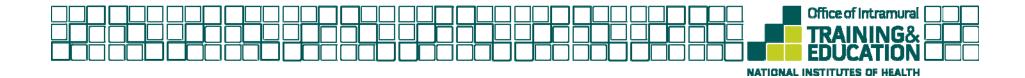
- Criticizing past professors (or anyone else)
- Bad-mouthing other graduate programs
- Expressing intolerant religious beliefs
- Sharing political beliefs
- Extended descriptions of mental anguish
- Arrogance
- Sexist language
- Too many adjectives: wonderful, meaningful
- Flowery language



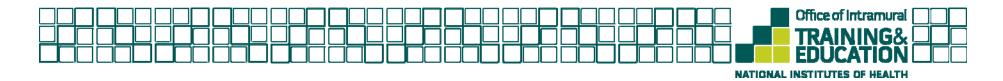


I was born and raised by my mother in a small town called Cuba, Alabama, which is located on the Mississippi border. The population is about 390, with a median income of \$18,000. There, families have several acres and a mule. Because of Cuba's geographical location and low economic status, several educators, doctors, and state representative have said, "The only things that come out of Cuba are illiterate athletes and users of the government welfare system." After having been systematically desensitized to such degrading remarks, I challenged myself not to be categorized in these ambivalent statistics, but instead, chose to be a role model for my brothers and an example of hope for the Cuba community. So, while attending Sumter County High School, I served as Vice President of the Student Government Association. One of my duties was to organize activities centered on science. As a member of the science club at Sumter High, my main goal was to get students at the high school level involved in substantive science projects. The biggest problem was no one wanted to do the work, especially quality work for science fair competitions. I presented a project on the Pythagorean theorem that won 1st place at both the local and regional science fairs. Because of that motivational event, I was inspired to follow a career in science. I graduated with honors from Sumter High School in May 2001.

Sample 1: "Hook"

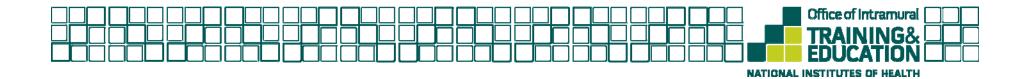


I was born and raised, by my mother, in a small town called Cuba, Alabama. The population is about 390, and in 2001 the median family income was \$18,000. In Cuba, families really do have several acres and a mule, and it has been said that the only things to come out of Cuba are illiterate athletes and welfare dependents. I resolved to be different. While attending Sumter County High School, I served as Vice President of the Student Government Association; one of my duties was to organize science activities. My efforts to involve my classmates in science did not succeed, but I completed a project on the Pythagorean theorem that won 1st place at both the local and regional science fairs. I graduated with honors in May 2001.

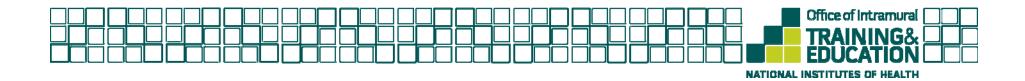


I have always been inspired by the complexity of interdisciplinary work. When I began my studies at College X, I intended to major in philosophy. I was fascinated by the richness of a subject that had applications in logic, language, truth, mind, aesthetics, and ethics; philosophy seemed a rich field with limitless boundaries for problem solving. I also knew that I enjoyed the descriptive and quantitative nature of math and physics. Thus, my first semester at College X, I decided to try an engineering course. My first project aimed to build a toy that taught a physics concept demonstrated in a musculoskeletal system. I chose to show how the different lengths of the jaw of a tiger versus an alligator were adapted to different hunting tactics demonstrating the relevance of lever arm in torque. At the end of this project, I got to teach a class of enthusiastic 6<sup>th</sup> graders about angular acceleration and torque in tigers and alligators. Consequently, I too found myself incredibly enthusiastic about engineering and decided I couldn't leave College X without majoring in it.

Sample 2: "Hook"

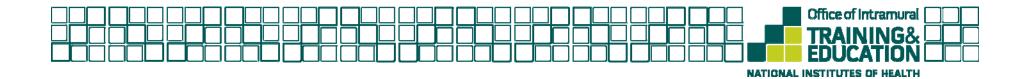


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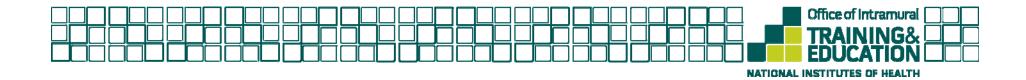


It was at Y University where, through close interactions with my peers and mentors, my enthusiasm for science and research first took root and flourished. Although I began my undergraduate education majoring solely in biology, it didn't take long after my first encounter with synthetic organic chemistry for me to realize that I wanted to focus on the area where chemistry and biology overlap. I added chemistry as a second major and sought to integrate both fields through advanced coursework in molecular/cellular biology and organic synthesis. Furthermore, I took advantage of research opportunities in both fields. The underlying passion that fueled my academic and research career to date is the same that leads me now to pursue a graduate degree in the field of chemical biology. I am drawn to this area due to its emphasis on integrating the principles and techniques employed in both biology and chemistry to address specific questions.

Sample 3: "Hook"

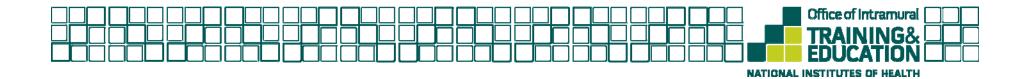


My enthusiasm for science and research first took root and flourished at Southwestern University. Although I began my undergraduate education majoring <u>solely</u> in biology, my first encounter with synthetic organic chemistry made me realize that I wanted to focus on the area where chemistry and biology overlap. I added chemistry as a second major and sought to integrate both fields through advanced coursework in molecular/cellular biology and organic synthesis. Furthermore, I took advantage of research opportunities in both fields. The underlying passion that has fueled my academic and research career to date is the same that leads me now to pursue a graduate degree in the field of chemical biology. I am drawn to this area due to its emphasis on integrating the principles and techniques employed in both biology and chemistry to address specific questions.

