Education at URMC – Student Perspectives

Name: Molly Jaynes

Hometown: Bemus Point, NY

Undergraduate Degree: B.A. in violin from the University of Cincinnati College-Conservatory of Music

Graduate Degree: Ph.D. in Translational Biomedical Science

Areas of Interest: Movement disorders, focal dystonia

Background Information
I grew up in a small town in southwestern New York State. Both of my parents are musicians and I began playing violin when I was very young. When it came time to choose a career path, I looked to music for the answers. I knew that no matter what I ended up doing in my post-graduate career, a music degree would teach me lessons in perseverance and diligence that I could take anywhere. I was fortunate enough to end up at a great Conservatory, and while I was there I became interested in the control of movement, especially in the context of musicians. I added more science courses to my schedule and began looking at grad programs for scientific research.

Why did you choose The University of Rochester Medical Center?
The University of Rochester is a forward-thinking and collaborative establishment. The focus on interdisciplinary research fit the lines of my interests perfectly, and I appreciated that the U of R valued my nontraditional background. Here I have an opportunity to collaborate with both leading scientists at
the Medical Center and internationally known musicians at the Eastman School of Music, and then translate what I learn into the fields of music pedagogy and injury treatment. Also, everybody seems to be as excited about my research as I am!

Tell us about your program
The Translational Biomedical Sciences program is unique in that all of the students come to the program with diverse backgrounds and experiences. I’m doing clinical research, so I’m working with human subjects and measuring muscle activity, but some of my classmates are doing more bench-related work like growing cells or developing disease models in animals. This means we are all exposed to a little bit of everything and become well-rounded in our view of science. With an emphasis on translational research, we are always asking, “how can my work be applied to patient care?” Doing this helps us stay focused on performing the research that will be the most meaningful.

What are your career aspirations?
I’m looking forward to developing a therapy that can be helpful for musicians (or others) with neurological movement disorders, but I am also interested in serving as some kind of conduit between scientists and the performing arts community. I’m interested in translating my work and the work of others into educational programs aimed at college-level or professional musicians to promote injury prevention and to the medical practitioners treating them.

What are some of the things you have learned since you came to Rochester?
The uncertainty of the economy has changed the way science is funded, with more emphasis on higher applicability and faster implementation. This type of research mainly comes from multidisciplinary teams. I’ve learned the importance of becoming a well-rounded scientist and being able to collaborate. This means that a successful scientist really has a working understanding of many different techniques, systems, and literature. Since science is becoming even more competitive, it is really important to learn how to network and communicate with many different fields.

Any advice for prospective students?
Graduate school really is about self-education, and you need to start now! I asked so many questions when I was making decisions and people were usually more than happy to help. A good graduate school will be a good fit for both your personal and professional development; for me, that was certainly the University of Rochester.