

Rachel L. Moran
Assistant Professor
Department of Ecology & Evolution | University of Chicago
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POSITIONS

Assistant Professor, Department of Ecology & Evolution, University of Chicago	2025 - Present
Assistant Professor, Department of Biology, Texas A&M University	2023 - 2025
Chicago Fellow, Department of Ecology & Evolution, University of Chicago	2022
Postdoctoral Research Associate, Department of Ecology, Evolution and Behavior, University of Minnesota	2019 - 2022

EDUCATION

Ph.D., Program in Ecology, Evolution, and Conservation Biology, University of Illinois at Urbana-Champaign	2019
M.S., Biological Sciences, Northern Illinois University	2013
B.S., Biological Sciences, Northern Illinois University <i>Summa Cum Laude</i> , University Honors, Departmental Honors	2011

PUBLICATIONS

**Mentees*

Preprints / In Review

Radcliffe, W. V.*, Dye, M.*, Kim, D.*, Muralidhar, P., and **Moran, R. L.** *In review at Nature Communications*. Sex chromosome turnover and mitonuclear conflict drive reproductive isolation. bioRxiv preprint: <https://doi.org/10.1101/2025.08.29.673102>

Moran, R. L. *In revision at Nature Reviews Biodiversity*. Resetting the rules: Sex-chromosome turnover as an escape hatch for mitonuclear conflict. EcoEvoRxiv preprint: <https://doi.org/10.32942/X2QS7Q>

Radcliffe, W. V.*, Kim, D.*, Bryant, K*, Riggins, C. L., Heard, T., McGarrity, M., Daugherty, D. J., Perkin, J. S., and **Moran, R. L.** *In revision at Molecular Ecology*. The genomic complexity of invasion: cryptic lineages, founder effects, and polygenic sex determination in armored catfish. bioRxiv preprint: <https://doi.org/10.1101/2025.09.06.674633>

Richards, E. J., **Moran, R. L.**, Wiese, J., O'Gorman, M., Hutton, P., Rastogi, A., North, O. W., Roback, E. Y., Kowalko, J. E., Rohner, N., Keene, A. C., and McGaugh, S. E. *In review at Genetics*. Cave evolution on repeat: reuse of the same genomic regions across lineages but not across traits.

Kellermeyer, R., Espinasa, L., Seidel, C., Redwine, W. B., **Moran, R. L.**, Bertho, S., Ornelas García, C. P., Alegre, D., Medley, J. K., Weaver, K., Unruh, J., Troutwine, B., Wang, Y., Collins, E., Rutkowski, J., McGaugh, S., and Rohner, N. *In review*. Long-term hybridization in a karst window reveals the genetic basis of eye loss in cavefish. bioRxiv preprint: <https://doi.org/10.1101/2024.10.25.620266>

Kopack, C. J., **Moran, R. L.**, Broder, E. D., McDonald, C., Fetherman, E. R., Hoke, K. L., & Angeloni, L. M. *In review*. The effect of environmental enrichment on whole-brain gene expression in an imperiled fish. bioRxiv preprint: <https://doi.org/10.1101/2025.10.18.683224>

