

## Alan O. Bergland

Department of Biology  
University of Virginia  
485 McCormick Rd, PO Box 400328  
Charlottesville, VA 22904

aob2x@virginia.edu  
<https://bergland-lab.org>

### POSITIONS

---

|                                                                  |                                                 |
|------------------------------------------------------------------|-------------------------------------------------|
| <b>Associate Professor</b><br>Department of Biology              | <b>University of Virginia</b><br>2022 - current |
| <b>Assistant Professor</b><br>Department of Biology              | <b>University of Virginia</b><br>2016 - 2022    |
| <b>Research Associate</b><br>Petrov Lab, Department of Biology   | <b>Stanford University</b><br>2014 - 2015       |
| <b>Post-doctoral Fellow</b><br>Petrov Lab, Department of Biology | <b>Stanford University</b><br>2010 - 2014       |

### EDUCATION

---

|                                                                     |                                        |
|---------------------------------------------------------------------|----------------------------------------|
| <b>Ph.D.</b><br>Tatar Lab, Dept. of Ecology and Evolution           | <b>Brown University</b><br>2004 - 2010 |
| <b>B.S. with Honors</b><br>Bradshaw-Holzapfel Lab, Dept. of Biology | <b>Univ. of Oregon</b><br>2000-2004    |
| <b>B.S.</b><br>Dept. of Philosophy                                  | <b>Univ. of Oregon</b><br>2000-2004    |

### GRANTS, FELLOWSHIPS & AWARDS

---

**2025:** UVA Data Analytics Center Research Support Grant \$10,000 (in-kind)  
**2025 – 2026:** UVA A&S Seed Funding “Unraveling the genetic architecture of an adaptive inversion” \$50,000  
**2024:** UVA Data Analytics Center Research Support Grant \$10,000 (in-kind)  
**2024 – 2025:** 4-VA grant “Sex, death, and dormancy in the rock pools of Belle Isle” \$36,000  
**2023 – 2025:** UVA ADVANCE Teaching Fellow  
**2022 – 2027:** NSF CAREER “Backyard Evolution across a Seasonal Metapopulation in *Drosophila*” \$757,988 in total direct costs.  
**2019:** Dept. of Biology Teaching Award, University of Virginia  
**2016 – 2021:** NIH R35 “The genetic and physiological architecture of rapid and cyclic adaptation” sole PI. \$1,250,000 in total direct costs.  
**2013:** Stanford Center for Computational, Evolutionary and Human Genomics trainee research grant, “Physiological mechanisms underlying rapid adaptive evolution”, \$15,000  
**2012:** NESCent Catalysis meeting grant, “Tracking the biotic response to global climate change through genomic analysis,” Co-PI along with D. Petrov & P. Schmidt  
**2011 – 2014:** NIH NRSA post-doctoral fellowship, “Genomics of Natural Populations”, \$165,000

**2007 – 2008:** Oliver Cromwell Gorton Arnold Biological Fellow, Brown Univ.

## PUBLISHED ARTICLES

(† = undergraduate mentee; \* = equal contribution; **member of the Bergland lab**)

