During the past year, I have used the endowment funds to support a PhD student to aid in my research. Below I have summarized the research progress I have made over the year.

**Publications:** I co-authored two publications and submitted three manuscripts in peer-reviewed journals. These publications and manuscripts are listed below (the names of graduate students are underlined).


**Submitted manuscripts:**

3. Wang M, **Zhang S**, Sha Q. A computationally efficient clustering linear combination approach to jointly analyze multiple phenotypes for GWAS. The ASHG 2021 Annual Meeting, Virtual. PLOS ONE.
Conference presentations: I collaborated with my colleagues and graduate students in five projects that were presented at two of the largest international conferences in statistical genetics. All presentations were given by a graduate student (the first author).


Advising graduate students: My former and current PhD students are doing very well. After 2.5 years of postdoc training at Yale University, Xiaoyu Liang accepted a tenure track assistant professor position at the University of Tennessee Health Science Center. Joy Hu successfully defended her PhD thesis in Aug 2020 and accepted a position at the Food and Drug Administration (FDA). Currently, I am advising two PhD students: Steve Yan and Lirong Zhu. Steve is expected to graduate in Spring 2022. Lirong started her first project in the summer of 2021 and have obtained some very interesting results already.

I enjoy doing research and advising graduate students. The endowment funds continue to play a crucial role in my research. I would like to again thank Ms. and Mr. Henes for their generous sponsorship.