Peer Reviewed

- Johnson, B. E. *, Adkins, C., Black, T. N. *, Dye, M. *, Mendoza, I. *, & **Moran, R. L.** *In press*. Environmental stress amplifies competitive asymmetry and drives divergent hybrid zone outcomes. *Evolution*. doi:10.1093/evolut/qpag118
- Black, T. N. *, Grundy, K., Mendoza*, I., Stein, L. R., & **Moran, R. L.** 2026. Lineage-specific decoupling of arginine vasotocin-evoked aggression in male darter fishes (Percidae: Etheostomatinae). *Hormones and Behavior*, 181, 105934.
- Roback, E. Y., Ferrufino, E., **Moran, R. L.**, Mulliniks, C., Shennard, D., Gallop, J., Weagley, J., Miller, J., Fily, Y., Ornelas-García, C. P., Rohner, N., Kowalko, J. E., McGaugh, S. E. 2025. Population genomics of premature termination codons in cavefish with substantial trait loss. *Molecular Biology and Evolution*. 42(2):msaf012. doi:10.1093/molbev/msaf012
- Lloyd, E., Xia, F., Moore, K., Zertuche, C., Rastogi, A., Kozol, R., Kenzior, O., Warren, W., Appelbaum, L., **Moran, R. L.**, Zhao, C., Duboue, E., Rohner, N., Keene, A. C. 2025. Elevated DNA Damage without signs of aging in the short-sleeping Mexican Cavefish. *eLife*. doi:10.7554/eLife.99191.1
- Manning, A. E., Grunwald, H., **Moran, R. L.**, Rodriguez-Morales, R., Powers, A. K., McGaugh, S., & Kowalko, J. E. 2024. Defining the unseen: Population-specific markers for *Astyanax mexicanus* blind cavefish. *Zebrafish*. doi:10.1089/zeb.2023.0105
- Black, T. B. *, Rastogi, A., Saegert, A. *, Dib, J. *, & **Moran, R. L.** 2024. Male recognition of conspecific female olfactory cues in a diverse clade of freshwater fishes. *Journal of Fish Biology*. 104(3), 883-886. doi:10.1111/jfb.15600
- Garduño-Sánchez, M., Hernandez-Lozano, J., **Moran, R. L.**, Miranda-Gamboa, R., Gross, J. B., Rohner, N., Elliott, W. R., Miller, J., Lozano-Vilano, L., McGaugh, S. E., and Ornelas-García, C. P. 2023. Phylogeographic relationships and morphological evolution between cave and surface *Astyanax mexicanus* populations (De Filippi 1853) (Actinopterygii, Characidae). *Molecular Ecology*. 32(20):5626-5644. doi:10.1111/mec.17128
- Powers, A. K., Hyacinthe, C., Riddle, M., Kim, Y. K., Amaismeier, A., Thiel, K., Martineau, B., Ferrante, E., **Moran, R. L.**, McGaugh, S. E., Boggs, T., Gross, J. B., Tabin, C. J. 2023. Genetic mapping of craniofacial traits in the Mexican tetra reveals loci associated with bite differences between cave and surface fish. *BMC Ecology and Evolution*. 23(1):41. doi:10.1186/s12862-023-02149-3
- Moran, R. L.**, Richards, E. J., Ornelas-García, P., Gross, J.B., Donny, A., Wiese, J. *, Keene, A. C., Kowalko, J. E., Rohner, N., & McGaugh, S. E. 2023. Selection-driven trait loss in independently evolved cavefish populations. *Nature Communications*. 14, 2557 (2023). doi:1038/s41467-023-37909-8
- Moran, R. L.**, Jaggard, J. B., Roback, E. Y., Kenzior, A., Rohner, N., Kowalko, J. E., Ornelas-García, P., McGaugh, S. E., Keene, A. C. 2022. Hybridization underlies localized trait evolution in cavefish. *iScience*. 25(2):103778. doi:10.1016/j.isci.2022.103778
- O’Gorman, M., Thakur, S., Imrie, G., **Moran, R. L.**, Rohner, N., McGaugh, S. E., Keene, A. C., and Kowalko, J. E. 2021. Pleiotropic function of the albinism gene *oca2* reveals co-evolution of albinism and sleep loss. *Current Biology*. 31(16):3694-3701. doi:10.1016/j.cub.2021.06.077
- Chang, C.-H., Catchen, J. M., **Moran, R. L.**, Rivera-Colon, A., Wang, Y.-C. and Fuller, R. C.

