This summer, I worked with Sewanee’s Economics Department as an undergraduate research assistant for Dr. Tammy Schlosky. I undertook a full-time four-week and part-time six-week dual research project: a research assistantship with professor Schlosky and my independent research paper, with a greater focus on the latter.

The first topic is to find a spatial correlation in life expectancy in neighboring countries and document direct and indirect spillover effects of each determinant of life expectancy from one country to its neighbors. Cross-national studies show neighboring countries tend to have similar population characteristics such as life expectancy and economic variables such as gross national product. The second topic is to examine the link between a world trade organization (WTO) membership, total trade volumes, and economic growth. The World Trade Organization (WTO), established in 1995 under the foundation of the General Agreement on Tariffs and Trade (GATT), is an intergovernmental commerce agency which provides framework and legal ground rules for negotiations and dispute resolution among its members, for the purpose of promoting non-discriminating, predictable, more competitive, and fair trade flows. WTO’s primary goal has been to lower trade barriers and open markets for trade through a series of agreements negotiated and signed by its members. A majority of WTO members are developing countries, comprising of highly diverse background, very different issues, and very special needs. Therefore, these members are provided with differential treatment and various means of assistance. In particular, with its most current launch of the Doha Development Agenda (DDA) in 2001, WTO claimed to shift its focus into helping its the developing and least developed nations by pursuing further trade liberalization and substantial assistance to these members. While this negotiation round
appears to be an ambitious effort to make globalization more inclusive and increase global welfare, the project has faced serious challenges, and has failed to meet two important deadlines in 2005 and 2006. The trade system has received many criticisms on its policies towards its developing-country members. My paper attempts to contribute to the extensive empirical works on the role of WTO in enhancing world trade and economic growth by utilizing a different method from the leading gravity theories. Raising the question, “Does WTO Membership Promote Trade Flows and Economic Growth for its Developing-Country Members?,” the paper re-evaluates the GATT/WTO trade effect according to subsets of the members - developed versus developing nations, by using panel data model. Instead of examining bilateral trade flows between particular pairs of countries, I look at total trade flows of WTO members to the world, and national income and GDP growth as a whole. Besides WTO membership and observing obligation, this paper controls for the traditional and new determinants of trade patterns introduced and studied by other researchers, one of whom was Gourdon (2009).

During the ten-week research, my project took advantage of literature reviews and reports, World Bank and Economic Freedom House’s data, and statistics software. During the first four weeks, I gathered and studied peer-reviewed literature that match the interest of both projects, and summarized with a specific format on Excel. I then collected data of the dependent variables - life expectancy at birth in total and gender-based for the first project, and total trade volumes to the world, and GDP per capita growth for the second project. I also gathered data on explanatory variables for my WTO project, including WTO membership and year of accession, economy categories (developing, developed, or transition), geographical variables (landlocked or island and total surface area), Ease of Doing Business index, Economic Freedom index, current
account balance, employment rate, exchange rate, inflows of foreign direct investment, global competitiveness index, and the ICRG Indicator of Quality of Government index. After refining the data on Excel, I ran the regression on Stata software to generate results.

My biggest challenge was the impossibility to carry on my original research topic, which was to examine the economics cross-strait relations and political barriers of Taiwan and mainland China. Even though I seek to determine whether the increasingly symbiotic relationship between Taiwan and China would have any effect on Taiwan’s dependency, I could not find any trade data between China and Taiwan before 1949 and a few years after that due to their closed-door policy. In addition, the ten-week timeline did not allow me enough time to finish my research project as expected. I was able to run the regression once, and reached a conclusion that there is an inconsiderable positive relationship between WTO membership and trade volumes. This indicates that WTO membership does, but not significantly, increase total trades of its members. WTO membership also seems not to contribute to positive economic growth. However, I needed to employ a different model besides panel data, for example, gravity model, in order to have a more thorough result. I have been composing my paper and reviewing further existing literatures to improve my original method. I intend to resume my research during the school year, and finish my final paper by November 2015 to register for the 2016 Midwest Economics Association and the Pennsylvania Economics Association conference.

Overall, this research opportunity was a great learning experience that enables me to familiarize with research process, academic writing, and econometrics models, as well as to gain insightful knowledge on my economics major. Besides technical skills, I also acquired very important soft skills for whichever profession I decide to pursue in the future, for example,
problem-solving, multi-tasking, time-management, and writing skills. This experience is significantly beneficial for my future economics and Asian studies coursework, particularly my senior research seminar, and senior thesis paper. Furthermore, this research project will be my essential first step towards the graduate level, at which I wish to focus on economics development and international finance in South East Asia. I am confident that my academic work and scholarly outcomes will become a productive asset to the academic life of University of the South.