



Education at URMC – Student Perspectives



Name: Katie Evans

Hometown: Blue Springs, MO

Undergraduate Degree: B.S. in Mathematics from Truman State University

Graduate Degree: M.A. in Statistics from University of Rochester
(pursuing Ph.D. in Statistics from University of Rochester)

Areas of Interest: Identifying the number and structure of clusters of observations in complicated datasets; variable selection and outlier detection within cluster analysis.

Background Information

I grew up an only child near Kansas City, MO where I attended Blue Springs High School. There, I participated in academic, athletic, and performance clubs. Outside of school, I volunteered with different organizations and played competitive softball (and my parents, Chuck and Debbie, never missed a game!). I pursued my BS in Mathematics at Truman State University, a liberal arts college in Kirksville, MO. My undergraduate advisor, Dr. James Guffey, played a key role in helping me to develop my love of statistics. When I wasn't studying, I was very active in the campus radio station. Throughout high school and college, I took advantage of numerous summer opportunities to pursue my academic interests in new places across the Midwest. These summer camps, REU's, and internships helped me to learn more about myself and confirmed that graduate school was the right decision for me.

Why did you choose The University of Rochester Medical Center?

When looking at graduate schools, I was interested in a university that was actively engaged in important research, but one that also cares about the success of their students. Personally, I wanted to pursue my statistics degree in a program with a biomedical “flair”, allowing me to apply my analytic skills to research which could ultimately help people. Since the Department of Biostatistics and Computational Biology is located in the University of Rochester Medical Center, I believed this program, in this school, would be a great fit. I would have the same rigorous coursework as other statistical programs and the opportunity to use statistics in a medical setting at a university doing interesting and innovative research. During my first visit to the department at the medical center, I was overwhelmed by the supportive environment created by the students, faculty, and staff. I instantly felt that they were invested in me and would help give me the tools I needed to succeed.

Tell us about your program

The Department of Biostatistics and Computational Biology is a unique statistics program. The coursework is similar to what is offered in most statistics programs, but it’s location in the medical center is what sets it apart. Being a part of the Medical Center allows for the students in our department to work with different professors on collaborations with a variety of researchers who ask unique questions from their datasets.

I am excited to be supported by an NIH-funded training grant in Environmental Health Sciences Biostatistics and involved with the Seychelles Child Development Study, a research project involving the Ministries of Health and Education in Seychelles, the University of Ulster in Northern Ireland, and the University of Rochester. My own research, under the guidance of Drs. Tanzy Love and Sally Thurston, is motivated by data from the Seychelles study. My goal is to determine underlying clusters of observations within a dataset (identifying different diet groups from various nutrition measurements), by using only the most important subset of variables while being robust to outliers.

What are your career aspirations?

Before I came to University of Rochester, I was an intern in Biomedical Statistics at the Mayo Clinic in Rochester, MN where I enjoyed working on diverse projects in a rewarding environment. When I finish my Ph.D., I would like to use my degree to continue working in and developing methods for biomedical applications of statistics. I believe that using my skills to participate in and further medical research will be an exciting and satisfying career. Eventually, I would like to return to a small liberal arts college, much like my undergraduate institution, so that I can share my love of statistics with a new generation of students. I know I would not be where I am today without the encouragement of my undergraduate advisor.

What are some of the things you have learned since you came to Rochester?

Since coming to Rochester I have learned the importance of communication. Communication plays an important role in the field of statistics; our collaborations are multi-disciplinary and it is important for statisticians and researchers to ask the right questions and to understand one another's backgrounds when interpreting results. Also, as with any experience, it is important to take initiative and to become involved. By taking on new projects, working with a different professor, or attending a conference, taking steps out of my comfort zone has enabled me to discover which paths are right for me.

Any Advice for prospective students?

Maintain a healthy work-life balance! The advanced programs at University of Rochester require mental toughness and perseverance, but as a matter of well-being, it is important to know when and how to relax. Luckily, at the university and in the greater community, Rochester offers a thriving cultural, social, and active scene. Candidates wanting to learn more can contact Kaite at katie_evans@urmc.rochester.edu.