2021. Sequence analysis and ontogenetic expression patterns of cone opsin genes in the bluefin killifish (*Lucania goodei*). **Journal of Heredity**. esab2021. doi:10.1093/jhered/esab017
- Warren, W. C., Aspiras, A., Boggs, T. E., Borowsky, R., Carlson, B. M., Damen, F., Ferrufino, E., Gross, J.B., Hillier, L., Hu, Z., J., Keene, A. C., Kowalko, J. E., Tomlinson, C., Kremitzki, M. Lemieux, M. E., Lindsay-Graves, T., McGaugh, S. E., Miller, J. T., Mommersteeg, M., **Moran, R. L.**, Peu, R., Rice, E., Riddle, M., Sifuentes-Romero, I., Stanhope, B. A., Tabin, C., Thakur, S., Yoshiyuki, Y., Rohner, N. 2021. A chromosome level genome of *Astyanax mexicanus* surface fish for comparing population-specific genetic differences contributing to trait evolution. **Nature Communications**. 12(1):1447. doi: 10.1038/s41467-021-21733-z NCOMMS-20-25279
- Reid, B. N., **Moran, R. L.**, Kopak, C. J., Fitzpatrick, S. W. 2021. Rapture-ready darters: sequence capture outperforms whole-genome data regardless of reference genome in *Etheostoma*. **Molecular Ecology Resources**. 21(2):404-420. doi:10.1111/1755-0998.13275
- Moran, R. L.**, Catchen, J. M., and Fuller, R. C. 2020. Genomic resources for darters (Percidae: Etheostominae) provide insight into postzygotic barriers implicated in speciation. **Molecular Biology and Evolution**. 37(3):711-729. doi:10.1093/molbev/msz260
- Moran, R. L.**, Zhou, M., Catchen, J. M., and Fuller, R. C. 2018. Hybridization and postzygotic isolation promote reinforcement of male mating preferences in a diverse group of fishes with traditional sex roles. **Ecology and Evolution**. 8(18):9282-9294. doi:10.1002/ece3.4434
- Moran, R. L.**, and Fuller, R. C. 2018. Agonistic character displacement of genetically based male colour patterns across darters. **Proceedings of the Royal Society B: Biological Sciences**. 285(1884): 20181248. doi:10.1098/rspb.2018.1248
- Moran, R. L.**, Soukup, R. M.*, Zhou, M., and Fuller, R. C. 2018. Egg viability decreases rapidly with time since ovulation in the rainbow darter: implications for costs of choosiness. **Journal of Fish Biology**. 92(2):532–536. doi:10.1111/jfb.13523
- Moran, R. L.** and Fuller, R. C. 2018. Male-driven reproductive and agonistic character displacement in darters and its implications for allopatric speciation. **Current Zoology**. 64(1):101-113. doi:10.1093/cz/zox069
Invited contribution to Special Column on Male Competition and Speciation.
- Moran, R. L.**, Zhou, M., Catchen, J. M., and Fuller, R. C. 2017. Male and female contributions to behavioral isolation in darters as a function of genetic distance and color distance. **Evolution**. 71(10):2428-2444. doi:10.1111/evo.13321
- Moran, R. L.**, von Ende, C. N., and King, B. H. 2014. Seasonal colour change and antipredator behaviour in *Etheostoma* (Percidae). **Journal of Fish Biology**. 84(4):1188-1194. doi:10.1111/jfb.12327
- Moran, R. L.**, von Ende, C. N., and King, B. H. 2013. Mate choice copying in two species of darters (Percidae: *Etheostoma*). **Behaviour**. 150(11):1255-1274. doi:10.1163/1568539X-00003092
- Moran, R. L.** 2012. Breeding fantail darters in captivity. **American Currents**. 37(4):21-22.

RESEARCH FUNDING (>\$3.3 million total awarded to PI Moran)

- 2024-2029 NIH R35: Early Stage Investigator (ESI) Maximizing Investigators Research Award (MIRA), "Genetic and neural mechanisms of paternal care behavior"
PI: Rachel L. Moran (\$1,873,321)

