

NOAH J. SPENCER

njspenc1@asu.edu • (304) 692-5588 • noahspencer.net

EDUCATION

- 2021– **Ph.D. Student, Evolutionary Biology**
Arizona State University, Tempe, AZ, USA
- 2021 **B.S. Biology** (Genomics emphasis), *summa cum laude*
West Virginia University, Morgantown, WV, USA

RESEARCH INTERESTS: Endosymbiosis, evolutionary biology, cell biology, prokaryotic and organellar genome evolution, mutation, intracellular transport

RESEARCH EXPERIENCE

- 2021– **Center for Mechanisms of Evolution, Arizona State University**
Advisor: Dr. John McCutcheon
- Characterized the effects of genome fragmentation on transcription in an ancient cicada endosymbiont, *Hodgkinia cicadicola*.
- 2017–2021 **Department of Biology, West Virginia University**
Advisor: Dr. Rita Rio
- Demonstrated the quorum sensing-mediated establishment and vertical transmission of *Sodalis praecaptivus* in tsetse flies.

PEER-REVIEWED RESEARCH PUBLICATIONS

- 2023 **Spencer N**, Łukasik P, Meyer M, Veloso C, McCutcheon JP. No Transcriptional Compensation for Extreme Gene Dosage Imbalance In Fragmented Endosymbionts of Cicadas. *Genome Biol. Evol.* 15(6), evad100.
- 2021 Medina Munoz M, Brenner C, Richmond D, **Spencer N**, Rio RVM. The holobiont transcriptome of teneral tsetse fly species of varying vector competence. *BMC Genomics.* 22(1), 400.
- 2020 Medina Munoz M, **Spencer N**, Enomoto S, Dale C, Rio RVM. Quorum sensing sets the stage for the establishment and vertical transmission of *Sodalis praecaptivus* in tsetse flies. *PLOS Genet.* 16, e1008992.

GRANTS, FELLOWSHIPS, & AWARDS

- 2023–2024; 2022–2023 ASU Graduate College University Grant (\$10K/year × 2 years awarded)
- 2021–2026 National Science Foundation Graduate Research Fellowship (\$138K)
- 2021 WVU Outstanding Senior
- 2020 WVU Eberly Scholar
- 2019 WVU Honors EXCEL Grant (\$1K)
- 2019 WVU SURE Enrichment Grant (\$500)

CONTRIBUTED PRESENTATIONS

Oral Presentations

- 2022 Increases in Genome Complexity Exacerbate Transcript Dosage Imbalance in a Cicada Endosymbiont. 8th Conference on Beneficial Microbes. Madison, WI.

Poster Presentations

- 2023 No Transcriptional Compensation for Extreme Gene Dosage Imbalance In Fragmented Endosymbionts of Cicadas. 2023 EMBL Symposium on the Cellular Mechanics of Symbiosis. Heidelberg, Germany. (*Also presented at Biodesign Fusion 2023. Tempe, AZ.*¹)
- 2022 No Transcriptional Compensation for Extreme Gene Dosage Imbalance In Fragmented Endosymbionts of Cicadas. 2022 Annual Symposium for Mechanisms of Cellular Evolution. Tempe, AZ.
- 2021 Genome Sequencing Provides Insight into Coevolution Between an Insect Vector and Its Microbial Partner. WVU Online Spring Undergraduate Research Symposium.²
- 2020 Plasmid DNA Sequence Analysis Elucidates Evolution of Species-Specific Tsetse Fly Symbiotic Bacteria. WVU Online Spring Undergraduate Research Symposium.
- 2019 Characterizing Plasmid Functional Roles Within Tsetse Fly-Associated Symbiotic Bacteria. WVU Summer Undergraduate Research Symposium. Morgantown, WV.³

^{1, 3} Winner, Best Poster in Category

² Runner-up, Best Poster in Category

TEACHING EXPERIENCE

- 2022– *Volunteer with Prison Biology Education Program, ASU*
Taught in-person, developed course materials and assessments, and provided feedback on student work for introductory biology courses offered at Eyman Prison Complex in Florence, AZ.
- 2018–2021 *Tutor at MindFit Academic Enhancement, WVU*
Provided over 350 hours of sustained, one-on-one academic coaching to students with learning-related difficulties.
- 2019 *Cell and Molecular Biology Teaching Assistant, WVU*
Provided feedback on over 350 written assignments, held weekly office hours to provide one-on-one support, and assisted with course design.

INVITED PANELS & TALKS

- 2023 *Grad Student Panel, ASU School of Life Sciences Graduate Recruitment*
- 2022 *Grad Student Panel, Biodesign Institute Summer Internship Program for Community College Students*
WVU ASPIRE Academy Alumni Panel
- 2021 *WVU Honors EXCEL Seminar: "The Secret of My Success: Learning from Recent Honors EXCEL Graduates"*
WVU Summer Undergraduate Research Symposium panel, "Get the Most from Your Mentor"
- 2020 *WVU Summer Undergraduate Research Symposium panel, "Get the Most from Your Mentor"*
WVU undergraduate research webinar for incoming freshmen; WVU Honors EXCEL Academy

PROFESSIONAL SOCIETY AFFILIATIONS & SERVICE

- Member, Society for Molecular Biology & Evolution
- Member, American Society for Microbiology
- Reviewer of paper submitted to *mBio*.