46. Bitter M, Greenblum S, Rajpurohit S, **Bergland AO**, Hemker J, Lappo E, Betancourt N, Berardi S, Oken H, Schmidt P, Petrov D. 2025. Pervasive fitness trade-offs revealed by rapid adaptation to shifting population densities in large experimental populations of *Drosophila melanogaster*. *Ecology Letters*, in press.
45. Erickson PA, Gunter A, **Bangerter A**, Polizos N, **Bergland AO**. 2025. Limited population structure but signals of recent selection in introduced African Fig Fly (*Zaprionus indianus*) in North America. *G3*: 10.1093/g3journal/jkaf178.
44. Gray W, **Stephenson M**, **Bergland AO**, Erickson PA. 2025. Field Sampling of *Zaprionus indianus* in the Eastern United States in 2023-2024. *microPublication Biology*: 001707.
43. Durmaz Mitchell E, Kerdaffrec E, Harney E, Paulo TF, Veselinovic MS, (+18 co-authors), **Erickson P**, (+63 co-authors), Kapun M, Schlötterer C, Schmidt P, Sucena E, González J, **Bergland AO**, Ritchie MG, Flatt T. 2025. Continent-wide differentiation of fitness traits and patterns of climate adaptation among European populations of *Drosophila melanogaster*. *Evolution Letters*: 10.1093/evlett/qraf014.
42. **Nunez JCB\***, Coronado-Zamora M\*, Gautier M, Kapun M, Steindl S, Ometto L, Hoedjes KM, Beets J, Wiberg RAW, **Mazzeo GR†**, **Bass DJ†**, (+95 co-authors), Flatt T\*, **Bergland AO\***, Gonzalez J\*. 2025. Footprints of worldwide adaptation in structured populations of *D. melanogaster* through the expanded DEST 2.0 genomic resource. *Molecular Biology & Evolution*: 10.1093/molbev/msaf132.
41. **Murray C & Bergland AO**. 2025. Patterns of gene family evolution and selection across *Daphnia*. *Ecology & Evolution*: 10.1002/ece3.71453
40. Berardi S, Rhodes JA, Berner MC, Greenblum SI, Bitter MC, Behrman EL, Betancourt NJ, **Bergland AO**, Petrov DA, Rajpurohit S, Schmidt P. 2025. *Drosophila melanogaster* pigmentation demonstrates adaptive phenotypic parallelism but genomic unpredictability over multiple timescales. *Evolution Letters*: 10.1093/evlett/qraf008.
39. **Murray CS**, **Karram M**, **Bass DJ†**, **Doceti M†**, **Becker D**, **Nunez JCB**, Ratan A, **Bergland AO**. 2025. Trans-Specific Polymorphisms Between Cryptic *Daphnia* Species Affect Fitness and Behavior. *Molecular Ecology*: 10.1111/mec.17632.
38. **Lenhart BL**, **Ashan A†**, **McHaty M†**, **Bergland AO**. 2024. Improvement of starvation resistance via periodic fasting is genetically variable in *Drosophila melanogaster*. *Physiological Entomology*: 10.1111/phen.12443
37. **Nunez JCB**, **Lenhart BL**, **Bangerter A**, **Murray CSM**, **Yu Y**, **Nystrom TL**, **Tern C†**, **Erickson PA**, **Bergland AO**. 2024. A cosmopolitan inversion drives seasonal adaptation in overwintering *Drosophila*. *Genetics*: 10.1093/genetics/iyad207
36. Rakes LM, **Delamont M**, Cole C, Yates JA, **Blevins LJ†**, **Hassan FN†**, **Bergland AO**, Erickson PA. 2023. Spatial and temporal variation in abundance of introduced African fig fly (*Zaprionus indianus*) (Diptera: Drosophilidae) in the eastern United States. *Journal of Insect Science*: 10.1093/jisesa/iead092
35. **Porter RJ\***, **Gutierrez G\***, **Barnard-Kubow KB**, **Bergland AO**. 2023. Maternal control of spontaneous dormancy termination in *Daphnia pulex*. *Hydrobiologia*: 10.1007/s10750-023-05361-w
34. **Yu Y & Bergland AO**. 2022. Unique signals of clinal and seasonal allele frequency