- 2024-2028 NSF IOS: Animal Behavior, “Evolutionary and neurogenomic mechanisms of species discrimination during character displacement”
PI: Rachel L. Moran (\$1,297,896)
- 2023-2025 Texas Parks & Wildlife Department: Aquatic Invasive Species Research Grant, “Developing spawning protocols and identifying the sex determining regions in suckermouth armored catfish to facilitate the production of neofemales and YY males for use in population control”
PI: Rachel L. Moran, Co-PIs: Joshua Perkin, Thomas Heard (\$133,332)
- 2021 Chicago Fellows research award – University of Chicago (\$20,000)
- 2021 American Genetic Association (AGA) Evolutionary, Ecological, or Conservation Genomics (EECG) Award (\$6,000)
- 2018 American Society of Naturalists (ASN) Student Research Award (\$2,000)
- 2018 Society for the Study of Evolution (SSE) Graduate Research Excellent Grant - Rosemary Grant Advanced award (GREG-RGA) (\$2,600)
- 2018 Society for Integrative & Comparative Biology (SICB) Grant in Aid of Research (\$960)
- 2017 Sigma Xi Grant-in-Aid of Research (\$1,000)
- 2017, 2018 Harley J. Van Cleave Research Award - SIB, UIUC (\$2,000 total)
- 2017 National Science Foundation (NSF) Doctoral Dissertation Improvement Grant - (\$20,618)
- 2017 NSF IGERT Student Research Grant (\$5,000)
- 2016 Phillip W. Smith Memorial Award - Natural History Survey, UIUC (\$980)
- 2015-2018 Conference Travel Grant - PEEC, UIUC (\$2,120 total)
- 2015 Dissertation Research Travel Grant - Graduate College, UIUC (\$3,240)
- 2015 Francis M. & Harlie M. Clark Research Support Grant - SIB, UIUC (\$1,000)
- 2014-2018 Summer Research Grant (Annual Award) – PEEC, UIUC (\$3,500 total)
- 2012 Graduate Student Conference Travel Grant - Department of Biological Sciences, NIU (\$225)
- 2011, 2012 Graduate Research Grant - Department of Biological Sciences, NIU (\$700 total)

Mentee Research Grants

- 2025 Animal Behavior Society (ABS) Student Research Grant (\$1,500) – Kiedon Bryant (PhD Student)
- 2025 Sigma Xi Grant in Aid of Research (\$1,000) – Kiedon Bryant (PhD Student)
- 2024 Field Inclusive Conference Travel Grant (\$2,000) – Kiedon Bryant (PhD Student)
- 2024 SSE Graduate Research Excellence Grant (GREG) R. C. Lewontin Award (\$2,033) – Taylor Black (PhD Student)
- 2023 NSF Research Coordination Network, Integrating Organismal Biology into NEON Pilot Grant (\$1,833) – Brynn Johnson (MS Student)

HONORS, AWARDS, & FELLOWSHIPS

- 2026 Early Career Spotlight Talk – Midwest Population Genetics Conference, Chicago, IL

- 2024 Keynote Speaker - Texas Genetics Society, 51st Annual Meeting
- 2023 Early Career Scientist Award - Evolution Seminar Series, UW-Madison
- 2022 Early Career Investigator Award - American Society of Naturalists (ASN)
Recognizes outstanding and promising work by early career investigators
- 2021 Chicago Fellows Postdoctoral Fellowship - University of Chicago (two years' salary, \$118,000) **Awarded to truly exceptional and creative scientists in the biological and biomedical sciences**
- 2020 Walter M. Fitch Award - Society for Molecular Biology and Evolution (SMBE)
- 2019 Hamilton Award, Honorable Mention - Society for the Study of Evolution (SSE)
- 2019 Emerson Memorial Award for Best Dissertation - School of Integrative Biology, University of Illinois Urbana-Champaign (UIUC) **Recognizes exceptional academic achievement and research potential**
- 2017, 2018 Best Talk by a PhD Candidate - Graduates in Ecology and Evolutionary Biology (GEEB) Research Symposium at UIUC
- 2016, 2017 Teacher Ranked as Excellent by Students - UIUC
- 2016 Spring Semester Fellowship - Program in Ecology, Evolution, and Conservation Biology (PEEC), UIUC
- 2013-2015 Integrative Graduate Education and Research Traineeship (IGERT), Vertically Integrated Training with Genomics (VInTG) – NSF (two years' stipend, \$64,000)
- 2013 Outstanding Women and Gender Advocacy Student Award - Northern Illinois University (NIU)
- 2012-2013 University Fellowship - NIU (\$10,000)
- 2011 University Honors - NIU
- 2011 Departmental Honors - Biological Sciences, NIU
- 2011 August M. Gorenz Award - Biological Sciences, NIU **Awarded annually to an outstanding undergraduate student majoring in the biological sciences**
- 2010 Dennis Larsen Memorial Scholarship - Department of Biological Sciences, NIU
- 2010 Scholar Award for First Year Physics Students - Department of Physics, NIU
- 2007 Centennial Scholarship - NIU

