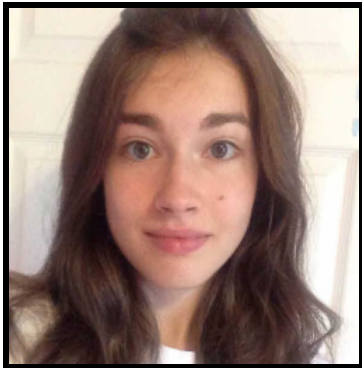


Summer Internship Report 2017

Kelsie Schiavone, C'19

Hometown: Danville, Kentucky



**Biology Research Assistantship:
Gambusia Fish and Alligators
Sewanee, Tennessee**

Provide an overview of the organization/research project and a summary of your responsibilities, tasks, and/or projects.

My research this summer focused primarily on the effects of androgens on the morphology of *Gambusia* fish collected in Sewanee, TN. Additionally, my partner and I researched the reproductive structures and behavior of alligators. My jobs in the laboratory included processing fish tissue samples, preparing tissue sample slides, compiling data in spreadsheets, and writing protocols for lab procedures.

During your internship, what did you accomplish or how did you make a difference? In what ways did you grow in your professional and technical skills?

I was able to develop and expand my laboratory techniques and skills during my internship. I was introduced to faculty members, programs, methods, and learning tools that helped me to become a better student and scientist. By working closely with my faculty supervisor, I learned how to approach problems and tough questions with creativity and develop practical solutions and procedures. When we experienced setbacks or uncertainty in the lab, I was challenged to create solutions and learn new laboratory skills. For example, when my partner and I were presented with over 600 tissue samples and told to get them into a form that could be analyzed using x-ray spectroscopy, we had to collaborate and use trial and error to develop a procedure that allowed us to do so.

Describe a problem that you helped to solve at your internship. What skills or knowledge from your education at Sewanee helped you address the problem?

My partner and I developed a procedure that allowed us to take tissue samples from fish and turn them into pellets of a specific size that could be analyzed using x-ray spectroscopy. It was necessary for us to do this in order for our research to progress. My education and lab experience at Sewanee gave me the confidence and analytical approach necessary to tackle this objective. I have developed

teamwork, leadership, and laboratory skills that enabled me to accomplish my goals during my internship.

In what way were your teamwork skills strengthened?

I collaborated with my lab partner to come up with solutions to problems and research topics that would help us perform better in the lab. I learned 3D model construction from my partner, and I taught him how to use excel to consolidate data. We worked as a team to solve problems and learn new skills.

How did your internship affect your career plans?

I am now planning to major in Biology and possibly pursue research after completing my undergraduate education.

In what ways did your internship cause you to encounter people of different backgrounds from your own? What steps did you take to communicate effectively with such persons? What did you learn from such persons' perspectives?

I lived and worked with students from all over the world this summer while living in Courts Hall. I enjoyed asking them questions about their homes and cultures while we cooked in the common kitchen area. I met and befriended peers from Nepal, Ghana, and Greece during my internship. Living in the same dorm as them was an invaluable experience, and I gained some wonderful new friends and cultural knowledge.

Words of advice for future interns (housing, transportation, etc.)?

It is absolutely essential to have your own car during your internship. Most importantly, bring as many fans as you possibly can, as the dorms are not air-conditioned. If you think you've packed enough fans, you are mistaken. A de-humidifier is also a good choice if you aren't fond of being in a constant state of dampness. Bring a fridge, blender, and pots/pans, as the kitchen is small and there isn't much cookware available. Winchester Walmart is your best friend.

Words of thanks to your internship funding donors:

I would like to give my sincerest thanks to the donors who made my internship possible. I had one of the most rewarding and challenging summers of my life thanks to the opportunity you provided. In addition to learning new laboratory techniques, discovering a new field of interest in Histology, and making valuable connections, I was able to connect with wonderful people and travel to new places. I have had a fun, experience-filled summer thanks to your generosity.