Kelly Sovacool

EDUCATION

Bachelor of Science, Biology

2014-2018

University of Kentucky, Lexington, KY

Minor: Computer Science

- 4-year Full Tuition Presidential Scholarship
- Lewis Honors College
- Honors Biology Scholar

RESEARCH

Undergraduate Lab Assistant

2015-present

Moseley Bioinformatics Lab, Dept. of Molec. & Cell. Biochemistry, University of Kentucky

Developing a computational tool for identifying sets of orthologous and paralogous gene products across any set of whole genomes to facilitate collinearity analysis and detection of gene duplication events.

BIO395 Independent Research Student

2016-present

Weisrock Lab, Dept. of Biology, University of Kentucky

- Population structure analysis of the Ambystoma tiger salamander complex.
- Bayesian species delimitation of the Desmognathus dusky salamander complex.
- Writing Bash and Python scripts for managing sequence data.
- Developing a SNP calling pipeline for amplicon sequence data

Undergraduate Lab Assistant

2015-2016

Jaromczyk Lab, Dept. of Computer Science, University of Kentucky

- Maintained the E. festucae genome project database.
- Applied methods of processing RNA-seq data to *C. quinoa* and the Coffee ringspot virus.

AWARDS

Oswald Research & Creativity Award, University of Kentucky

2017

- Awarded a \$200 prize for second place in the Biological Sciences category.
- Manuscript title: Developing a Global Homology and Collinearity Analysis Framework for Identifying Gene Duplication Events. Supervised by Prof. Hunter NB Moseley.

Summer Research Grant, University of Kentucky

2017

- Awarded a \$2,000 grant by the UK Office of Undergraduate Research to work full time on a research project during the summer.
- Project title: Developing a Global Homology and Collinearity Analysis Framework for Identifying Gene Duplication Events. Supervised by Prof. Hunter NB Moseley.

POSTERS & ORALS

Developing a Global Homology Analysis Framework for Comparative Genomics Supervised by Prof. Hunter NB Moseley.

- Poster presented at the Showcase of Undergraduate Scholars, University of Kentucky. April 25, 2018.
- Oral presentation given at the Systems Biology & Omics Integration Seminar Series, University of Kentucky. April 16, 2018.
- Poster presented at the National Conference on Undergraduate Research, University of Central Oklahoma. April 4-7, 2018.

Processing RNA-seq Reads of Plants Infected with the Coffee Ringspot Virus Supervised by Profs. Jerzy W Jaromczyk and Michael M Goodin.

- Poster presented at the Showcase of Undergraduate Scholars, University of Kentucky. April 27, 2016.
- Poster presented at the UT-KBRIN Bioinformatics Summit, Cadiz, KY. April 8-10, 2016.

The Effect of Meditation on Performance Supervised by Prof. Bruce O'Hara.

Poster presented at the Showcase of Undergraduate Scholars, University of Kentucky. April 29, 2015

OTHER WORK Tutor

2012-2017

• Tutored high school and college students in Biology, Calculus, Chemistry, Computer Science, and Bioinformatics.

Sound Technician 2009-present

- Setting up, maintaining, repairing, and operating audio equipment for bands, churches, and other non-profit organizations.
- Operating the front of house, monitor, and recording systems during sound checks, rehearsals, services, and concerts.
- Training new sound techs in the art and science of live sound.