Mentee Honors, Awards, & Fellowships

- 2026 UW Madison Early Career Scientist Award Symposium – Gabrielle Welsh (Postdoc)
- 2026 Society for the Study of Evolution (SSE) Hamilton Award, Honorable Mention – Gabrielle Welsh (Postdoc)
- 2026 Animal Behavior Society (ABS) Allee Award Finalist – Gabrielle Welsh (Postdoc)
- 2026 NSF Graduate Research Fellowship, Honorable Mention - Wynne Radcliffe (PhD student)
- 2024 - 2027 NSF Graduate Research Fellowship (\$159,000) – Kiedon Bryant (PhD student)
- 2024 - 2025 Texas A&M University Merit Fellowship (\$43,000) – Wynne Radcliffe (PhD student)
- 2024 Best Talk, Rice University's Gulf Coast Undergraduate Research Symposium, Houston, TX – Isa Mendoza (Undergraduate Honors Student)

TEACHING EXPERIENCE

Instructor of Record

Texas A&M University

BIOL 451 - Bioinformatics (Fall 2023, Fall 2024)
BIOL 681 – The Biology of Sex (Spring 2024, Spring 2025)
BIOL 681 – Speciation (Fall 2024)

Guest Lecturer

Northern Illinois University

ENVS 302 Environmental Science 2: Biological Systems - Sexual selection (Spring 2013)

University of Illinois at Urbana-Champaign

IB 329 Animal Behavior - Sexual selection and female mate choice (Spring 2016)
IB 463 Ichthyology - Hearing and mechanoreception in fishes (Fall 2016); Speciation in fishes (Fall 2016, 2018); Olfaction in fishes (Fall 2018); Electroreception in fishes (Fall 2018)

Teaching Assistant

Northern Illinois University

ENVS 301 Environmental Science 1: Physical Systems (Spring 2011, Fall 2011, Fall 2012)
BIOS 430/530 Plant Systematics (Fall 2011)
ENVS 302 Environmental Science 2: Biological Systems (Spring 2012, Spring 2013)

University of Illinois at Urbana-Champaign

IB 105 ONL Environmental Biology - online (Fall 2014)
IB 100 ONL Integrative Biology - online (Spring 2015)
IB 368/NRES 368 Vertebrate Natural History - laboratory (Fall 2015)
IB 302 Evolution - laboratory (Spring 2017)
IB 463 Ichthyology - laboratory (Fall 2016, Fall 2018)

Research Assistant

University of Illinois at Urbana-Champaign

Progressing through the Ages: Global change, Evolution, & Societal well-being (PAGES), funded by an NIH Science Education Partnership Award (SEPA). Developed K-12 curriculum aligned with Next Generation Science Standards (Fall 2017 – Spring 2019)

PRESENTATIONS

Invited Seminars

Armour Seminar Series Women's History Month speaker, Field Museum of Natural History, Chicago, IL. March 2026
Department of Forestry & Natural Resources, Purdue University, West Lafayette, IN. January 2026.
Department of Biology, Northern Illinois University, DeKalb, IL. November 2025.
School of Biological Sciences, University of Nebraska-Lincoln, Lincoln, NE. October 2025.
Evolutionary Morphology Seminar Series, Committee on Evolutionary Biology, University of Chicago, Chicago, IL. October 2025.
Department of Evolution, Ecology, and Behavior, University of Illinois at Urbana-Champaign. Urbana, IL. September 2025.
Department of Integrative Biology, Michigan State University. East Lansing, MI. February 2025.
Department of Ecology & Evolution, University of Chicago. Chicago, IL. January 2025.
Department of Biology & Program in Animal Behavior, Indiana University. Bloomington, IN. January 2025.
Department of Biology, Penn State University. State College, PA. December 2024.
Genetics and Genomics (G2), Texas A&M University. College Station, TX. April 2024.
Department of BioSciences at Rice University. Houston, TX. November 2023.

