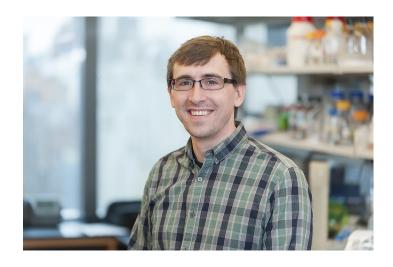
Computer Science Symposium



Sowing Random Seeds: Reproducible Science and Software Engineering

A crisis of reproducibility has been hitting science headlines in recent years, often laden with finger-pointing at poor statistical practices. Yet, as more disciplines come to rely on custom software for scientific data analysis, the role of poor software engineering practices has become more noticeable. We will discuss how tools and practices from software engineering can help to improve the reproducibility of scientific computing, with a specific look at emerging best practices in computational biology and bioinformatics. In addition to sharing some experiences about life in interdisciplinary research, I will highlight some of my work in applying Bayesian machine learning models to analyze single-cell RNA-sequencing data.



March 26, 7:00pm Roddy 149 presented by Mervin Fansler

Mervin Fansler is a 2016 MU alumnus, graduating with a B.S. in Mathematics and Computer Science. Prior to his education at MU, he worked as a web and enterprise data visualization software developer, and consulted as a systems administrator. He is currently a PhD candidate in the Tri-Institutional Program in Computational Biology and Medicine in New York City, where he is a member of the Christine Mayr Lab at Sloan Kettering Institute (MSKCC). His research involves developing software and statistical models for the analysis of single-cell RNA-sequencing data, with a focus on quantification and differential expression of alternative 3' untranslated regions.