

## SECTION IV: VITA

last updated: 12/15/2025

### I. ACADEMIC HISTORY

**1. Name:** Alexander T. Strauss

**2. Present rank:** Assistant Professor

**Recommended rank:** Associate Professor

**Department:** Odum School of Ecology

**3. Allocation of effort (1.00 EFT):** Instruction: 0.33; Research: 0.60; Service: 0.07

**4. Tenure status:** On tenure track

**5. Administrative title:** None

**6. Graduate faculty status:** Active, first appointed August 2020

**7. Highest degree:** PhD in Ecology, Evolution and Behavior, Indiana University, 2016

**8. List of academic positions:**

8/20-present: *Assistant Professor*, Odum School of Ecology, University of Georgia

5/17-7/20: *Postdoctoral Associate*, U. Minnesota & Nat. Socio-Env. Synthesis Center (SESYNC)

1/17-4/17: *Postdoctoral Associate*, Indiana University

8/11-12/17: *NSF GRFP Fellow, Teaching Assistant, and Final Year Fellow*, Indiana University

**9. Post-graduate awards:**

2025: Richard B. Russell Excellence in Undergraduate Teaching Award, University of Georgia

2024: Outstanding Teaching Faculty, Odum School of Ecology, University of Georgia

2022: Lilly Teaching Fellowship, University of Georgia

2019: JBS Haldane Early Career Award, British Ecological Society

2017: Thomas M. Frost Award for Graduate Research, Ecological Society America, Aquatic Section

2016: Floyd/Ogg/Cleland Final Year Fellowship Award, Indiana University

2015: Outstanding Paper Award, Ecological Society of America, Disease Ecology Section

2014: Doctoral Dissertation Improvement Grant (DDIG) Award, NSF

2013: David G. Frey Memorial Fund Award

2011: Graduate Research Fellowship Program (GRFP) Award, NSF

2011: Biology Department Research Recruitment Fellowship Award, Indiana University

### II. INSTRUCTION

#### 1. Courses taught

Dr. Strauss regularly teaches undergraduate and graduate courses (Table 1). Labs and lectures are listed separately since enrollment often differs; summary does not include supervised undergraduate research, graduate research, lab group meetings, or guest lectures.

**TABLE 1: SUMMARY OF COURSES TAUGHT AT UGA**

Course (ECOL)	Responsibility <sup>1</sup>	Course Title <sup>2</sup>	Term	Enroll. <sup>3</sup>	Course Credit	Cred. Hours
4000/6000	100	Pop. & Comm. Ecology	F 2025	40	3	120
4000L/6000L	100	Pop. & Comm. Ecology Lab	F 2024	9	1	9
4000/6000	100	Pop. & Comm. Ecology	F 2024	38	3	114
4310L/6310L	50	Freshwater Ecosystems Lab	F 2024	23	1	11.5
4310/6310	50	Freshwater Ecosystems	F 2024	37	3	55.5
4000/6000	100	Pop. & Comm. Ecology	F 2023	32	3	96
4310L/6310L	50	Freshwater Ecosystems Lab	F 2023	18	1	9
4310/6310	50	Freshwater Ecosystems	F 2023	30	3	45
4150/6150	50	Pop. Bio. Infect. Disease Lab	S 2023	24	1	12
4150/6150	50	Pop. Bio. Infect. Disease	S 2023	24	3	36

4150L/6150L	50	Pop. Bio. Infect. Disease Lab	S 2022*	36	1	18
4150/6150	50	Pop. Bio. Infect. Disease	S 2022*	36	3	54
4000/6000	50	Pop. & Comm. Ecology	F 2021	28	3	42
4310L/6310L	50	Freshwater Ecosystems Lab	F 2021	19	1	9.5
4310/6310	50	Freshwater Ecosystems	F 2021	34	3	51
4150L/6150L	50	Pop. Bio. Infect. Disease Lab	S 2021	42	1	21
4150/6150	50	Pop. Bio. Infect. Disease	S 2021	43	3	64.5
4000/6000	50	Pop. & Comm. Ecology	F 2020	27	3	40.5
8000	8.3	Topics in Modern Ecology	F 2020	13	3	3.25

1: Responsibility = percent teaching responsibility. 2: Abbreviated titles: Pop. & Comm. Ecology = Population and Community Ecology; Pop. Bio. Infect. Disease = Population Biology of Infectious Disease. 3: Enroll. = Enrollment.  
 \*Teaching release granted for fall 2022 as part of third year review; partial release granted for fall 2025 via FMLA