Early Career Seminar Award, UW-Madison Evolution Seminar. Madison, WI. March 2023.
Texas Parks and Wildlife Department. Online. March 2023.
Ecology and Evolutionary Biology, Texas A&M University. College Station, TX. January 2023.
Department of Biology, Temple University. Online. February 2022.
Department of Biology, Texas A&M University. College Station, TX. January 2022.
Department of Biology, University of Oklahoma. Norman, OK. December 2021.
California Academy of Sciences Genomics Social Hour. Online. December 2020.
EEB Department, University of Virginia. Online. October 2020.
Behavior Group Meeting, University of Minnesota. Online. October 2020.
PEEC Seminar, University of Illinois at Urbana-Champaign. Urbana, IL. March 2019.
Population Genomics Group Meeting, University of Minnesota. St. Paul, MN. June 2018.
Department of Animal Biology Colloquium, UIUC. Urbana, IL. April 2018.
Champaign Area Fish Exchange (CAFÉ) Meeting. Champaign, IL. November 2015.
EEB Group Meeting, Texas State University. San Marcos, TX. November 2012.

Invited Conference Talks

Symposium, "Empirical and conceptual insights on the (un)predictability of evolution",
Evolution Meeting. Montreal, Québec. July 2024.
Keynote Speaker, Texas Genetics Society Annual Meeting, College Station, TX. March 2024.
Southeast Texas Evolutionary Genetics & Genomics Symposium. Houston, TX. July 2023.
Early Career Investigator Award Symposium, American Society of Naturalists. Evolution
Meeting. Cleveland, OH. June 2022.
Walter M. Fitch Award Symposium, Society for Molecular Biology and Evolution. Society for
Molecular Biology and Evolution Meeting. Online. June 2020.
Hamilton Award Symposium, Society for the Study of Evolution. Evolution Meeting.
Providence, RI. June 2019. **Awarded Honorable Mention.**

Contributed Conference Talks

11th Annual Conference of Poeciliid Biologists. San Marcos, TX. October 2024.
Evolution Meeting. Albuquerque, NM. June 2023.
Southeast Texas Evolutionary Genetics & Genomics Symposium. Houston, TX. June 2023.
National Science Teachers Association Conference. St. Louis, MO. April 2019.
National Association of Biology Teachers Conference. San Diego, CA. November 2018.
Midwest Ecology and Evolution Conference (MEEC). Hickory Corners, MI. April 2018.
Graduates in Ecology and Evolutionary Biology (GEEB) Research Symposium, UIUC.
Urbana, IL. February 2016, 2017, and 2018. **Awarded best talk in 2017 and 2018.**
Evolution Meeting. Portland, OR. June 2017.
Midwest Ecology and Evolution Conference (MEEC). Urbana, IL. March 2017.
Evolution Meeting. Austin, TX. June 2016.
Animal Behavior Conference, Indiana University. Bloomington, IN. March 2015.
Graduate Student Research Association Conference, Northern Illinois University. DeKalb, IL.
March 2012 and April 2013.

PROFESSIONAL SERVICE & OUTREACH

Campus2Congress (C2C) Video Conference at Northern Illinois University (NIU) - Assisted with
organizing and running video conference with Illinois Senator Dick Durbin. (2011)
Environmental Film Festival, NIU Institute for the Study of the Environment, Sustainability and
Energy - Assistant Organizer. (2011)