- change at eQTLs in *Drosophila melanogaster*. Evolution: 10.1111/evo.14617
33. **Becker D, Barnard-Kubow K, Porter R, Edwards A, Beckerman A, Bergland AO.** 2022. Stabilizing selection shapes variation in phenotypic plasticity. Nature Ecology and Evolution: 10.1038/s41559-022-01837-5
  32. **Barnard-Kubow K, Becker D, Murray C, Porter R, Gutierrez G<sup>†</sup>, Erickson P, Nunez JCB, Voss E, Suryamohan K, Ratan A Beckerman A, Bergland AO.** 2022. Polygenic variation in sexual investment across an ephemerality gradient in *Daphnia pulex*. Molecular Biology and Evolution: 39(6):msac12
  31. Kapun M\*, **Nunez JCB\***, Bogaerts-Márquez M\*, Murga-Moreno J\*, Paris M\*, **Outten J**, Coronado-Zamora M, **Tern C<sup>†</sup>**, (+40 others), & **Bergland AO.** 2021. *Drosophila* Evolution over Space and Time (DEST) - A New Population Genomics Resource. Molecular Biology and Evolution: 10.1093/molbev/msab259
  30. Machado H\*, **AO Bergland\***, R Taylor, S Tilk, E Behrman, K Dyer, D Fabian, T Flatt, J Gonzalez, T Karasov, O Kozeretska, B Lazzaro, T Merritt, J Pool, K O'Brien, S Rajpurohit, P Roy, S Schaeffer, S Serga, P Schmidt, D Petrov. 2021. Broad geographic sampling reveals predictable and pervasive seasonal adaptation in *Drosophila*. eLife: 10:e67577 DOI: 10.7554/eLife.67577
  29. **Weller C**, Tilk S, Rajpurohit S, **Bergland AO.** 2021. Accurate, ultra-low coverage genome reconstruction and association studies in Hybrid Swarm mapping populations. G3: 10.1093/g3journal/jkab062.
  28. Fu Z, Meier AR, Epstein B, **Bergland AO**, Castillo Carrillo CI, Cooper W, Cruzado RK, Horton DR, Jensen AS, Kelley JL, Rashed A, Reitz SR, Rondon S, Thinakaran J, Wenninger EJ, Wohleb CH, Crowder DW, Snyder WE. 2020. Host plants and endosymbionts shape the population genetics of sympatric vectors. Evolutionary Applications: 13(10):2740-2753.
  27. **Erickson PA, Weller CA, Song DY<sup>†</sup>, Bangerter-Black A, Schmidt PS, Bergland AO.** 2020. Unique genetic signatures of local adaptation over space and time for diapause, an ecologically relevant complex trait, in *Drosophila melanogaster*. PLoS Genetics: 16(11):e1009110
  26. Kapun M, MG Barrón, F Staubach, DJ Obbard, RAW Wiberg, J Vieira, C Goubert, O Rota-Stabelli, M Kankare, M Bogaerts-Márquez, A Haudry, L Waidele, I Kozeretska, E G Pasyukova, V Loeschke, M Pascual, C P Vieira, S Serga, C Montchamp-Moreau, J Abbott, P Gibert, D Porcelli, N Posnien, A Sánchez-Gracia, S Grath, E Sucena, **AO Bergland**, M Pilar Garcia Guerreiro, B Sebnem Onder, E Argyridou, L Guio, M Fristrup Schou, B Deplancke, C Vieira, M G Ritchie, B J Zwaan, E Tauber, D J Orenge, E Puerma, M Aguadé, P Schmidt, J Parsch, A J Betancourt, T Flatt, J González 2020. Genomic analysis of European *Drosophila* populations reveals longitudinal structure and continent-wide selection. 2020. Molecular Biology and Evolution 37(9):2661-2678
  25. Waldvogel AM, Feldmeyer B, Rolshausen G, Exposito-Alonso M, Rellstab C, Kofler R, Mock T, Schmid K, Schmitt I, Bataillon T, Savolainen O, **Bergland AO**, Flatt T, Guillaume F, Pfenninger M. 2020. Evolutionary genomics can improve prediction of species' responses to climate change. Evolution Letters: 10.1002/evl3.154
  24. **Stone<sup>†</sup> HM, Erickson PA\*, Bergland AO\*.** 2020. Phenotypic plasticity, but not adaptive tracking, underlies seasonal variation in post-cold hardening freeze tolerance of *Drosophila melanogaster*. Ecology and Evolution: 10.1002/ece3.5887
  23. Wang Y, Kapun M, Waidele L, Kuenzel S, **Bergland AO**, Staubach F. 2020. Common structuring principles of the *Drosophila melanogaster* microbiome on a continental scale