#### GUEST LECTURES

- 2024: Disease in Aquatic Food Webs. FYOS 61396: Ecology of Infectious Diseases (J. Drake)
- 2023: Host & Parasite Evolution. REU Program Lecture Series
- 2023: Microparasites. REU Program Lecture Series
- 2022: Disease in Aquatic Food Webs. FYOS 54924: Ecology of Infectious Diseases (J. Drake)
- 2020: Disease Ecology. Ecology 3500 (Prof. A. Injaian)

## **2. Development of new courses and teaching resources**

#### NEW COURSES

- ECOL 4000L/6000L: Population and Community Ecology Lab (FIRST OFFERED 2024)

#### COURSE RE-DESIGN (TEACHING INNOVATIONS)

- ECOL 4000/6000: Population and Community Ecology (*flipped classroom; scaffolded problem sets; i-clicker formative assessments; peer-graded group project; jigsaw paper discussions; individual whiteboards for sketching graphs and deriving equations in class*)
- ECOL 4150/6150: Population Biology of Infectious Disease (*new topics; recorded lectures; new case studies; in-class activities*)
- ECOL 4150L/6150L: Population Biology of Infectious Disease Lab (*red queen card game; 3-week wet lab experiment with invertebrate hosts & data analysis module*)
- ECOL 4310/6310: Freshwater Ecosystems (*flipped classroom; jigsaw paper discussions; in-class think-pair-shares; synthesis writing activities in lieu of traditional exams*)
- ECOL 4310/6310L: Freshwater Ecosystems Lab (*revised all content including field sampling expeditions and 3-week wet lab mesocosm experiment & data analysis module*)

#### TEACHING RESOURCES

- 2025: Host for “Faculty-to-Faculty” Program (ECOL 4000: Oct. 9, 2025)
- 2024: “Teaching Tips” presentation at faculty meeting on jigsaw paper discussions

## **3. Supervision of graduate student research**

- 2023-present: James Oni (Ph.D. Ecology, UGA)
- 2023-2025: Kelly Mayes (M.S. Ecology, UGA)
- 2021-present: Katherine Schroeder (Ph.D. Ecology, UGA)

## **4. Graduate student advisory committee membership**

- 2024-present: Nina Simone Warner (M.S. Ecology, UGA)
- 2024-present: Jacob Lott (M.S. Ecology, UGA)
- 2024-present: Anna Bushong (PhD. Ecology, UGA)
- 2024-present: Josiah Kaderis (M.S. Ecology, UGA)
- 2024-present: Marilee Hoyle (M.S. Ecology, UGA)

- 2023-present: Nadia Raytselis (Ph.D. Population Biology, Ecology, and Evolution, Emory U.)
- 2022-present: Brandon Haile (Ph.D. Ecology, UGA)
- 2022-2024: Kelly Holland (M.S. Forestry and Natural Resources, UGA)
- 2021-2024: Daniel Suh (Ph.D. Ecology, UGA)

#### **5. Supervision of undergraduate research & grants awarded to UGA mentees (17)\***

- 2025: Eileen Brook: Summer Volunteer (Georgia Institute of Technology)
- 2025: Patricia Babb: Independent Research (ECOL 4960) & CURO Research Award, UGA
- 2025: Liv Ritacco: CURO Research Award, UGA
- 2024: Reina Scott: CURO Summer Fellowship & CURO Research Award, UGA
- 2024: Emilie Dudgeon: CURO Research Award (2x), UGA
- 2024: Ava McCain: CURO Research Award, UGA
- 2024: Avery Akins: Independent Research (ECOL 4960) & CURO Research Award, UGA
- 2023: T’Kai Adekunle (Savannah State University): Pop. Bio. Infect. Diseases REU, UGA
- 2023: Isaac Wood: Independent Research (ECOL 4960) & CURO Summer Fellowship, UGA
- 2023: Gabriel Sullivan-Brugger: Ind. Research (ECOL 4960) & CURO Award, UGA
- 2023: Christopher Romiluyi: CURO Research Award, UGA
- 2022: Jenavier Tejada (Dennison University): Population Biology of Infectious Diseases REU, UGA; Travel Award, SACNAS National Diversity in STEM Conference
- 2022: Emily Landolt (St. Norbert College): Pop. Biology Infectious Diseases REU, UGA
- 2022: Abigail (Mackenzie) Jordan: CURO Research Award, UGA
- 2022: Andrew Mancao: Independent Research (ECOL 4960) & CURO Award, UGA
- 2021: Hannah O’Grady (Mount Holyoke College): Pop. Bio. Infectious Diseases REU, UGA
- 2021: August Anderson: Independent Research (ECOL 4960) & CURO Award, UGA