Region V Illinois Junior Academy of Science (IJAS) - Science Fair Judge (2012)
STEM Fest for K-12 Students at NIU - Presenter. (2012)
STEM Career Investigations Camp for Grades 9-12 at NIU - Guest Speaker. (2012)
NIU Undergraduate Research and Artistry Day - Poster Judge. (2012, 2013)
STEM Saturdays Classes at NIU - Developed and taught a class on Aquatic Biology for 4th to 8th grade students. (Spring and Summer 2013)
Graduate Student Research & Artistry Conference at NIU – As GSRA President, I organized a conference and hosted keynote speaker Ira Flatow, host of NPR's Science Friday. (2013)
Boneyard Creek Clean Up Day - “Fishes of Boneyard Creek” display (2014, 2015, 2016)
Science at the Market "Backyard Ecology" booth - Volunteer presenter. (2015, 2016)
Girls Explore Biology Camp - Ran activities at summer day camp for 4th-7th grade girls. (2015)
Junior Scientist Day at Yankee Ridge Elementary, Urbana, IL - Volunteer presenter. (2016)
Wildlife Society Club at UIUC - Led fish field trip for undergraduates. (2016)
Midwest Ecology and Evolution Conference (MEEC) at UIUC - Organized social mixer and moderated session. (2017)
Girls Go For It - Lead Coach at afterschool leadership program for 5th grade girls. (2017)
Graduates in Ecology and Evolutionary Biology (GEEB) at UIUC - Social Chair (2014-2015), EcoLunch Coordinator (2015-2016), President (2016-2017), Symposium Judge (2017-2019)
Teacher Training Workshops at UIUC - Planned and implemented a series of four workshops for secondary education science teachers to gain training in the Next Generation Science Standards and developed and implemented high school evolution curriculum. (2016-2018)
Field Guides Program - Student-run group that serves to connect undergraduates interested in EEB to graduate student and postdoc mentors and provides monthly professional development seminars. (2020)
Women's Mentoring Lunch, Invited Panelist - Led informal discussions on mentorship and pursuing a career in research at weekly brown bag lunch meetings during the summer. Participants included faculty, postdocs, and graduate students from the University of Minnesota and undergraduate students from Macalester College. (2021)
Preparing Future Faculty Program, Invited Panelist - Discussed transitioning from graduate school to postdoctoral and faculty roles with graduate students at the University of Minnesota. (2022)
Talk Judge - Ecological Integration Symposium, EEB, Texas A&M University. (2023)
Poster Judge - Southeast Texas Evolutionary Genetics & Genomics Symposium. (2023)
Poster Judge - Student Post-doc Research Conference, Department of Biology, Texas A&M University. (2023, 2024)
TAMU EEB Darwin Day Booth - Diversity of Texas Fishes (2024, 2025)
Graduate Program Committee, Department of Biology (member), TAMU. (2023- 2025)
Reviewer, SSE Graduate student awards - R.C. Lewontin Early Award (2024), Rosemary Grant Advanced Award (2026)
Graduate Recruiting and Admissions Committee (member), EEB IDP, TAMU (2024)
Committee on Bioinformatics Curriculum Development (member), Department of Biology, TAMU (2023 – 2025)
Committee on Student-Advisors Separations (member), EEB IDP, TAMU (2024 – 2025)

Invited panelist, Faculty Mentor Training Series, Biological Sciences Division, University of Chicago (2025)

Reviewer for Ecology and Evolution Summer Fellowship Applications, Department of Ecology & Evolution, University of Chicago (2026)

Signals of Change Podcast – Invited guest (2026)

Guest speaker, UChicago BSD “Pizza with the Pls” first year class (2026)

UChicago Lab School Outreach – hosted 25 kindergarteners in our lab for a tour of the fish room and to learn about darters (2026)

New Faculty Lighting Talk - UChicago BSD Basic Science Community Gathering (2026)

Judge – SSE Hamilton Symposium (2026)

Reviewer for Evolution, Journal of Animal Ecology, Molecular Ecology, Ecology and Evolution, Biological Journal of the Linnean Society, Journal of Ethology, American Naturalist, Behavioral Processes, Ecology Letters, Evolution Letters, Integrative Organismal Biology, Proceedings B, Molecular Systems Biology

PROFESSIONAL DEVELOPMENT

Teaching Evolutionary Biology Workshop. “Developing Tools to Teach Evolution and Dispel Common Misconceptions.” University of Illinois. Urbana, IL. (*Workshop facilitator*; 2014)

Graduate Academy for College Teaching. The Center for Innovation in Teaching and Learning, University of Illinois. Two-day workshop with sessions on foundational teaching topics, discipline-based teaching topics and language, culture, and diversity topics. (*Participant*; 2015)

National Association of Biology Teachers (NABT) Conference. San Diego, CA. (*Workshop facilitator*; 2018)

National Science Teachers Association (NSTA) National Conference on Science Education. St. Louis, MO. (*Workshop facilitator*; 2019)

Implicit Bias Training Workshop. “Re-Writing the Story: Understanding Implicit (Unconscious) Bias.” Counseling Center, University of Illinois. Urbana, IL. (*Participant*; 2019)

