Kelly L. Sovacool

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Education

2018-present	**PhD Bioinformatics**, *University of Michigan*, Dept. of Computational Medicine and Bioinformatics
2014-2018	**BS Biology**, *University of Kentucky*, Dept. of Biology, Minor: Computer Science

Research Experience

2019-present	**Graduate Student Researcher**, *Schloss Lab*, Dept. of Microbiology and Immunology, University of Michigan ○ Developing bioinformatics tools & pipelines for microbial ecology. ○ 16S rRNA sequence and tandem mass spectrometry data analysis.
2018-2019	**Rotation Student Researcher**, *Program in Biomedical Sciences*, University of Michigan
2015-2018	**Undergraduate Lab Assistant**, *Moseley Bioinformatics Lab*, Dept. of Molecular and Cellular Biochemistry, University of Kentucky ○ Developed a computational tool for identifying sets of orthologous and paralogous gene products in whole genomes to facilitate collinearity analysis and detection of gene duplication events.
2016-2018	**BIO395 Independent Research Student**, *Weisrock Lab*, Dept. of Biology, University of Kentucky ○ Developed scripts and a SNP calling pipeline for amplicon sequence data. ○ Population structure analysis of the *Ambystoma tigrinum* species complex. ○ Bayesian species delimitation of the *Desmognathus fuscus* species complex.
2015-2016	**Undergraduate Lab Assistant**, *Jaromczyk Lab*, Dept. of Computer Science, University of Kentucky ○ Maintained the *Epichloë festucae* genome project database. ○ Analyzed RNA-seq data of *Chenopodium quinoa* and coffee ringspot virus.

Awards

Grants & Fellowships

2019-2020	**NIH T32 Bioinformatics Training Program Fellow** University of Michigan

Dec 2017	**Oswald Research & Creativity Award**, *UK Office of Undergraduate Research*, 2nd place in the Biological Sciences category ($200) University of Kentucky
May-Aug 2017	**Summer Research Grant**, *UK Office of Undergraduate Research*, ($2,000) University of Kentucky
2014-2018	**Presidential Scholarship**, (out-of-state full tuition) University of Kentucky

Honors

May 2018	**Graduated Cum Laude with Departmental Honors in Biology** University of Kentucky
May 2019	**Biology Undergraduate Research Award Nominee** University of Kentucky
2014-2018	**Lewis Honors College** University of Kentucky

Service

2019-present **Graduate Student Coordinator**, *Data Analysis Networking Group*, University of Michigan, um-dang.github.io
- Organize monthly meetings & a one-day symposium for researchers to sharpen their data analysis skills.
- Funded by a Rackham Interdisciplinary Workshop grant.

2018-present **Executive Committee Member**, *Girls Who Code at UM-DCMB*, University of Michigan, github.com/gwc-dcmb
- Plan, apply for funding, develop curriculum, & facilitate collaborative development of our resources to teach introductory programming & data science to high school women.

2009-present **Live Sound Engineer**, *for various churches and non-profit organizations.*
- Set up, maintain, repair, and operate front of house, monitor, and recording systems during sound checks, rehearsals, services, and concerts.
- Train new sound techs in the art and science of live sound.

Teaching Experience

2018-present **Software Carpentry instructor**, *U-M Software Carpentry*, umswc.github.io
- 01-02 July 2019. Workshop instructor teaching the Unix shell, Git, and R.
- 22-23 May 2019. Workshop helper teaching the Unix shell, Git, and Python.
- 01 Mar 2019. Workshop helper teaching the Unix shell, Git, and Python.
- 17-18 Dec 2018. Workshop helper teaching the Unix shell, R, and Git.

2019-2020 **Facilitator & Capstone Project Mentor**, *Girls Who Code at UM-DCMB*, Weekly GWC Club for high school women, University of Michigan

15-19 July 2019	**Facilitator & Capstone Project Mentor**, *Girls Who Code at UM-DCMB*, Data Science Summer Experience, Detroit, MI
25 Apr 2019	**DNA Day Ambassador**, *MI DNA Day*, Epigenetics & scientific journeys, Ann Arbor, MI
20 Mar 2019	**Workshop helper**, *Graduate Society of Black Engineers and Scientists*, Data visualization with Python workshop, University of Michigan
16 Mar 2019	**Capstone Activity Leader**, *Females Excelling More in Math, Engineering, & Science*, Binary numbers through Ozobots with GWC at UM-DCMB, University of Michigan
Jan-May 2019	**Capstone Project Mentor**, *Girls Who Code at UM-DCMB*, Weekly GWC Club for high school women, University of Michigan
2012-2018	**Tutor**, *freelance*, for high school and college students in Biology, Calculus, Chemistry, Computer Science, and Bioinformatics.

Presentations

Apr 2018	**Showcase for Undergraduate Scholars**, *Developing a Global Homology Analysis for Comparative Genomics*, Poster, University of Kentucky
Apr 2018	**Systems Biology & Omics Integration Seminar**, *Developing a Global Homology Analysis for Comparative Genomics*, Talk, University of Kentucky
Apr 2018	**National Conference on Undergraduate Research**, *Developing a Global Homology Analysis for Comparative Genomics*, Poster, University of Central Oklahoma
Apr 2016	**Showcase for Undergraduate Scholars**, *Processing RNA-seq Reads of Plants Infected with the Coffee Ringspot Virus*, Poster, University of Kentucky
Apr 2016	**UT-KBRIN Bioinformatics Summit**, *Processing RNA-seq Reads of Plants Infected with the Coffee Ringspot Virus*, Poster, Cadiz, KY
Apr 2015	**Showcase for Undergraduate Scholars**, *The Effect of Meditation on Performance*, Poster, University of Kentucky

Continuing Education

03-04 Jun 2019	**Software Carpentry Instructor Training**, *The Carpentries* University of Michigan
01-05 May 2019	**PyCon Education Summit & Conference**, *Python Sofware Foundation* Cleveland, OH
24-26 Apr 2019	**MICROBIOL 612.2**, *Riffomonas minimalR workshop* University of Michigan