*\*Student Success Activities*

#### **6. Leadership of undergraduate training programs**

- 2022-2023: Acting co-Director, NSF Site REU Program: Population Biology of Infectious Disease Site REU, University of Georgia

#### **7. Instructional grants received**

- 2023: One-time Student Technology Fee (STF) Funding, UGA (\$11,074)
- 2022-2024: Lilly Teaching Fellowship, UGA (\$2,000)

#### **8. Recognitions and outstanding achievements in teaching and mentoring**

- 2025: Richard B. Russell Excellence in Undergraduate Teaching Award, University of Georgia
- 2024: Student Career Success Influencer Award, Career Center, University of Georgia
- 2024: Outstanding Teaching Faculty, University of Georgia
- 2022-2024: Lilly Teaching Fellowship, UGA

#### **9. Professional development**

- 2020-2022: Lilly Teaching Fellowship, UGA
- 2019: Teaching Mentorship, Dep. Biology Teaching and Learning, UMN (Mentor: Mark Decker)
- 2015: Enrolled Course: Mentored Teaching, IU (Instructor: Mimi Zolan)

### **III. SCHOLARLY ACTIVITIES & CREATIVE WORK**

#### **1. Publications**

Dr. Strauss has authored a total of **34** peer-reviewed publications, including 31 journal articles, two monographs and one book chapter, with 20 of these works published after Dr. Strauss arrived at UGA. Authorship was typically assigned using the “first-last-author-emphasis-norm”, in which the first author is the primary contributor and last authorship denotes “senior authorship”

with contributions to study design, interpretation, and writing. Notations: Dr. Strauss is **bolded**. Manuscripts where he was the senior author are denoted with \*. Students and other coauthors advised by Dr. Strauss are underlined. For co-authored publications with Dr. Strauss as a middle author, his contributions are briefly described in *italics*. Award-winning publications (5x) are denoted with a †.

#### A. CHAPTERS IN BOOKS (PEER REVIEWED; INVITED)

1. \*Guindre-Parker, S, Tung, J, and **AT Strauss**. 2022. Emerging frontiers in animal behavior and parasitism: Integration across scales. In: Ezenwa VO, Altizer S, Hall RJ, editors. *Animal Behavior and Parasitism*: Oxford University Press. 16 pages. *All authors contributed equally*.

#### B. MONOGRAPHS (PEER REVIEWED; NOT INVITED)

2. Borer ET, Paseka, RE, Peace, A, Asik, L, Everett, R, Frenken, T, González, AL, **Strauss, AT**, Van de Wall, D, LA White and EW Seabloom. 2022. Disease-mediated nutrient dynamics: Coupling host-pathogen interactions with ecosystem elements and energy. *Ecological Monographs* 92 (2): e1510. *Dr. Strauss roles: discussion, interpretation, writing*.
3. † **Strauss, AT**, Shocket, MS, Civitello, DJ, Hite, JL, Penczykowski, RM, Duffy, MA, Cáceres, CE, and SR Hall. 2016. Habitat, predators, and hosts regulate disease in *Daphnia* through direct and indirect pathways. *Ecological Monographs* 86: 393-411. †winner of 2017 Thomas M. Frost Award for Excellence in Graduate Research.