Equity and Diversity Certificate. The Office for Equity and Diversity Education, University of Minnesota. Ten-week online course covering topics such as Navigating Challenging Conversations, Addressing Implicit Bias and Microaggressions, Collective Access for All, Ableism & Disability Justice, LGBTQIA Identities and Communities, and Race, Racism, and White Supremacy. (*Participant*; 2020)

Early Career Success Program, Office of the Provost, University of Chicago (Participant; 2025 - 2026)

Faculty Mentor Training Series, Biological Sciences Division, University of Chicago (Participant; 2025 - 2026)

STUDENTS SUPERVISED

Undergraduate Students

(*Developed an independent honors research project)

University of Illinois at Urbana-Champaign

Miao Xu (2014), Makayla Wycoff* (2014-2015), Asif Ali (2015), Rachel Siller (2015), Lindsay Hartwig (2016), Rachel Soukup* (2016-Present), Alex Park (2017), Michelle Christopher (2017),

Jennifer Flores (2017), Mary Durstock (2018), Angela Zheng (2018), George Balto (2018), Rishabh Mehta (2018), Kwesi Talavera (2018), Nathanael Eaves (2018)

University of Minnesota

Jonathan Wiese (2020-2022)

Texas A&M University

Abby Saegert (2023 – 2024), Halle Hagdorn (2023 – 2024), Joseph Dib (2023 – 2024), Isa Mendoza* (2023 – 2025), Olivia Cole (2024), Maya Stokes (2024; TAMU-PVAMU NIH GREAT Award trainee), Peter Dang (2024 – 2025), McKenna Bowman (2024 – 2025)

University of Chicago

Suhani Kotecha (2026 – present), Kristine Cacayuran (2026 – present)

Graduate Students

Committee Chair

TAMU

Taylor Black, TAMU Biology PhD student (2022 – 2026)

Brynn Johnson, TAMU Biology MS student (2023 – 2025)

Kiedon Bryant, TAMU Biology PhD student (2024 – 2025; remained at TAMU)

UChicago

Wynne Radcliffe, University of Chicago Ecology & Evolution (E&E) PhD student (2025 – Present)

India Wesley-Cardwell, University of Chicago, Immuno-engineering PhD student in the Pritzker School of Molecular Engineering (PME) (2025 – Present)

Committee Member

TAMU

Megan Copeland, Biology PhD student (Chair: Heath Blackmon)

Austen Ehrie, Biology PhD student (Chair: Courtney Fitzpatrick)

Sean Chien, Biology PhD student (Chair: Heath Blackmon)

Alex Samano, Biology PhD student (Chair: Mahul Chakraborty)

Brittany Cornell, Biology PhD student (Chair: Courtney Fitzpatrick)

Stephanie Hendricks, Biology PhD student (Chair: Marie Strader)

Carolina Zertuche-Mery, Biology MS student (Chair: Alex Keene)

Noah Santee, ECCB MS student (Chair: Joshua Perkin)

Benton Fry, EEB PhD student (Chair: Kirk Winemiller)

Jonathan Ellard, ECCB MS student (Chair: Joshua Perkin)

Jenna Turpin, ECCB PhD student (Chair: Jessica Yorzinski)

Isis Davis, EEB PhD student (Chair: Lee Fitzgerald)

Lauren Doellinger, Biology MS student (Chair: Kira Delmore)

Aakriti Rastogi, Biology PhD student (Chair: Alex Keene)

Wesley Arend, ECCB MS student (Chair: Kevin Conway)

Hayden Roberts, ECCB PhD student (Chair: Joshua Perkin)

Thomas Dodson, EEB PhD student (Chair: Joshua Perkin)

UChicago

Sophie Kelly, E&E PhD student

Elizabeth (Libby) Polston, E&E PhD student

Tanner Lee, E&E PhD student

CV
Moran

Rachel L.

Diego Morales Sánchez, CEB PhD student
Madelynn Sinclair, CEB PhD student

Postdoctoral Trainees

Mysia Dye (2023 – 2024; now faculty at Whitman College)
Daemin Kim (2024 – Present)
Gabrielle Welsh (2025 – Present)
Taylor Black-Bergrud (2026 – Present)