

Dear *****,

I read your essay with great interest, and enjoyed learning how you ultimately decided to apply for the Ph.D. program at ***** University's Institute of ***** Sciences. You have performed several interesting studies, and have a very specific idea about what you intend to research. It is also fascinating that your research could eventually contribute to scientific breakthroughs that could lead to advancements in cancer treatment.

Your grammar was very good, although phrases were changed to make the writing more formal and fluid. There were some points in the essay that could have been more concise, and these areas were revised. Your original essay was 1,007 words, which was reduced to 935 words in the revision.

General Overview:

It is good that you provided so many details, but you need to be a little more succinct. The admissions committee reviewing your admissions essay will be very well versed in your field of study and do not require extended explanations. Since the essay is not long, you do not need bolded subtitles as this makes the essay look more like a business proposal, and detracts from the transitions between the paragraphs. There are a few points in the essay where you need to be more positive about yourself and your accomplishments. Your essay should not be boastful, but it should be direct, concise, and display your self-confidence.

Specific Suggestions by Essay:

Paragraph 1:

Your opening was weak. It needs to focus more directly on what you want to study, what program to which you are applying, and your ultimate career goals. The explanation of proteins and amino acids is important, but should be placed further down in the essay. Some of your wording was a little awkward, (i.e. "when I realized more about proteins,") so this was changed to be more formal. When you mention that it is "Admittedly different from my previous studies," this sounds a little too negative. ***** , Molecular ***** and Cell ***** are very broad fields. Your previous experience is important and relevant.

Paragraph 2:

This was good information that needed to be summarized. The last sentence was too long (it had five commas), and needed to be shortened.

Paragraph 3:

This paragraph was a bit too long, and needed to be divided into separate paragraphs – each having a theme. The first theme was your work in graduate school. Another theme, which deserved its own paragraph, is the implications of your work, and it is here you can mention *****.

Paragraph 4:

[Omitted]

*****,

You have some very good experience, and have obvious enthusiasm and interest in the field of ***** and in the study of proteins. The revisions make your writing more focused, and more formal to fit into the scheme of what an American Admissions Committee will expect. The revisions also make your essay stronger, and more assertive. It is important to remember, not only will you benefit from ***** --- but ***** will benefit from having you.

I sincerely hope you find my notes and suggestions helpful, and this contributes to a successful admissions process. I wish you the best of luck in your endeavors. If you have any questions, feel free to e-mail Top Admit.

Sincerely,

Top Admit International Consulting

BEFORE:

Motivation

My studies of ***** began with the study of amino acids, and the more I studied, the more I became intrigued by proteins; just 21 amino acids can create innumerable proteins, which can in turn perform different functions through folding. As I realized more about proteins, I increasingly wanted to learn more about them. Additionally, I am greatly interested in the study of ***** , and how different ***** pathways are controlled by different enzymes and proteins, producing different results. Admittedly, ***** is different from my previous studies, which largely involved direct observation, while ***** requires a continuing process of experimentation to investigate questions further and gather empirical evidence. It is a broad field, and one that can help solve a great number of problems, and I hope that you will see fit to accept me into your program.

Academic Background

During my undergraduate studies, I studied a selection of 25 ***** under the supervision of Professor ***** at the National Research Institute of ***** Medicine. In the course of this, we observed colonies of the different ***** and carried out MTT

assaying to select cell toxic *****, carrying out further large-scale culturing, followed by conducting extractions from the fungal suspension. We then proceeded to perform ***** and then purify the toxic compounds. This was a valuable experience for me, as I had to assign time to carry out this work outside of my normal class schedule, and doing this work taught me to become more effective, a quicker learner, more able to find the best method for continuing my work, and how to manage my time more effectively.