- and between host and substrate. Environmental Microbiology Reports: doi:10.1111/1758-2229.12826
22. Tilk S, **Bergland AO**, Goodman A, Schmidt P, Petrov D, Greeblum S. 2019. Accurate allele frequencies from ultra-low coverage pool-seq samples in evolve-and-resequence experiments. G3: 10.1534/g3.119.400755
  21. Rajpurohit S, Gefen E, **Bergland AO**, Petrov DA, Gibbs AG, Schmidt PS. 2018. Spatiotemporal dynamics and genome-wide association analysis of desiccation tolerance in *Drosophila melanogaster*. Molecular Ecology: 27 (17), 3525-3540
  20. Behrman EL, Howick VM, Kapun M, Staubach F, **Bergland AO**, Petrov DA, Lazzaro BP, Schmidt PS. 2018. Rapid seasonal evolution in innate immunity of wild *Drosophila melanogaster*. Proc. R. Soc. B 285: 20172599.
  19. Anderson C, Reiss I, Zhou C, Cho A, Siddiqi H, Mormann B, Avelis C, Deford P, **Bergland AO**, Roberts E, Taylor J, Vasilaiuskas D, Johnston R. 2017. Natural variation in stochastic photoreceptor specification and color preference in *Drosophila*. eLife. doi:10.7554/eLife.29593
  18. Wittmann MJ, **Bergland AO**, MW Feldman, PS Schmidt, DA Petrov. 2017. Segregation lift: A general mechanism for the maintenance of polygenic variation under seasonally fluctuating selection. PNAS. doi: 10.1073/pnas.1702994114
  17. Fu Z, Epstein B, Kelley JL, Zheng Q, **Bergland AO**, et al. 2017. Using NextRAD sequencing to infer movement of herbivores among host plants. PLOS ONE 12(5): e0177742.
  16. Akhund-Zade J<sup>†</sup>, **Bergland AO**, Crowe SO, Unckless R. 2017. The Genetic Basis of Natural Variation in *Drosophila* (Diptera: Drosophilidae) Virgin Egg Retention. Journal of Insect Science: doi: 10.1093/jisesa/iew094
  15. Rajpurohit S, Hanus R, Vrkoslav V, Behrman EL, **Bergland AO**, Petrov D, Cvacka J, Schmidt PS. 2016. Adaptive dynamics of cuticular hydrocarbons in *Drosophila*. Journal of Evolutionary Biology: doi: 10.1111/jeb.12988.
  14. Beckerman AP, Childs DZ, **Bergland AO**. 2016. Eco-evolutionary Biology: Feeding and Feedback Loops. Current Biology, doi: 10.1016/j.cub.2016.01.013.
  13. Tuttle EA\*, **Bergland AO\***, Gonser R, Karody M, Lear T, Houck M, Ryder O, Romanov M, Warren WC, Balakrishnan CN. 2016. Divergence and functional degradation of a sex-chromosome like super-gene. Current Biology, doi:10.1016/j.cub.2015.11.069.
  12. Machado HE, **Bergland AO**, O'Brien K, Behrman EL, Schmidt PS, Petrov DA. 2016. Comparative population genomic analysis of latitudinal variation in *D. simulans* and *D. melanogaster*. Molecular Ecology, doi: 10.1111/mec.13446.
  11. **Bergland AO**, Tobler R, González J, Schmidt P & Petrov D. 2016. Secondary contact and local adaptation contribute to genome-wide patterns of clinal variation in *Drosophila melanogaster*. Molecular Ecology, doi: 10.1111/mec.13455
  10. Zhao X, Behrman EL, **Bergland AO**, Gregory BD, Petrov DA, Schmidt PS. 2015. Global transcriptional profiles of diapause in *Drosophila melanogaster* reveal evidence of seasonal adaptation. Molecular Biology and Evolution, doi: 10.1093/molbev/msv263
  9. **Bergland AO**, E Behrman, K O'Brien, P Schmidt & D Petrov. 2014. Genomic evidence of rapid and stable adaptive oscillations over seasonal time scales in *Drosophila*. PLoS Genetics 10(11): e1004775. doi:10.1371/journal.pgen.1004775
  8. Paaby AB, **Bergland AO**, Behrman EL, Schmidt PS. 2014. An amino acid polymorphism in the *Drosophila* Insulin Receptor demonstrates pleiotropic and adaptive function in life-history traits. Evolution (68): 3395-3409

7. Adrion J, Pascual M, Burrack H, Haddad N, **Bergland AO**, Machado H, Sackton T, Schlenke T, Watada M & Singh N. 2014. Reconstructing the invasion history of *Drosophila suzukii* using multilocus sequence data. Molecular Biology Evolution: doi:10.1093/molbev/msu246
6. Feder A<sup>†</sup>, Petrov D & **Bergland AO**. 2012. LDx: Estimation of linkage disequilibrium from high-throughput pooled resequencing data. PLoS ONE 7(11): e48588
5. Zhu Y, **Bergland AO**, Gonzalez-Perez J & Petrov D. 2012. Empirical validation of pooled whole genome population re-sequencing in *Drosophila melanogaster*. PLoS ONE 7(7): e41901
4. **Bergland AO**, Chae HS, Kim YJ & Tatar M. 2012. Fine scale mapping of natural variation in fly fecundity identifies neuronal domain of expression and function of an aquaporin. PLoS Genetics 8(4): e1002631
3. **Bergland AO**. Mechanisms and ecological genetics of reproduction in Dipteran insects, 2011. In *Molecular mechanisms of life history evolution*, eds. Flatt, T. & A. Heyland. Oxford University Press, Oxford, UK
2. **Bergland AO**, Genissel A, Nuzhdin SV & Tatar M. 2008. Quantitative trait loci affecting phenotypic plasticity and the allometric relationship of ovariole number and thorax length in *Drosophila melanogaster*. Genetics 180: 576-582
1. **Bergland AO**, Agotsch M, Mathias D, Bradshaw WE & Holzapfel CM. 2005. Factors influencing the seasonal life history of the pitcher plant mosquito, *Wyeomyia smithii*. Ecological Entomology 30:129-137

