ABBREVIATED CURRICULUM VITAE 2024 Amanda Kyle Gibson, Ph.D.

EDUCATION AND EMPLOYMENT

University of Virginia, Charlottesville, VA

Assistant Professor of Biology, January 2019 – present

Institute for Advanced Study, Berlin, Germany

Fellow of the College for Life Sciences, September – December 2018

Emory University, Atlanta, GA

National Institutes of Health (NIH) Postdoctoral Fellow in Research and Science Teaching, September 2016 – August 2018

Indiana University, Bloomington, IN

Ph.D. in Ecology, Evolution and Behavior, September 2010 - August 2016 National Science Foundation (NSF) Graduate Research Fellow, 2010-2015 NIH Common Themes in Reproductive Diversity Trainee, 2012-2013, 2015-2016

National Institutes of Health, Bethesda, MD

National Institute of Allergy and Infectious Disease Trainee, July 2009-August 2010

Université de Paris-Sud XI, Orsay, France

Fulbright Scholar, September 2008 – June 2009

Amherst College, Amherst, MA

B.A. in Biology, summa cum laude, September 2004-May 2008

RECENT HONORS, AWARDS & FELLOWSHIPS

- 2023 SCHEV Outstanding Faculty Award, Rising Star
- 2022 University of Virginia Alumni Board of Trustees Teaching Award
- 2021 Invited speaker, International Symposium celebrating the 75th anniversary of the Society for the Study of Evolution (one of six speakers)
- 2020 Invited "rising star" speaker, International conference on Evol. Biology of Caenorhabditis
- 2018 Fellow, Berlin Institute for Advanced Study (Wissenschaftskolleg zu Berlin)
- 2018 Dobzhansky Prize, Society for the Study of Evolution
- 2017 Maynard Smith Prize, European Society for Evolutionary Biology
- 2016 Huxley Award for Education, Society for the Study of Evolution

RECENT PUBLICATIONS (OUT OF 38; undergraduate authors underlined)

- 1. **AK Gibson***, FM Mundim*, A Ramirez, and P Timper. 2024. Do biological control agents adapt to local pest genotypes? A multi-year test across geographic scales. *Evolutionary Applications* 17(4): e13682. *co-first authors
- 2. CR Amoroso, <u>L Shepard</u>, and **AK Gibson**. 2024 Genetic variation in parasite avoidance, yet no evidence for constitutive fitness costs. *Evolution* 78(5): 1005-1013.
- 3. J Jiranek and AK Gibson. 2023. Diet can alter the cost of resistance to a natural
- 4. parasite in Caenorhabditis elegans. Ecology and Evolution 13(2): e9793
- 5. FM Mundim and **AK Gibson**. 2022. A diverse parasite pool can improve effectiveness of biological control constrained by genotype-by-genotype interactions. *Evolutionary Applications* 15(12): 2078-2088.
- 6. **AK Gibson** and CR Amoroso. 2022. Ecology and evolution of parasite avoidance. Invited, in press at *Annual Review of Ecology, Evolution and Systematics*
- 7. LT Bubrig, AN Janisch, <u>EM Tillet</u>, and **AK Gibson**. 2022. Contrasting parasite-mediated reductions in fitness within vs. between patches of a nematode host. *Evolution*. 76(7): 1556-1564
- 8. AK Gibson. 2021. Genetic diversity and disease: the past, present and future of an old

- idea. Evolution 76(S1): 20-36.
- 9. **AK Gibson** and <u>AE Nguyen</u>. 2021. Does genetic diversity protect host populations from parasites? A meta-analysis across natural and agricultural systems. *Evolution Letters* 5(1): 16-32.
- 10. DM Hawley, **AK Gibson**, AK Townsend, ME Craft, and JF Stephenson. 2021. Bidirectional interactions between host social behaviour and parasites arise through ecological and evolutionary processes. *Parasitology* 148(3): 274-288.
- 11. **AK Gibson**. 2019. Asexual parasites and their extraordinary host ranges. *Integrative and Comparative Biology* 59(6): 1463-1484.
- 12. C Liu*, **AK Gibson***, P Timper, LT Morran, and RS Tubbs. 2019. Rapid change in host specificity in a field population of the biological control organism *Pasteuria penetrans*. *Evolutionary Applications* 12(4): 744-756. *authors contributed equally