For my graduate study I enrolled in the Institute of ***** Sciences at National ***** University, where I was lucky enough to study under Professor *****, who is currently a professor in the School of ***** at National Taiwan University. Together we carried out research into “Studies on ***** from ***** *sumatrana*” extracting and purifying secondary metabolites and find six new compounds. We used ***** spectrography to determine their chemical structure and analyze the compounds toxic to human tumor cells. We have published on ***** *Bulletin* and another manuscript was submitted on *****. Additionally, we investigated the mechanisms of secondary metabolites in plants; some of these secondary metabolites are highly toxic, and can be used as agents by the plants in resisting harsh environments. The study of natural compounds has been a particularly popular field within Chinese herbal medicine in recent years, and the application of secondary metabolites to human cancers has benefited patients greatly; one of the most representatives of these is the drug *****, which is a derivative obtained through isolation from ***** and synthesize. The function of ***** is to bind with cellular β -tubling, leading to mitosis and preventing the tumor cells from further dividing, resulting in an anti-tumor effect. This discovery is a breakthrough intreatment of breast and cervical cancer.

AFTER:

It is an exciting time to be a biochemist. Not only has the isolation of new compounds and proteins created pharmaceutical drugs that have led to breakthroughs in the treatment of diabetes, obesity, heart disease, and cancer, but the increasing globalization of the scientific community has engendered worldwide cooperation, and accelerated the pace of discovery. While the most advanced ***** laboratories have historically been in the United States and Europe -- this is changing rapidly as the scientific community is growing in Southeast Asia. My objective is to broaden my education and obtain a Ph.D. in ***** at ***** University’s Institute of ***** Sciences in the United States. At *****, I plan to learn the latest research techniques and experimental design techniques that will allow me to return to Taiwan and contribute to my country’s growing scientific community.

During my undergraduate years, I first became intrigued with the study of amino acids. I found it fascinating that a mere 21 amino acids can be used to create innumerable proteins, which can be used, through folding, to perform beneficial functions in living organisms. I am particularly interested in metabolism, and how the human body modifies chemical compounds in cells. By studying ***** pathways we can develop and test compounds to speed up beneficial processes (like cell regeneration), or retard harmful processes (like the division of cancer cells).

To this point, my study has focused primarily on studying the reactions of different compounds, and by direct observation. I would like my ***** experience as the foundation to move in a new direction: studying experimental design and the discovery of new compounds. I want to understand the entire process of scientific

discovery – from understanding a problem, to developing compounds, to testing the compounds through empirical evidence, and finally, learning how these scientific discoveries have practical implication in the field of medicine.

Through its laboratories, its esteemed faculty, and cutting-edge research, ***** University will best allow me to meet my personal objectives. I am particularly interested in Professor *****'s research on the role of his newly discovered protein, ***** in DNA replication. I am also interested in the work of Professor ***** who has researched the role of proteins in the evolution of living organisms.

While I have not had in-depth experience in clinical research, I did have an opportunity to study 25 ***** under the supervision of Professor Yao-Haur Kuo at the National Research Institute of Chinese Medicine as an undergraduate. In this research we observed colonies of different ***** and conducted MTT assaying to select cell toxic *****. Furthermore, we expanded this research to conduct further large-scale culturing, followed by extractions from the fungal suspension. We then proceeded to perform chromatography and then purify the toxic compounds. This was a valuable experience for me, but not just from the learning environment, I had to effectively manage my time as I conducted these experiments in addition to my normal class schedule.

For my graduate study, I enrolled in the Institute of Biological Sciences at National ***** University, where I was fortunate to study under Professor ***** , who is currently a professor in the School of ***** at National Taiwan University. Together we conducted research into “Studies on ***** Sumatrana” by extracting and purifying secondary metabolites. During our work we discovered six new compounds. We used ***** spectrography to determine their chemical structure and analyzed the compounds determined to be toxic to human tumor cells.

We have published our work in the ***** *Bulletin* and another manuscript was submitted to ***** . We undertook another project to investigate the mechanisms of secondary metabolites in plants. The study of natural compounds has been an emerging field within Chinese herbal medicine as the application of secondary metabolites to human cancers has benefited patients. The most notable example of this is the drug, Paclitaxel, which was derived from a compound found in Pacific Yew trees, and has been instrumental in the fight against breast and cervical cancer.

[Omitted]