## SEMINARS & PRESENTATIONS

---

(\* = departmental seminar; † = conference)

- 2026:** 16<sup>th</sup> DrosEU Meeting – Montpellier, France (planned) †  
Department of Zoology, Basel University (planned) \*
- 2025:** Society for the Study of Evolution Meeting, Athens, GA †  
Museum of Vertebrate Zoology, UC Berkeley, Berkeley, CA \*  
Ukrainian School in Evolutionary Biology, Uzhgorod, Ukraine / virtual †  
15<sup>th</sup> DrosEU Meeting – Lisbon, Barcelona †
- 2024:** Dept of Biological Sciences, University of South Carolina, Columbia, SC \*  
School of Biological Sciences, University of Nebraska, Lincoln, NE \*  
Dept. of Entomology, University of Maryland, College Park, MD \*  
SSE/ESEB Joint Congress – Montreal, Canada †  
14<sup>th</sup> DrosEU Meeting – Barcelona, Spain †
- 2023:** 13<sup>th</sup> DrosEU Meeting – Netherlands †  
Society for the Study of Evolution Meeting, Albuquerque, NM †
- 2022:** European Society for Evolutionary Biology, Prague, Czech Republic †  
Society for the Study of Evolution Meeting, Cleveland, Ohio †  
12<sup>th</sup> DrosEU Meeting – Belgrade / Virtual †  
Center for Public Health Genomics, UVA \*  
Center for Functional Ecology and Evolution, University of Montpellier \*
- 2021:** Dept. of Biology, University of Virginia (Promotion/Tenure seminar) \*  
11<sup>th</sup> DrosEU Meeting – Virtual †

- 2020:** Penn State University, State College, PA<sup>\*</sup>  
 Department of Evolutionary Biology, University of Zurich, Zurich, Switzerland<sup>\*</sup>  
 EAWAG Kastanienbaum, Luzern, Switzerland<sup>\*</sup>  
 10<sup>th</sup> DrosEU Meeting, Instituto Gulbenkian, Lisbon, Portugal<sup>†</sup>
- 2019:** 9<sup>th</sup> DrosEU Meeting, ESEB STN, Turku, Finland<sup>†</sup>  
 European Society for Evolutionary Biology, Turku, Finland<sup>†</sup>  
 8<sup>th</sup> DrosEU Meeting, Universitat Pompeu Fabra, Barcelona, Spain<sup>†</sup>  
 Society for the Study of Evolution Meeting, Providence, RI<sup>†</sup>  
 Dept. of Biology, James Madison University<sup>\*</sup>  
 Dept. of Biology, Washington State University<sup>\*</sup>
- 2018:** Museum of Comparative Zoology, Harvard University<sup>\*</sup>  
 Dept. of Ecology and Evolution, Brown University<sup>\*</sup>  
 Dept. of Biology, College of William and Mary<sup>\*</sup>  
 7<sup>th</sup> DrosEU Meeting, Institute in San Michele all' Adige (Keynote address)<sup>†</sup>  
 Dept. of Biology, Johns Hopkins University<sup>\*</sup>  
 Center for Public Health Genomics, UVA<sup>\*</sup>  
 Senckenberg Nat. History Museum, Genomics of Climate Change (Keynote address)<sup>†</sup>
- 2017:** Entomological Society Meeting, Pacific Branch (Invited)<sup>†</sup>  
 Dept. of Biology, East Carolina University<sup>\*</sup>  
 Drosophila Research Conference, San Diego (Submitted)<sup>†</sup>
- 2016:** Mind the Gap Conference, Vienna, Austria<sup>†</sup>  
 Neuroscience Graduate Program, University of Virginia<sup>\*</sup>
- 2015:** Institut Jacques Monod, Université Paris Diderot, Paris, France<sup>\*</sup>  
 Dept. of Biology, Indiana State University (Double Helix Speaker)<sup>\*</sup>  
 University of Sheffield, Sheffield, United Kingdom<sup>\*</sup>  
 3<sup>rd</sup> DrosEU meeting, Barcelona, Spain<sup>†</sup>  
 Universitat Pompeu Fabra, Barcelona, Spain<sup>\*</sup>  
 Dept. of Molecular Biosciences, University of Kansas<sup>\*</sup>  
 Dept. of Biology, University of Virginia<sup>\*</sup>
- 2014:** Entomological Society of America, Portland, OR<sup>†</sup>
- 2012:** Bay Area Population Genetics VI, Univ. of California, Davis<sup>†</sup>  
 rEvolution, Stanford University<sup>†</sup>
- 2011:** Dep. Of Biology, University of Pennsylvania<sup>\*</sup>
- 2008:** Uppsala University, Uppsala, Sweden<sup>\*</sup>  
 Interdisciplinary Graduate Student Seminar Series, Brown University<sup>†</sup>