#### C. JOURNAL ARTICLES (PEER REVIEWED; NOT INVITED)

4. \*Suh, D, Schroeder, K, and **AT Strauss**. Temperature and resources interact to influence transmission via host foraging rate and susceptibility. *Ecology Letters*. In press.
5. \*Suh, D, Schroeder, K, Tejada J, Landolt, E, and **AT Strauss**. A legacy of competitive exclusion: Host stage structure and amplified disease. *Integrative and Comparative Biology*. In press.
6. Halliday, FW, Kohli, M, Everingham, SE, Bröcher, M, Ebeling, A, Kempel, A, Mundim, FM, **Strauss, AT**, and ZA Xirocostas. Towards an integrative mechanistic framework for biodiversity-consumer relationships. 2025. *Trends in Ecology & Evolution* (In press). *Dr. Strauss roles: discussion, writing*
7. **Strauss, AT**, Hobbie, SE, Reich, PB, Seabloom, EW, and ET Borer. The effect of diversity on disease reverses from dilution to amplification in a 22-year biodiversity x N x CO<sub>2</sub> experiment. 2024. *Scientific Reports* 14(1).
8. **Strauss, AT**, Suh, DC, Galbraith, K, Coker, SM, Schroeder KM, Brandon, C, Warburton, EM, Yabsley, MJ, and CA Cleveland. 2024. Mysterious Microsporidians: Springtime outbreaks of disease in *Daphnia* communities in shallow pond ecosystems. *Oecologia* 204(2).
9. van de Waal, DB, White, LA, Everett, RA, Asik, A, Borer, ET, Frenken, T, González, AL, Paseka, RE, Seabloom, EW, **Strauss, AT**, and AL Peace. 2023. Reconciling contrasting effects of nitrogen on host immunity and pathogen transmission using stoichiometric models. *Ecology* 104(12). *Dr. Strauss roles: discussion, interpretation, writing*.
10. Seabloom, EW, Asik, A, Everett, RA, Frenken, T, González, AL, Paseka, RE, Peace, AL, **Strauss, AT**, van de Waal, DB, White, LA, and ET Borer. 2023. Dead or alive: Integrating disease and ecosystem ecology theory. *Oikos*. *Dr. Strauss roles: design, discussion, interpretation, writing*.
11. Walsman, JC, **Strauss, AT**, Hite, JL, Shocket, MS, and SR Hall. 2022. A paradox of parasite resistance: disease-driven trophic cascades increase the cost of resistance, selecting for lower resistance with parasites than without them. *Evolutionary Ecology* 37(1): 53-74. *Dr. Strauss roles: data collection, discussion, writing*.
12. Walsman, J, **Strauss, AT**, and SR Hall. 2022. Parasite-driven cascades or hydra effects: virulence and foraging depression shape parasite-host-resource interactions. *Functional Ecology* 36: 1268-1278. *Dr. Strauss roles: data collection, discussion, writing*.

13. Ebeling, A, **Strauss, AT**, Adler, P, Arnillas, C, Barrio, I, Biederman, L, Borer, E, Bugalho, M, Caldeira, M, Cadotte, M, Daleo, P, Eisenhauer, N, Eskelinen, A, Fay, P, Firn, J, Graff, P, Hagenah, N, Haider, S, Komatsu, K, McCulley, R, Mitchell, C, Moore, J, Pascual, J, Peri, P, Power, S, Prober, S, Risch, A, Roscher, C, Sankaran, M, Seabloom, E, Schielzeth, H, Schutz, M, Speziale, K, Tedder, M, Virtanen, R, and DM Blumenthal. 2022. Nutrient enrichment increases herbivory and pathogen damage in grasslands. *Journal of Ecology* 110: 327-339. *Dr. Strauss roles: coding, analysis, discussion, writing. The first two authors (AE and **ATS**) contributed equally.*
