## Curriculum Vitae



# **Sarah Marie Stasel**

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## **EDUCATION**

2022 – present	PhD candidate, Department of Biology, University of Kentucky, Lexington,
	KY.
	Advisor & Mentor: Dr. Vincent M. Cassone
	Co-mentor: Dr. Carrie L. Shaffer
2023 - 2024	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 - Fall 2024	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, & 2 sections Fall 2024).
2021	Undergraduate Teaching Assistant, WKU, 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, U. 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 GC-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. <u>GenBank: MZ355723.1</u>

Stasel, S.M., Rowland, N.S., King, R.A. 2020. Novel Mycobacterium Phage Munford. PhagesDB.org

## **ORAL & POSTER PRESENTATIONS**

- \* indicates presenters; # indicates mentored undergraduate students
- 1. **Stasel, S.M.\***, Shaffer, C.L., Cassone, V.M. 2025. Transcriptome Analysis of *Klebsiella aerogenes* Circadian Clock. Rhythms in the Southeast Region, Vanderbilt University. Invited talk. May 17, 2025.
- 2. McDougal, L.G.\*\*, **Stasel, S.M.**, Cassone, V.M. 2025. Examining *Salmonella enterica* Typhimurium Gene Expression for Properties of a Circadian Clock. Showcase of Undergraduate Scholars, U. of Kentucky. Poster presentation. April 30, 2025.
- 3. Monsalve-Lunari, P.C.\*\*, **Stasel, S.M.**, Cassone, V.M. 2025. Investigating the Indole Sensitivity of the Enteric Pathogen *Salmonella enterica* Typhimurium. Showcase of Undergraduate Scholars, U. of Kentucky. Poster presentation. April 30, 2025.
- 4. **Stasel, S.M.\*** 2025. Clocked Communities: Melatonin and Circadian Regulation of *Klebsiella aerogenes* Biofilms. Department of Biology, U. of Kentucky, Lexington, KY. Invited talk. April 15, 2025.
- Stasel, S.M.\*, Waldridge, O.M., Shaffer, C.L., Cassone, V.M. 2024. Melatonin regulates type 1 pilusdependent biofilm production in diverse uropathogens. Circadian and Sleep Health for a Healthy Kentucky (CASH-KY) Research Day, U. of Kentucky, Lexington, KY. Poster presentation. August 15, 2024.
- 6. Grayson, A.D.\*\*, **Stasel, S.M.**, Cassone, V.M. 2024. Investigation of the Rhythmic Output of an Enteric Pathogen. KY-INBRE/SURES/Markey Strong Joint Program Poster Session, U. of Kentucky, Lexington, KY. Poster presentation. July 25, 2024.
- 7. **Stasel, S.M.\***, Waldridge, O.M., Prisinzano, T.E., Cassone, V.M., Shaffer, C.L. 2024. Exogenous Melatonin Regulates *Klebsiella aerogenes* Type 1 Pilus-Dependent Biofilm Formation. Society for Research on Biological Rhythms, San Juan, Puerto Rico. Invited talk. May 19, 2024.
- 8. McDougal, L.G.\*\*, Monsalve-Lunari, P.C.\*\*, **Stasel, S.M.**, Waldridge, O.M., Cassone, V.M. 2024. Search for Circadian Rhythms of Gene Expression in the Family *Enterobacteriaceae*. Showcase of Undergraduate Scholars, U. of Kentucky. Poster presentation. April 24, 2024.
- 9. Utley, A.\*\*, **Stasel, S.M.**, Waldridge, 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.
- 10. **Stasel, S.M.\***, Waldridge, 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.
- 11. **Stasel, S.M.**, Waldridge, 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.
- 12. Hart, O.\*#, Johnson, S.\*#, Morgan, J.\*#, Morton, H.\*#, Mowafi, O.\*#, Puskas, L.\*#, Saylor, E.\*#, Shoults, M.\*#, Siler, C.\*#, Taul, A.\*#, Vittitoe, N.\*#, Vyas, B.\*#, Krout, R., **Stasel, S.M.**, Waldridge, O.M., Cassone, V.M. 2023. Where does all my Tylenol™ keep going: The E. coli Case Study. Showcase of Undergraduate Scholars, U. of Kentucky. Poster presentation. April 26, 2023.

- 13. **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 Meeting, Virtual poster presentation. Nov. 6, 2021.
- 14. 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.