## SYMPOSIA/WORKSHOPS ORGANIZED

---

- 2024:** Ecological Genetics & Genomics Session Chair – DRC/TAGC 2024. Co-organized with Luisa Pallares (Max Plank Institute for Evolutionary Biology)
- 2021-2023:** UVA HR Leadership Essentials workshop on Genetics and Race for adult learners. Co-organized with Joaquin Nunez (UVA) and Lisa Harris (UVA).
- 2022:** UVA Biology workshop. “Toward a more humane genetics education: How to teach

about genetics to reduce racism” Co-organized with Brian Donovan (BSCS Science Learning)

**2022:** European Society for Evolutionary Biology conference symposium. “Progress and prospects in adaptation genomics.” Co-organized with Josefa Gonzalez (Universitat Pompeu Fabra, Spain) and Thomas Flatt (University of Fribourg, Switzerland)

**2021:** Drosophila Research Conference workshop. “A community-based approach to understanding Drosophila Evolution through Space and Time.” Co-organized with Josefa Gonzalez (Universitat Pompeu Fabra, Spain) and Martin Kapun (University of Zurich, Switzerland)

**2019:** American Society of Naturalists Special Symposium at the joint ASN/SSE/SSB meeting. “Causes and consequences of temporally fluctuating selection in the wild.” Co-organized with Zach Gompert (Utah State University)

**2012:** Tracking the biotic response to global climate change through genomic analysis, NESCent, Durham, NC (co-organized with Dmitri Petrov & Paul Schmidt)

## PUBLIC OUTREACH

---

**2020-2024:** Teamed up with faculty at Piedmont Virginia Community College to develop capstone project collecting flies at local orchard (2-3 students/year).

**2020-current:** Citizen Science recruiting at Master Gardeners Associations around Virginia

**2017, 2018, 2019:** Presentation to 5<sup>th</sup> grade class about pollinators at McSwain Elementary, Staunton, VA

**2018:** Interviewed by Staunton News Leader for story about insect diversity

## COURSES TAUGHT

---

**F25:** *Graduate Computational Evolutionary Biology Lab* (BIOL7030)

**F23, F24, F25:** *Computational Evolutionary Biology Lab* (BIOL4020)

**S23, S24, S25:** *Genetics and Molecular Biology* (BIOL3010, co-taught with Sarah Siegrist)

**S17, S18, S19, S21, S22:** *Molecular Evolution – Diversity, Mutants, and the Biological Myth of Race* (BIOL4610)

**F21, S22:** *Professional Skills in the Life Sciences* (BIOL8240/BIOL8250)

**F18, F20, F22, F24:** *Colloquium in Population Biology* (BIOL8070)

**S17:** *Communicating in Science* (BIOL8020)

**F17, F19, F22, F24:** *Advanced Ecology and Evolution* (BIOL8081/BIOL8082/BIOL8083)

## PROFESSIONAL DEVELOPMENT ACTIVITIES

---

**Summer 2019:** Return Panelist at Teaching Race at UVA workshop, University of Virginia

**May 2019:** Faculty Seminar on the Teaching of Writing, University of Virginia

**Summer 2018:** Teaching Race at UVA workshop, University of Virginia

**January 2017:** Course Development Institute, University of Virginia

## MENTORSHIP AND TRAINING

---

**Post-docs (4 former, 2 current):**

Karen Barnard-Kubow (2016-2020) Assistant Professor (research) and Director of the Genomics Core, James Madison University

