Tufts Summer Scholars – Cardiovascular Tissue Engineering Lab
http://sackler.tufts.edu/Faculty-and-Research/Faculty-Research-Pages/Lauren-Black

- Sydney Char (Biomedical Engineering, 2015)
- Student Researcher
- Full-time, 35-40 hours per week
- Paid

What do you do as an intern at this organization?
My project involves determining the influence of stiffness and composition of tissues on calcific aortic valve disease (CAVD) progression. I use mechanical stretching experiments to mimic heart valve activity and determine how heart valve calcification occurs. I work in the lab most of the day, every day, but my hours depend on my responsibilities and experiences for that given day. I’m given a lot of independence and leeway in the project, but I follow my PI and lab mentor’s guidance and instruction.

How did you find your internship?
I found it through Tufts!

What do you enjoy most about your internship?
Apart from the added convenience and fun of being in Boston for the summer, I enjoy being around people that I can potentially continue working with during the school year. I considered doing a research program at a different university, but I decided to stay at Tufts so I could learn more about the research that's happening right here! Tufts is a great place to perform biomedical engineering research.

What do you find challenging?
Since I didn’t have much experience working independently in a lab prior to this summer, the first couple of weeks were pretty rough as I was getting acquainted with lab safety, basic lab techniques, and generally trying to not screw anything up. But now, even though I'm continually learning from my mistakes and failures, I can see how much I've learned and grown. That said, the challenging part of the internship is to remember not to rush. We’re given 10 weeks (minimum) in this program, and in October we have to present multiple times on what we accomplished. Naturally, you want to have a lot to show, but oftentimes you don’t have a lot of results (10 weeks is a short time). I had to constantly remind myself that research can be slow, but it's baby steps closer to a huge revelation!

What advice would you offer to someone who wants to make the most of an internship like yours?
Do something that you don't necessarily feel comfortable with. Try something different and challenging, and don't be afraid to make mistakes! If you want to do Summer Scholars, find a professor who you want to get to know and who's involved with a project that you TRULY care about. Talk to your professors early in the spring semester, or even at the end of fall semester!

About the Organization
Tufts Summer Scholars – Cardiovascular Tissue Engineering Lab
Boston, MA

Dr. Black's research interests lie in understanding the biophysical signaling mechanisms responsible for the development of healthy and diseased myocardium inclusive of mechanical stress/strain, electrical stimulation, and cell-cell/ cell-matrix interactions. The ultimate goal of his research is to design and develop new methods for repairing diseased or damaged myocardium.