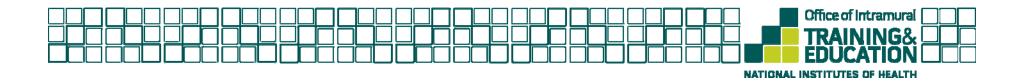


After completing my bachelor's degree, I accepted a fellowship with the National Institutes of Health in Bethesda, MD. I am currently associated with the Lab of Cellular and Developmental Biology headed by Dr. Kenneth Yamada, and working under the direct supervision of Dr. Kurt Musselman. As part of my research, I employ laser capture microdissection and microarray analysis to study gene expression in the developing submandibular gland. Our objectives are to characterize the expression profile of the developing gland and identify novel genes involved in the process of branching morphogenesis. It has been amazing for me to work alongside many top-notch scientists at one of the world's leading research centers. One of the most notable things I have observed while at the NIH is the interdisciplinary nature of modern scientific research and the need for communication between different fields.

Sample 4: Science Explanation

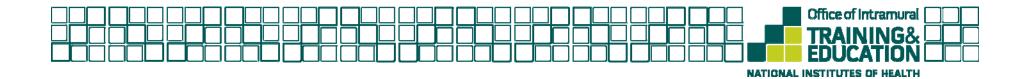


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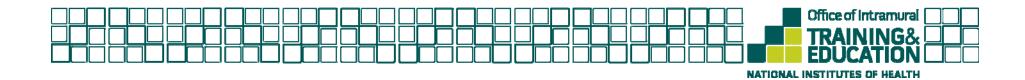


In May of 2008, I graduated with a BA in chemistry from New College of Florida, an undergraduate institution focused on original and independent research. I successfully completed an eighty-page thesis, "Reactions of Zinc and Magnesium Salts with Acetol and Carbon Dioxide as Models for Catalysis by RuBisCO." As part of the requirements of the thesis, I was responsible for planning and carrying out all of my own experimentation and successfully defending my thesis before a committee of chemistry faculty. My research involved using simple organic molecules to mimic catalysis at the active site of the photosynthetic enzyme, RuBisCO. I used NMR spectroscopy to monitor the formation of new carbon-carbon bonds between acetol, a RuBisCO substrate mimic, and carbon dioxide, with the larger goal of mitigating the effects of greenhouse gas emissions on global warming. During the eighteen months I spent preparing my thesis, I developed strong critical thinking and research skills, and working closely with my professors on this project showed me the importance of collaborative research.

Sample 5: Science Explanation

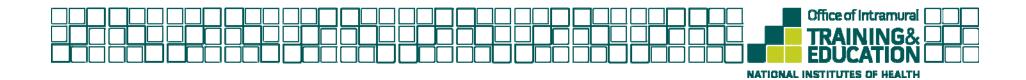


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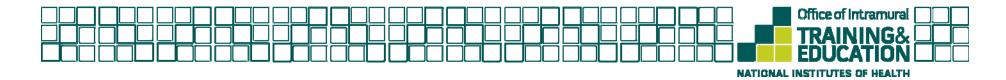


While I have specific interests in toxicology, I find many areas of molecular biology fascinating. The flexibility of the BBSP program at the University of North Carolina is appealing to me because it will allow me to explore the field of toxicology while still having the option to rotate in other molecular biology labs. In addition I like the fact that the Curriculum in Toxicology is composed of faculty from several different institutions including the National Institute of Environmental Health Sciences and the U.S. Environmental Protection Agency. In particular, I find the work of Dr. Suzanne Fenton on mammary gland development and of Dr. Elizabeth Wilson on steroid hormone receptors intriguing due to their focus on toxic chemicals found in our environment. I also find the work of Dr. Linda Birnbaum on polychlorinated biphenyls equally fascinating. I feel that graduate studies at the University of North Carolina can provide me with the education and training that I need to have a successful career in the field of toxicology, and I look forward to visiting the campus and meeting faculty.

Sample 6: "Why this program"



While I have specific interests in toxicology, I find many areas of molecular biology fascinating. The flexibility of the BBSP program at the University of North Carolina is appealing to me because it will allow me to explore the <u>field of toxicology while still having the option to rotate in other molecular</u> biology labs. In addition I like the fact that faculty from several different institutions, including the National Institute of Environmental Health Sciences and the U.S. Environmental Protection Agency, participate in the Curriculum in Toxicology . In particular, I find the focus on toxic chemicals in the environment of both Dr. Suzanne Fenton's work on mammary gland development and Dr. Elizabeth Wilson's research on steroid hormone receptors intriguing. I also find the work of Dr. Linda Birnbaum on polychlorinated biphenyls equally fascinating. <u>I feel that graduate studies at</u> the University of North Carolina can provide me with the education and training that I need to have a successful career in the field of toxicology, and I look forward to visiting the campus and meeting faculty.



#### **General Writing Principles**

- Be specific and accurate.
- Make certain grammar and spelling are perfect.
- Avoid lofty sounding statements that communicate little.
- Be ruthless about eliminating extra words.
- Begin each paragraph with a topic sentence and make certain all sentences in the paragraph address the topic.
- Use white space to make the document look easy to read.