Dear GSK research team,

As a 3rd year Ph.D. student majoring in Biostatistics at the University of Pittsburgh, I was excited to see your posting for 2020 summer internship positions on stattrak. Working as an intern with your research team would be an exciting and unique experience for me.

Over two years of study in the Ph.D. program helped me build a solid foundation. The statistics courses like Bayesian data science, likelihood theory and high-dimensional statistics have strengthened my theoretical knowledge in statistics and ability to do statistical modelling and inference. Meanwhile, I also get involved in several research projects. In the meta-analysis project, we try to develop methodology for detecting weak, sparse and highly heterogeneous signals by combining p-values from multiple independent studies, while in the single cell RNA sequencing data project, we try to build a classification model combining GLMM and sparse group lasso to select informative genes and cell types simultaneously. I also get involved in the outcome guided disease subtyping project where we try to develop methodology building connection between clinical data analysis and high throughput molecular data.

As a Graduate Student Researcher (GSR), I am also involved in many collaborative projects related to biology and immunology of ovarian cancer and endometriosis. The GSR training significantly strengthened my abilities to solve practical statistical problems. In addition, I have developed strong communication and presentation skills through my collaborative experience with several biologists and physicians.

I regard this internship opportunity as a valuable chance. I believe that my solid educational background, extensive research experiences and strong communication skills make me a strong candidate for this position. If my credentials are of interest to you, please feel free to contact me at [yuf31@pitt.edu](mailto:yuf31@pitt.edu) or 914-314-9339. Thank you for your precious time and consideration!

Sincerely,

Yusi Fang