

Sarah Marie Stasel

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EDUCATION

- 2022 - present **PhD student**, Department of Biology, University of Kentucky, Lexington, KY.
Advisor & Mentor: Dr. Vincent M. Cassone
Co-mentor: Dr. Carrie L. Shaffer
- 2023 – present **Graduate Certificate in College Teaching and Learning**, Graduate School, U. of Kentucky, Lexington, KY.
- 2020 - 2021 **Bachelor of Science in Biology**, Department of Biology, Western Kentucky University, Bowling Green, KY.
- 2017 - 2018 **Associate of Science**, Elizabethtown Community & Technical College, Elizabethtown, KY.

TEACHING EXPERIENCE

- Fall 2022- present **Research Assistant, U. of Kentucky, Lexington KY**
 Teaching good laboratory practice, basic microbiology, molecular biology, and chronobiology to undergraduate researchers (BIO 199, BIO 394, and BIO 395)
- Fall 2022- present **Graduate Teaching Assistant, U. of Kentucky, Lexington, KY**
 Taught BIO155 (Biological Research Skills Lab; 2 sections Fall 2022), BIO209 (Intro Microbiology Lab; 2 sections Spring 2023), and BIO309 (Microbiology Lab; 2 sections Fall 2023 & 2 sections Spring 2024)
- 2021 **Undergraduate Teaching Assistant, Western Kentucky University, Bowling Green, KY**
 Taught BIO114 (General Biology Lab for Non-Majors; 3 sections between Spring-Fall 2021) and assisted teaching BIO212 (Genome Discovery and Exploration Program; 2 sections Fall 2021).

RESEARCH EXPERIENCE

- 2022- present **Research Assistant: University of Kentucky, Lexington, KY.**
 Investigating the circadian clock and melatonin sensor mechanism in a human gut commensal *Klebsiella aerogenes*.
- 2020-2021 **Undergraduate Researcher: Science Education Alliance (SEA), Western Kentucky University, sponsored by HHMI, Bowling Green, KY.**
 Isolated novel *Mycobacterium* phage Munford and annotated *Mycobacterium* phage PeaceMeal1 through the SEA PHAGES program. Assisted in the creation of a gene library of *Mycobacterium* phage MooMoo and characterized phenotype of 5 out of 97 genes in its genome through the SEA GENES program.
- Summer 2021 **Undergraduate Summer Research Intern: KY INBRE @ University of Louisville, Louisville, Ky.** Analyzed samples by UHPLC-MS and GS-MS, assisted in the development of a microdevice method to analyze carbonyl compounds from exhaled breath.

PUBLICATIONS

Data Published Online

Porter, L., Allen, J.M., Stasel, S.M., Meece, K.Y., Pike, N.R., Gaffney, B.L., Staples, A.K., King, R.A., Rinehart, C.A., Garlena, R.A., Russell, D.A., Jacobs-Sera, D., and Hatfull, G.F. 2021 *Mycobacterium* Phage PeaceMeal1, complete genome. [GenBank: MZ355723.1](https://www.ncbi.nlm.nih.gov/genbank/MZ355723.1)

Stasel, S.M., Rowland, N.S., King, R.A. 2020. Novel *Mycobacterium* Phage Munford. [PhagesDB.org](https://phagesdb.org/)

ORAL AND POSTER PRESENTATIONS

1. Utley, A.*#, **Stasel, S.M.**, Waldrige, O.M., Cassone, V.M. 2023. Effects of gut bacteria on the circadian output of *Klebsiella aerogenes*. SC INBRE/Southeast Regional IDeA Conference 2023. Columbia Metropolitan Convention Center (CMCC). Poster presentation. September 16, 2023.
2. **Stasel, S.M.***, Waldrige, O.M., Shaffer, C.L., Cassone, V.M. 2023. Melatonin Regulates Type 1 Pilus-dependent Biofilm Production in Diverse Uropathogens. Rhythms in the Southeast Region, Virginia Tech. Invited talk. May 19, 2023.
3. **Stasel, S.M.**, Waldrige, O.M.*, Shaffer, C.L., Cassone, V.M. 2023. Melatonin regulates type 1 pilus-dependent biofilm production in diverse uropathogens. Rhythms in the Southeast Region, Virginia Tech. Poster presentation. May 19, 2023.
4. Hart, O.*#, Johnson, S.*#, Morgan, J.*#, Morton, H.*#, Mowafi, O.*#, Puskas, L.*#, Saylor, E.*#, Shoultz, M.*#, Siler, C.*#, Taul, A.*#, Vittitoe, N.*#, Vyas, B.*#, Krout, R., **Stasel, S.M.**, Waldrige, O.M., Cassone, V.M. 2023. Where does all my Tylenol™ keep going: The E. coli Case Study. Showcase of Undergraduate Scholars, University of Kentucky. Poster presentation. April 26, 2023.
5. **Stasel, S.M.***, Xie, Z., Morris, J.D., Fu, X. 2021. Development of a New Analytical Method for Analyzing Carbonyls in Exhaled Breath. Annual Kentucky Academy of Science Conference, Virtual poster presentation. Nov. 6, 2021.
6. Lusk, C.E.*, Norman, B.N., Flick, C.D.*, Sweeney, E.R., Salifu, S.N., Romero, H.G., Murphy, C.B., Xu, H.M., Schall, G.W., Tillett, C.T., Upchurch, C.P., Kamaludeen, A.D., Hoey, N.J., Delks, R.L., Godby, H.P., Smith, A.B., Meece, K.Y., Allen, J.M., **Stasel, S.M.***, Pike, N.R., Porter, L., Moore, C., Stewart, J., Rowland, N.S., King, R.A., Rinehart, C.A. 2021. Five Mycobacterium Phages: Sunshine924 (A1), PetiteSangsue (A4), Sparxx (A4), Cookiedough (A6), PeaceMeal1 (A10). HHMI 2021 SEA Symposium, Virtual poster presentation. April 9-11, 2021.