Priscilla Erickson (2016-2021) Assistant Professor, University of Richmond  
Dörthe Becker (2016-2020) Visiting Assistant Professor, University of Marburg, Germany  
 starting Fall 2021  
Joaquin Nunez (2020-2023) Assistant Professor, University of Vermont  
Abigail Hayes (2023 – current)  
Hannah Makowski (2026-current; co-advised with Megan Blumstein @ ENVS)

**PhD Students (6 former, 2 current):**

Cory Weller (2016-2019) Thesis: The Evolutionary Implications of Adaptations to Stressful Environments on Time Scales Spanning Days to Millennia (now staff scientist at NIH)  
Alyssa Bangerter (2016-2021) Thesis: Temporally Varying Selection and the Maintenance of Genetic Variation  
Yang Yu (2017-2022) Thesis: Adaptive dynamics of seasonal and spatial gene expression plasticity in *Drosophila* (now a post-doc at Mass Children's Hospital)  
Connor Murray (2019-2024), Thesis: The evolutionary history and ecological genetics of *Daphnia pulex*  
Adam Lenhart (2019-2025) Thesis: Natural variation and nutritional specificity in fasting-induced starvation resistance among *Drosophila* populations  
Taylor Nystrom (2019-2025) Co-advised with Sarah Siegrist, Thesis: Elucidating how nutrition and underlying genetic variation interact to influence brain development and function  
Robert Porter (2020-current) Thesis: Evolution and genetics of diapause termination in *Daphnia*  
Jingqi Liu (2025 – current)

**Graduate Rotation Students (7 former):** Pramod Kahdka (2017), Yang Yu (2017), Hannah Makowski (2018), Connor Murray (2019), Sarah McPeck (2019), Adam (Benedict) Lenhart (2020), Taylor Nystrom (2020), Robert Porter (2020), Madison Karram (2023), Andrew Croitoru (2024), Jingqi Liu (2025), Dylan Highland (2025), Andrew Grieve (2025), Emma Lou Pakulniewicz (2025), Saikrishnan Panackal Balakrishnan Shailaja (2025)

**Thesis committee membership:** Aaron Reedy (2016-2018), Ajay Chatrath (2019-2020; Med School), Anna Way (2017-2021; First Reader), Audrey Brown (2018-2022; First Reader), Caroline Bush (2020-2023), Catherine Debban (2016-2019), Catherine Vincent (2017-2020; EnviSci), Christopher Robinson (2020-2024), Daniel Nondorf (2020-current; First Reader), Erin Fegley (2018-2019), Hanna Makowski (2020-2024), Israel Angosor (2018-2021), Keric Lamb (2020-2024), Phoebe Cook (2019-2022), Rachana Bhawe (2018-2024), Ryan Sangson (2017-2023; First Reader), Yingnan Gao (2017-2023), Yuanming Liu (2021-current), Louis Bubrig (2022 – current; First Reader), Noah Brown (2023-current; First Reader), Myles Davol (2023-current), Erin Scott (2024 – current; First Reader), Madison Karram (2024 – current; First Reader), Cameron Cotton (2024, Physics)

**Distinguished Major Students (5 former):** Cynthia Ong (2016-2018), Helen Stone (2017-2019), William (Liam) Miller (2021-2022), Daria Gunderman (2022-2023), Madi Doceti (2023-2024)

**Independent Undergraduate Researchers (~36 former, 5 current, Harrison Award Winners\*, College Council Award Winner<sup>o</sup>, Double-Hoos<sup>†</sup>):** Cynthia Ong\* (2016-



