Kelly Sovacool

✉ *kellysovacool@uky.edu*
kelly-sovacool
kelly-sovacool

Education

2014-2018 **BS Biology**, *University of Kentucky*

- Minor: Computer Science
- 4-year full tuition Presidential Scholarship
- Graduated Magna Cum Laude
- Lewis Honors College
- Departmental Honors in Biology

Research Experience

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

Dec 2017 **Oswald Research & Creativity Award**, *University of Kentucky*

- 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."
- Advisor: Prof. Hunter NB Moseley.

May 2017 **Summer Research Grant**, *University of Kentucky*

- 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."
- Advisor: Prof. Hunter NB Moseley.

Presentations

Apr 2018 **Developing a Global Homology Analysis for Comparative Genomics**, *Advisor: Prof. Hunter NB Moseley*

- Poster, *Showcase of Undergraduate Scholars*, University of Kentucky
- Oral, *Systems Biology & Omics Integration Seminar*, University of Kentucky
- Poster, *National Conference on Undergraduate Research*, University of Central Oklahoma

Apr 2016 **Processing RNA-seq Reads of Plants Infected with the Coffee Ringspot Virus**, *Advisor: Prof. Jerzy W Jaromczyk*

- Poster, *Showcase of Undergraduate Scholars*, University of Kentucky
- Poster, *UT-KBRIN Bioinformatics Summit*, Cadiz, KY

Apr 2015 **The Effect of Meditation on Performance**, *Advisor: Prof. Bruce O'Hara*

- Poster, *Showcase of Undergraduate Scholars*, University of Kentucky

Other Work

2012-2017 **Tutor**

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

2009-present **Sound Technician**

- Set up, maintain, repair, and operate audio equipment for bands, churches, and other non-profit organizations.
- Operate the 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.

Publications

M. M. Goodin, M. Farman, H. Inocencio, C. Jang, J. W. Jaromczyk, N. Moore, and K. Sovacool. Processing rna-seq data of plants infected with coffee ringspot virus. In *Proceedings of the 15th Annual UT-KBRIN Bioinformatics Summit 2016*, volume 17, page 297, Aug 2016.