* indicates presenters

indicates mentored undergraduate students

TRAININGS & CAREER DEVELOPMENT

- “Transferable Skills for TAs”, UKY, CELT & GPSE Workshop, University of Kentucky, Mar. 22, 2024. Presented by Dr. Ashley Sorrell.
- “Getting Started with Teaching Philosophy and Diversity Statements”, UKY, CELT & GPSE Workshop, University of Kentucky, Feb. 15, 2024. Presented by Dr. Ashley Sorrell.
- “‘I’m Supposed to Teach What?’: Strategies for Teaching Content Outside of Your Expertise”, UKY, CELT & GSPE Workshop, University of Kentucky, Jan. 26, 2024. Presented by Dr. Ashley Sorrell.
- “KY INBRE Wet-Lab Genomics Summer Workshop”, UofL, KY INBRE GTEC Workshop, University of Louisville, May 22-26, 2023.
- “Setting Up an Inclusive Classroom”, UKY, CELT Workshop, University of Kentucky, Jan. 19, 2023. Presented by Drs. Jill Abney & Shauna Morgan.
- “2022 KY INBRE Electron Microscopy Summer Workshop”, UKY, KY INBRE EM Workshop, University of Kentucky. Aug. 4, 2022.
- “The Essentials of Next Generation Sequencing Workshop”, UKY, KY-INBRE NGS Workshop, Virtual. Aug. 2-6, 2021.

AWARDS, HONORS, SCHOLARSHIPS

- 2024, Society for Research on Biological Rhythms Member
- 2023, Ribble Travel Funding, awarded to UKY Biology Students for conference travel support (\$190).
- 2022, Gertrude Flora Ribble Graduate Research Fellowship (2022-2023), awarded to graduate students with outstanding academic record with preference to Kentucky residents (\$2000).
- 2021, Colonel Oscar Payne Cleaver Scholarship Fund recipient, awarded to students with an outstanding academic record with preference given to residents of Hart Co. (\$1,300).
- 2021, *Beta Beta Beta* (Tri-Beta) Honor’s Society Member, members selected must be full-time students pursuing a bachelor’s degree in the Biological Sciences with a cumulative GPA >3.2.

- 2020, WKU Department of Biology Scholarship recipient, awarded to students with a satisfactory departmental GPA (\$500).
- 2020, Martha T. Wolfe Biology Award recipient, awarded to one student that has displayed remarkable work in ECTC's Biology Department.
- 2018, *Phi Theta Kappa* Honor's Society Member, members selected must be full-time students pursuing either an associate or bachelor's degree with a cumulative GPA >3.5.

ACADEMIC SERVICE

- 2023, October 27th, volunteer for UKY BGSA Spooky Science outreach event.
- 2023-2024, UKY Biology Graduate Student Association (BGSA) Social & Events Chair.
- 2023, UKY Biology Graduate Student Association (BGSA) Peer Mentor.
- 2023, Microteach Group Leader, UKY Graduate School. Orienting new TAs for their instructional roles
- 2021, volunteered for WKU's Microbiology Club Fundraiser. Assisted in selling flasks of dinoflagellates and cloth masks to raise money for the Microbiology Club.
- 2021, volunteered at Richardsville Elementary School's Science Night. Assisted teachers in encouraging students to participate in age-appropriate science experiments/activities.

STUDENTS MENTORED

Paula C. Monsalve-Lunari Bio394 Independent Work in Neuroscience, undergraduate student, U. of Kentucky (Spring 2024)

L. Grace McDougal Bio394 Independent Work in Neuroscience, undergraduate student, *U. of Kentucky* (Spring 2023- present)

Shelby L. Burgess Bio395 Mentored Research, undergraduate student, *U. of Kentucky* (Fall 2023)

Faris S. Allahham Bio398 Research and Writing in Biology, undergraduate student, *U. of Kentucky* (Spring 2023- Fall 2023)

Delaney G. Rager Summer Student, undergraduate student, *Loyola University Chicago* (Summer 2023)

Anzlee S. Utley KY INBRE SUR 2023 Student, undergraduate student, *Western Kentucky University* (Summer 2023)