

Medical School and Healthcare: Before

There is an increasing emphasis on health issues nowadays. This made biostatistics, which played an important role in medical research to be a field worth studied. This is the reason why I want to purchase a master degree in biostatistics.

I majored in statistics during my undergraduate in ***** University. At first, I thought statistics was all about analyzing data from the commercial field. But afterwards, I was very lucky to join the course “Statistics in Epidemiology”. I first find out the importance of statistics in the medical field and how this subject can benefit this world by using it in medical research.

During my undergraduate, in addition to the basic subjects of statistics, I also took classes in biostatistics such as Categorical Data Analysis, Survival Analysis, Design and Analysis of Clinical Trials, Analysis of Longitudinal Data, and Statistical Consulting. The Department of Statistics also awarded me a Medical Statistics Program Certification for earning good points in all the biostatistics courses mentioned above. Only three students out of sixty-four were awarded this certification.

I am also well-trained in using statistical software packages. Large database in medical research rely on statistical software for analysis. So during my undergraduate, I completed the course, “Statistical Packages,” which taught SPSS, SAS, and R-project. I used these packages well and completed many projects in other classes. My ability in these software packages also helped me a lot on my work after I graduate.

In my free time in college, I joined the volleyball team of the Statistics Department for four year straight and worked as an elementary school math tutor for two years. I learned the importance of team work and to respect everyone on the team from my team mates. More importantly, I learned that no matter what, we should never give up. I was not a good player at first, but I kept trying then became one of the best players on the team. Our team even won the Statistics Cup championship during my years there. From the work as a tutor, I learnt to be very patient when teaching, since communicating with children is very different from that with adults. This also helped me in studying as it made me to gain more patience when facing a difficult problem.

After I graduated from college, I had a chance to take all what I have learnt into practice, which was working in the ***** in Taiwan as a research assistant. I worked under Dr. ***** and took charge of the research “Improve outcome of multi/extensively drug-resistant tuberculosis through intensive directly observed treatment, short course program.” I learnt a lot from Dr. *****. When I were in college,

in my eyes, the data that I use to analyze is just a bunch of numbers, but Dr. **** made me understand that each data represent a real person and I must treat them seriously. Biostatistics is not just about playing with numbers, but a very important part of medical research.

Furthermore, this was my first time to deal with real data. During my undergraduate, although I had many opportunities to do data analysis, but these data were often faked or collated. I struggled a little bit when I first starting to analyze these data that had been collected and filed by nurse. The reason is that there was a lot of missing data or data that was not logical. So I had to spend a lot of time to debug. Afterwards, I also found the difficulty of dealing with real data. There were a lot of details that we should be cautious, for example, whether the data meets the assumptions of the model, collinearity or interactions between variables, etc. When facing these problems there are many different statistical methods to use. I realized that undergraduate education alone is not sufficient enough to support my professional aspirations. There is still much to learn in biostatistics.

In the research that I have mentioned above, we used survival analysis to compare the outcome of the two groups. Since the research is a cohort study, we also used the aspects in longitudinal study. The more and more I use these two biostatistical methods, I am more and more interested in them. In the future, I wish to study more in these two biostatistics methods, and one day I can contribute it to medical research.

To create the present for the future is very important. We should determine which things could and should be done. Then find ways to make it happen. So far for me, the best choice for fulfill my goal is to apply to ***** University. The most important reason why I want to purchase a master degree in biostatistics in ***** University is that in addition to fulfill the course work, students also have to complete a one-term practicum and capstone experience. In my opinion, learning is not all about studying in books, but also gaining experience from the field. The practicum plan of ***** University exactly conforms to my ideal. The second reason is the seminars that often held. Student could learn a lot from biostatisticians who came from different universities. Furthermore, the ***** Library holds a big number of books in statistics, math and probability. This enables students to gain more knowledge in this field.