FUNDING

1. Eppley Foundation for Research Award Gibson (PI): 07/01/2024-06/30/2025 Using genomics to manage plant-parasitic nematodes in agricultural fields

2. UVA GIDI-UP Award Gibson (PI); 05/09/2022-05/08/2023

Testing pathogen diversification as a tool to promote sustainable pest management

3. Society for the Study of Evolution Workshop Grant Gibson (PI); 2019, 2020, 2022 Graduate Student Workshop in Evolutionary Biology

4. Morven Sustainability Teaching and Research Grant Gibson (PI); 11/15/2021-11/14/2022 Testing genetic diversification as a tool to promote sustainable pest management

5. NIH/NIGMS R35 MIRA Gibson (PI); 8/1/2020-7/31/2025

A general test of the genetic basis of parasite resistance across genetic and environmental contexts

6. Jeffress Memorial Trust Award Gibson (PI); 9/30/2020-6/30/2022 Modeling the evolution of disease resistance in a variable world

TEACHING ACTIVITIES

<u>Undergraduate courses:</u> BIOL 150 Disease Spillover (Summer 2020); BIOL 4012 Evolution and Ecology of Infectious Diseases (Fall 2020, 2021,2024); <u>Graduate courses:</u> BIOL 8084 Advanced Ecology and Evolution (Spring 2020, 2022, 2023, 2024); BIOL 8070 Colloquium in Pop Bio (Spring 2021); <u>Multiple ranks:</u> Graduate Workshop in Evolutionary Biology (Summer 2019, 2022, 2023; head instructor)

SUPERVISED RESEARCH (27 TRAINEES TOTAL)

Undergraduates: D. Aloudeh (2023-present); S. Budhwar (2019-2020); N. Channamraju (2023-present); S. Chon (2023-present); V. Feist (2021-present); W. Heo (2024); E. Huang (2023-present); A. Kamali (2022-present); E. Kirschke (2019-2021); A. Lockwood-Shabbat (2022-present); D. McNeill (2019); A. Motter (2020-2022); A. Nguyen (2019-2021); A. Odei (2020-2021); L. Shepard (2021-present); J. Singh (2021-present); T. Sol (2022-present); S. Talley (2022-present); E. Tillet (2019-2021); S. Wong (2019-2022). Ph.D. students: I. Amundson (2021-present); L. Bubrig (2020-present); J. Jiranek (2022-present); A. Ramirez (2021-present); E. Scott (2022-present). Postdoctoral fellows: C. Amoroso (2021-present); F. Mundim (2019-2022, Assistant Professor, Utah State University); L. Peng (2022-present)

SELECTED INVITED SEMINARS

<u>2024:</u> Dept. Seminar at *University of Michigan; UC Riverside.* <u>2023:</u> Dept. Seminars at *EAWAG, University of Pittsburgh.* <u>2022</u>: Dept. Seminars at *New York University, Virginia Tech.* <u>2021</u>: Dept. Seminar at *Oklahoma University*; Seminar Series in Ecology Evolution and the

Environment, *Trinity College Dublin*; Laboratory of Parasitic Diseases Seminar Series, *NIH.* 2020: Ecology and Evolution of Infectious Disease Series, *University of California, Berkeley*; 2019: Dept Seminars at *James Madison University, University of Pittsburgh, University of Connecticut, Tulane University*

RECENT SERVICE

Department Committees: Steering (2024-present); Undergraduate (2024-present); Evolution Faculty Search (2022-2023); Graduate Admissions (2019-2022); Community and Seminar (2019-present); Social media manager (2020-present); NSF EXPAND Curriculum (2021); Departmental Retreat (Chair, 2021); ad hoc Space (2021); Ph.D. Committees (8 total). **University:** Contagion Sciences Faculty Search, Graduate Teaching Awards. **International:** Evolutionary Biology of *Caenorhabditis* Conference (2024 and 2026 organizer); NSF Panel reviewer; NIH NIGMS R35 Panel reviewer; ad hoc reviewer for Swiss National Science Foundation, Society for the Study of Evolution, NSF, UK National Environment Research Council; Peer reviewer for 17 journals