14. Porath-Krause A, **Strauss, AT**, Henning, JA, Seabloom, EW, and ET Borer. 2022. Pitfalls and Pointers: An accessible guide to marker gene amplicon sequencing in ecological applications. *Methods in Ecology and Evolution* 13: 266-277. *Dr. Strauss roles: coding, analysis, writing.*
15. Wilfahrt, P, Asmus, AL, Seabloom, EW, Henning, JA, Adler, P, Arnillas, CA, Bakker, JD, Biederman, L, Brudvig, LA, Cadotte, M, Daleo, P, Eskelinen, A, Firn, J, Harpole, WS, Hautier, Y, Kirkman, KP, Komatsu, KJ, Laungani, R, MacDougall, A, McCulley, RL, Moore, JL, Morgan, JW, Mortensen, B, Hueso, RO, Ohlert, T, Power, SA, Price, J, Risch, AC, Schuetz, M, Shoemaker, L, Stevens, C, **Strauss, AT**, Tognetti, PM, Virtanen, R, and ET Borer. 2021. Temporal rarity is a better predictor of local extinction risk than spatial rarity. *Ecology* 102 (11): e03504. *Dr. Strauss roles: data collection, discussion, writing.*
16. **Strauss, AT**, Bowerman, L, Porath-Krause A, Seabloom, EW, and ET Borer. 2021. Mixed infection, risk projection, and misdirection: Resource supply determines infection risk for hosts exposed to multiple pathogens. *Ecology and Evolution* 11 (14): 9599-9609.
17. Frenken, T, Paseka, R, González, A, Asik, L, Seabloom, EW, White, L, Borer, ET, **Strauss, AT**, Peace, A, D van de Waal. 2021. Changing elemental cycles, stoichiometric mismatches, and consequences for pathogens of primary producers. *Oikos* 130 (7): 1046-1055. *Dr. Strauss roles: discussion, writing.*
18. Porath-Krause, A, Campbell, R, Shoemaker, LG, Sieben, A, **Strauss, AT**, Shaw, AK, Seabloom, EW, and ET Borer. 2021. Pliant pathogens: Estimating viral spread when confronted with new vector, host, and environmental conditions. *Ecology and Evolution* 11 (4): 1877-1887. *Dr. Strauss roles: design, analysis, discussion, writing.*
19. Borer, ET, Asik, L, Everett, R, Frenken, T, González, A, Paseka, R, Peace, A, Seabloom, EW, **Strauss, AT**, van de Waal, D, and L White. 2021. Elements of disease in a changing world: Modeling feedbacks between infectious disease and ecosystems. *Ecology Letters* 24 (1): 6-19. *Dr. Strauss roles: discussion, interpretation, writing.*
20. **Strauss, AT**, Henning, JA, Porath-Krause A, Asmus AL, Shaw, AK, Borer, ET, and EW Seabloom. 2020. Vector demography, dispersal, and the spread of disease: Experimental epidemics under elevated resource supply. *Functional Ecology* 34 (12): 2560-2570.
21. Paseka, R, White, L, van de Waal, D, **Strauss, AT**, González, A, Everett, R, Peace, A, Seabloom, EW, Frenken, T, and ET Borer. 2020. Disease-mediated ecosystem services: Pathogens, plants, and people. *Trends in Ecology and Evolution*. 35 (8): 731-743. *Dr. Strauss roles: discussion, writing.*