#### TRAININGS & CAREER DEVELOPMENT

- "Hands-on Confocal Fluorescence Microscopy", UKY A&S Imaging Center Workshop. July 9<sup>th</sup>, 2024. Presented by Dr. Doug Harrison.
- "Trainee Day", Society for Research on Biological Rhythms Biennial Meeting Workshop. May 18th, 2024.
- "Transferable Skills for TAs", UKY, CELT & GPSE Workshop, U. of Kentucky, Mar. 22, 2024. Presented by Dr. Ashley Sorrell.
- "Getting Started with Teaching Philosophy and Diversity Statements", UKY, CELT & GPSE Workshop, U. 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, U. of Kentucky, Jan. 26, 2024. Presented by Dr. Ashley Sorrell.
- "KY INBRE Wet-Lab Genomics Summer Workshop", UofL, KY INBRE GTEC Workshop, U. of Louisville, May 22-26, 2023.
- "Setting Up an Inclusive Classroom", UKY, CELT Workshop, U. of Kentucky, Jan. 19, 2023. Presented by Drs. Jill Abney & Shauna Morgan.
- "2022 KY INBRE Electron Microscopy Summer Workshop", UKY, KY INBRE EM Workshop, U. of Kentucky. Aug. 4, 2022.
- "The Essentials of Next Generation Sequencing Workshop", UKY, KY-INBRE NGS Workshop, Virtual. Aug. 2-6, 2021.

#### AWARDS

- 2025, A&S Outstanding Teaching Assistant of 2025 Award, University of Kentucky (\$500).
- 2025, Biology Outstanding Teaching Assistant Award, University of Kentucky.
- 2025, Ribble Travel Funding, awarded to UKY Biology Students for conference travel support (\$520)
- Spring 2025, Biology Merit Fellowship, awarded to UKY Biology PhD Students in Years 1 and 2, (\$14,700).
- 2024, Ribble Travel Funding, awarded to UKY Biology Students for conference travel support (\$1000).
- 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).
- 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.

## **ACADEMIC SERVICE**

- 2025-2026, President, UKY Biology Graduate Student Association (BGSA).
- 2024-2025, UKY BioBonanza Graphic Designer.
- 2024-2025, Graduate Mentor, UKY S-STEM Scholars Program.
- 2024-2025, Vice President, UKY BGSA.
- Fall 2023 & Fall 2024, UKY BGSA Peer Mentor.
- 2023-2024, Social & Events Chair, UKY BGSA.
- 2023, Microteach Group Leader, UKY Graduate School. Orienting new TAs for their instructional roles.
- Aug 2021-May 2022, Biology Tutor for Beta Beta Beta (Tri-Beta) Honor's Biology Society

### **OUTREACH**

- 2025, March 15<sup>th</sup>, panelist for Annual Celebration of Women in STEM held by the Yahng Discovery Center at Berea College.
- 2025, February 1st, poster judge for KY INBRE Annual Research Conference (ARC25).
- 2023, October 27<sup>th</sup>, volunteer for UKY BGSA Spooky Science outreach event.
- 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.

#### **MEMBERSHIP**

- 2025 present, American Society of Microbiology Member.
- 2024 present, Circadian and Sleep Health for a Healthy Kentucky (CASH-KY) Member.
- 2024 present, Society for Research on Biological Rhythms Member.
- 2021 present, *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.
- 2018 present, *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.

### STUDENTS MENTORED

- **Paula C. Monsalve-Lunari** Bio394 Independent Work in Neuroscience, undergraduate student, *U. of Kentucky* (Spring 2024 Spring 2025), starting as a PhD student at the U. of Kentucky in Fall 2025.
- **L. Grace McDougal** Bio394 Independent Work in Neuroscience, undergraduate student, *U. of Kentucky* (Spring 2023 Spring 2025), starting as a MD student at the U. of Kentucky in Fall 2025.
- Abbey Howard Bio397 Research in Microbiology, undergraduate student, U. of Kentucky (Fall 2024)
- **Aleah D. Grayson** KY INBRE SUR 2024 Student, undergraduate student, *University of Pikeville* (Summer 2024), starting as a DO student at the University of Pikeville in Fall 2025.
- **Shelby L. Burgess** Bio395 Mentored Research, undergraduate student, *U. of Kentucky* (Fall 2023), starting as a DO student at the Lincoln Memorial University in Fall 2025.
- **Faris S. Allahham** Bio398 Research and Writing in Biology, undergraduate student, *U. of Kentucky* (Spring 2023 Fall 2023), currently a MD student at the University of Louisville.
- 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)