

## Courtney Bonney – Personal Statement

In the past I have tried to challenge myself by working in fields which do not necessarily suit my natural abilities, hoping that by studying intensively in the areas where I found myself lacking I could make myself a well rounded individual, a sort of Renaissance man of the 21<sup>st</sup> century. I found a greater understanding of myself and the physical world through my undergraduate studies in physics at Truman State University, a premier liberal arts institution, and laid the necessary groundwork for a career through my undergraduate research experiences in agricultural science.

Residing within me is a love of agriculture and the fundamental relationship between humans and the land. At age nine I wrote a woman researching genetic diversity within corn hybrids, because I wanted to understand how it was possible that so much variety could exist in such a small world. As I grew up, I began a quest for simplicity that led me away from agriculture and into physics where simplicity seems more easily attainable. I saw physics as a science that is clear and demonstrable, that uses simplified models to explain countless complexities.

Over this past year I've come back in contact with the passion of my youth and found that the tools of physics can be applied to studying something as complex as organic systems. In the summer of 2005 I worked with Dr. Mark Campbell at Truman State University on the calibration of a near-infrared spectroscope for use with low phytate corn. I spent two months gathering data, working in the field, and improving the procedure for future use. My background in physics became useful in speeding up the data analysis. I chose to work on this project because of its link to environmental conservation; the information obtained from my research will be implemented in an attempt to decrease phosphorous pollution.

Through my graduate studies I hope to become a researcher of a higher caliber by writing publications, adding to my knowledge in chemistry and biology, and working directly in the laboratory. I covet from all of the academic disciplines: As an undergrad I habitually searched out lectures, sat in on classes outside my concentration, and chose an interdisciplinary approach to my course selection. I'm searching for an institution that freely implements non-traditional methods; I feel that growth in environmental and agricultural knowledge is attained through more hands on experience such as work in the field, in the lab, open discussion, and collaboration within the research community than through one-dimensional lecture settings.

I plan on pursuing a career in environmental studies with a focus in soil conservation and management. I look forward to being an integral part of a movement to see agricultural lands reach their highest potential while limiting their impact on natural habitat. I believe the interdisciplinary vision of your institution coincides ideally with my vision and this gives me confidence and hope in pursuing my advanced degree through your institution.