

Student Profile

Rachel J. Smith – Biomedical Engineering PhD Program



Your Time at UCI

What made you decide to pursue a graduate degree?

I went to the University of Tennessee, Knoxville (UTK) for my undergraduate education. During my junior year, I was offered an appointment as a research intern at Oak Ridge National Laboratory, a DOE lab near UTK campus. I noticed that all the people with the “cool” jobs at ORNL had PhDs, so I decided I also wanted a PhD. Neither of my parents had gone to grad school, so I didn’t have much guidance on what I was getting myself into. Luckily I stayed the course, because now I can’t imagine having done anything else.

Why did you choose to come to UCI?

After my acceptance in February 2014, I visited UCI and was immediately enraptured by the weather, the beach, and the incredibly kind students and faculty I met. I was unsure of which lab I was going to join when I began at UCI, so I appreciated that the Biomedical Engineering department provided time for students to rotate in different labs before committing to them. I attended another visitation day at a different university after I visited UCI, but I had already made my decision.

If you are conducting research, how would you explain your research and its significance to your grandparent?

My research focuses on infantile spasms, a form of pediatric epilepsy that causes clusters of seizures in children under two years old. The disease can have devastating impacts on the infant’s development if not successfully treated as quickly as possible. In my lab, we analyze these patients’ brain signals to predict when patients are going to respond to a given treatment. We hope that early prediction of treatment response will expedite the treatment process and improve patients’ overall outcome.

What are your hobbies/passions outside of research?

I began playing ultimate frisbee in college and have continued to play on club teams in the Orange County area. Hiking and camping have become new hobbies of mine, but I don’t get to go as often as I would like. I am really involved with my church in Old Town Orange and love to study in coffee shops up there. Lastly, I love live music, so I drive up to LA every so often to see my favorite bands that come through town.

Reflections

What are you most proud of accomplishing (so far) in your graduate program?

I was most proud when I picked up my Master's of Science in Biomedical Engineering diploma from the Registrar's Office. My degree was technically conferred when I completed my qualifying exam, but there was something about holding the paper that made it special. It gave me a boost of confidence to keep moving toward my goal of a doctorate.

What is your most memorable moment/experience at UCI to date?

What advice do you have for a new graduate student in your program?

My advice to new students is to get involved on campus EARLY. UCI has so many great clubs and resources, it is to your advantage to use these resources to the fullest. By getting involved early, you not only are adding professional development and service to your CV and resume, you are building relationships with students and faculty across campus. You may also find something you are passionate about that you wouldn't have otherwise known about.

Career

What do you see yourself doing in five or ten years?

I aim to become a faculty member at a research-focused university like UCI. In addition to my research, I have sought extensive training in evidence-based teaching practices and sought opportunities for both undergraduate and graduate student mentorship. I believe these efforts have prepared me for a future faculty position to eventually shape the next generation of biomedical engineers.