2018), Daniel Song (2016-2019), Warren Wheaton (2016-2018), Anne Saunders (2017-2019), Helen Stone\* (2017-2019), Matt Cambell (2017-2019), Dakota Delong-Maxey\* (2017-2020), Grace Gutierrez (2018-2020), Hanzhang Li (2018-2020), Robert Porter (2017-2020), Sasha Bilal\* (2018-2020), Sharon Hueston (2018-2020), Skylar Lee (2018-2020), Teja Muagala (2019-2020), Yasmin Khodaei (2019-2020), Zach Williams (2019-2020), Kisa Batuwangala (2018-2021), William (Liam) Miller\* (2018-2022), Courtney Tern (2018-2022), Daria Gundermann (2021-2023), *Ayesha Ahsan (F2022-current)\**, David Bass\* (Sp22-Sp23), Brad Davis (Su22-F22), Madi Doceti<sup>o†</sup> (Sp21-Sp24), Kariman Eitta (F22-Sp23), Margaret McHaty (F22-Sp24), Caroline Roda (F22-Sp23), Celina Vasquez (F22-F24), *Gio Mazzeo (Sp23-current)\**, Lynsey Blevins (Sp23-Sp24), Owen Shaffer (F23-S24), *Caroline Smith (F24-current)*, *Grace Miller (F24-Sp25)*, *Lauren Bradshaw<sup>o</sup> (F22-current)*, *Angie Smith (Sp25-current)*, *Dana Johannsen (F25-current)*, *Anjali Frary (F25-current)*

**VA-NC Alliance for Minority Participation Summer Students:** Yasmin John (2017), Kojo Agyeman-Prempeh (2018), Celina Vasquez (2022), Feby Abraham (2022), Maya Harris (2024)

**Lab technicians:** Erin Voss (2016-2018, now PhD student at UC Berkeley), Austin Edwards (2016-2018, now technician at UCSF), Robert Porter (2018-2021, now PhD student at UVA), Grace Gutierrez (2020-2021, now MS student at Penn. State Univ.), Megan Delamont (2022-2023), Megan Stephenson (2023-2025)

**Community College Visiting Faculty Collaborators:** Prof. Joanna Vondrasek (2023; PVCC); Prof. Anne Alison (2024; PVCC)

## DEPARTMENTAL SERVICE

---

**2025-current:** Faculty mentor for Jessie Perlmutter, Biology Dept., UVA  
**2024-current:** Faculty mentor for Drew Schield, Biology Dept., UVA  
**2024-2027:** Director of Graduate Studies, Biology Dept., UVA  
**2023-2024:** TT Microbiology/Immunology Search, Biology Dept., UVA  
**2022-2023:** TT Evolutionary Biology Search (Chair), Biology Dept., UVA  
**2020-2022:** Steering Committee, Biology Dept., UVA  
**2019-2022:** *Ad hoc* Community Committee, Biology Dept., UVA  
**2018, 2019:** Faculty organizer of the Departmental Retreat, Biology Dept., UVA  
**2018/2019:** Undergraduate Committee, Biology Dept., UVA  
**2016/2017, 2017/2018, 2021/2022, 2023/2024:** Graduate Committee, Biology Dept., UVA

## UNIVERSITY SERVICE

---

**2024-current:** Research Computing Advisory Committee  
**2024-current:** NSF S-STEM PACE Advisory Committee  
**2025-current:** Graduate Student Publicity Committee

## PROFESSIONAL SERVICE

---

**2023 – current:** Associate Editor *Evolution*  
**2022:** NSF IOS Panel (full)  
**2014, 2015, 2016:** NSF DEB Evolutionary Processes Panel (pre- & full-)

**2017:** GRFP proposal panel

**2015:** Genetics Society of America 100 Year Anniversary committee

**2013 – 2014:** Post-doc representative, Genetics Society of America Awards committee

**Guest Editor:**

*PLoS Genetics* (2021, 2024)

**Ad-hoc Reviewer:**

• **Scientific journals:** *Aging Cell, The American Naturalist, BMC Biology, Developmental Biology, eLife, Ecological Entomology, Ecology and Evolution, Ecosphere, Environmental Entomology, Evolution, Evolution Letters, Evolution & Development, Evolution Letters, Functional Ecology, Genetics, Genome Biology and Evolution, G3, Heredity, Journal of Evolutionary Biology, Journal of Heredity, Molecular Ecology, Molecular Biology and Evolution, Nature Ecology and Evolution, PeerJ, Physiological Entomology, PLoS Genetics, PLoS One, PNAS, Proc. Royal Soc. B., Trends in Genetics, and more!*

• **Funding agencies:** *Austria (ASF), France (INR), United Kingdom (BBSRC), United States (NSF DEB), Netherlands (NWO), Graduate Women in Science, UVA DoubleHoos/Harrison*