December 12, 2011

Before entering college, I deeply enjoyed biology, but had reservations about not pursuing a degree in a mathematics-related field. The day I visited the University of Scranton, a professor described the biomathematics major and since then, the integration of both math and biology has fascinated me. Statistics is one of the few fields that can help researchers describe natural phenomena and infer relationships about the world using rigorous tools. The fact that the fruits of this discipline can directly affect the treatment of diseases, development of policy, and population patterns are large reasons why I would like to continue my education in statistics.

After working for over a year on Master's-level projects, I feel that I have become a leader and a resource for my colleagues. Furthermore, I have developed a desire for a deeper understanding of the field of statistics. Also, I feel that learning cutting-edge statistical methods will increase my ability to tackle complex research problems. Thus, I believe that obtaining a PhD in Statistics will help me to achieve these goals.

Working for the Johns Hopkins Biostatistics Consulting Center (JHBC) for the past year has provided me the opportunity to collaborate with experts in the field, work on a diversity of assignments, and acquire a competitive skill set. The various projects I have worked on include a multi-center stroke trial, an observational study of a pediatric intensive care unit, and functional MRI analysis in children with ADHD and autism. Through these projects, I have gained insight into the work of multidisciplinary statisticians. One commonality I have seen throughout is that one needs adequate **fundamentals** in order to produce the highest quality of work.

Although I have gained fundamental knowledge of statistics through my Master's program and work experience at JHBC, I would like to further broaden my knowledge and expertise. Therefore, to increase my knowledge and continue working on topics central to public health and expand it to other areas, applying to the program at the Wharton School at the University of Pennsylvania is a standout choice. Not only is this school one of the most respected public health institutions, but it also has tremendous research opportunities.

More importantly, the school fosters collaboration between researchers, financial experts, and most importantly, statisticians. Overall, after spending three years within this field, I am confident that obtaining a PhD in Statistics is the necessary next step. This degree will inevitably provide me the tools and skills to approach complex and diverse problems. Ultimately, it will not only allow me to approach statistical issues that not only interest me, but also think more analytically towards any problem.

One added benefit is that I am from the suburbs in Philadelphia and would enjoy working so close to my hometown.