*All journal articles listed below were published before ATS arrived at UGA.*

22. **Strauss, AT**, Hite, JL, Civitello, DJ, Shocket, MS, Cáceres, CE, and SR Hall. 2019. Genotypic variation in parasite avoidance behavior and other mechanistic, non-nonlinear components of transmission. *Proceedings of the Royal Society B* 286 (1915): 20192164.
23. **Strauss, AT**, Shoemaker LG, Seabloom EW, and ET Borer. 2019. Cross-scale dynamics in community and disease ecology: Relative timescales shape the community ecology of pathogens. *Ecology* 100 (11): e02836.
24. † Shoemaker, LG, Hayhurst, E, Weiss-Lehman, CP, **Strauss, AT**, Porath-Krause, A, Borer, ET, Seabloom, EW, and AK Shaw. 2019. Pathogens manipulate the preference of vectors, slowing disease spread in a multi-host system. *Ecology Letters* 22 (7): 1115-1125. *Dr. Strauss roles: data*

collection, discussion, writing. †winner of 2019 Ecology Letters Early Career Researcher Award (awarded to L Shoemaker)

25. Bresciani, L, Lemos, LN, Wale, N, Lin, JY, **Strauss, AT**, Duffy, MA, and LM Rodrigues. 2018. Draft genome sequence of *Candidatus Spirobacillus cienkowskii*, a pathogen of freshwater *Daphnia* species, reconstructed from hemolymph metagenomics reads. *Microbiology Resource Announcements* 7 (22): e01175-18. *Dr. Strauss roles: collection of field samples, writing.*
26. Shocket, MS, Vergara, D, Sickbert, A, Walsman, J, **Strauss, AT**, Hite, JL, Duffy, MA, Cáceres, CE, and SR Hall. 2018 Parasite rearing and infection temperatures jointly influence disease transmission and shape seasonality of epidemics. *Ecology* 99 (9): 1975-1987. *Dr. Strauss roles: data collection, discussion, writing.*
27. † **Strauss, AT**, Bowling, AM, Duffy, MA, Cáceres, CE, and SR Hall. 2018. Linking host traits, interactions with competitors, and disease: Mechanistic foundations for disease dilution. *Functional Ecology* 32 (5): 1271-1279. †winner of 2019 JBS Haldane Early Career Award.
28. † Shocket, MS, **Strauss, AT**, Hite, JL, Šljivar, M, Civitello, DJ, Duffy, MA, Cáceres, CE, and SR Hall. 2018. Temperature drives epidemics in a zooplankton-fungus disease system: A trait driven approach points to transmission via host foraging. *The American Naturalist* 191 (4): 435-451. *Dr. Strauss roles: data collection, writing.* †winner of 2019 American Naturalist Student Paper Award (awarded to M Shocket).
29. **Strauss, AT**, Hite, JL, Shocket, MS, Cáceres, CE, Duffy, MA, and SR Hall. 2017. Rapid evolution rescues hosts from competition and disease and – despite a dilution effect – increases the density of infected hosts. 2017. *Proceedings of the Royal Society B*. 284.
30. Hite, JL, Penczykowski, RM, Shocket, MS, Griebel, K, **Strauss, AT**, Duffy, MA, Cáceres, CE, and SR Hall. 2017. Allocation, not male resistance, increases male frequency during epidemics: A case study in facultatively sexual hosts. *Ecology* 98: 2773-2783. *Dr. Strauss roles: data collection, writing.*
31. Hite, JL, Penczykowski, RM, Shocket, MS, **Strauss AT**, Orlando PA, Duffy, MA, Cáceres, CE, and SR Hall. 2016. Parasites destabilize host populations by shifting stage-structured interactions. *Ecology* 97: 439-449. *Dr. Strauss roles: data collection, writing.*
32. † **Strauss, AT**, Civitello, DJ, Cáceres, CE, and SR Hall. 2015. Success, failure, and ambiguity of the dilution effect among competitors. *Ecology Letters* 18: 916-926. †winner of 2015 ESA Disease Section Outstanding Paper Award.
33. **Strauss, AT** and KG Smith. 2013. Why does amphibian chytrid (*Batrachochytrium dendrobatidis*) not occur everywhere? An exploratory study in Missouri ponds. *PLoS ONE*.
34. **Strauss, A**, White, A, and M Boots. 2012. Invading with biological weapons: The importance of disease-mediated invasions. *Functional Ecology* 26: 1249-1261.

#### D. WORKS SUBMITTED BUT NOT YET ACCEPTED.

- Henning, JA, Borer, ET, **Strauss, AT**, Lumibao, C, May, G, Kinkel, L, and EW Seabloom. Selection, ecological drift, and dispersal shape foliar fungal endophyte community assembly receiving nutrient addition. In review. *Dr. Strauss roles: discussion, writing.*
- Raytselis N, Risin M, Steinbock L, Story T, Miller J, Heard T, Rintala E, Gupta I, Gutierrez S, **Strauss AT**, and DJ Civitello. Apparent failure and cryptic success of disease control via population regulation: density dependence in copepods, intermediate hosts for Guinea worm disease. Target journal(s): *Ecological Applications*

#### E. WORKS IN ADVANCED STAGES OF PREPARATION (TO BE SUBMITTED 2025)

- Richards, R, Drake, J, and **AT Strauss**. Age structure disrupts healthy-herds effects in predator-parasite interactions. Target journal(s): *Ecology; American Naturalist*
- Warburton, E, Park, A, and **AT Strauss**. Macroecology of parasites with complex lifecycles. Target journal(s): *Global Ecology & Biogeography; Ecology*

- **Strauss AT, Schroeder, D, Brandon, C, Suh, D, and T Adekunle.** Hot and hungry healthy herds: Predators reverse the effects of temperature on disease. Target journal(s): *Ecology Letters*
- \***K Mayes and AT Strauss.** The chironomid contingent: Cryptic diversity of chironomid communities in shallow ponds. Target journals(s): *Freshwater Biology; Oecologia*

#### F. CREATIVE CONTRIBUTIONS OTHER THAN FORMAL PUBLICATIONS

- “This is Hidden” Podcast. Hosted by C Williams, interviewing Alex Strauss about research on the community ecology of infectious disease. 2024.
- “Gaming with Science” Podcast. Hosted by B Kvitko & J Wallace, with guest Alex Strauss. 2024.
- Cedar Creek Education and Community Engagement Newsletter: “The fungus among us: Research on infectious disease in grassland plants.” Paseka, RE and AT Strauss. 2020.
- Functional Ecologists Blog (functionalecologists.com): “Disease, diversity, and dilution.” Strauss, AT. 2019.

## **2. Grants and fellowships received**

Dr. Strauss has been awarded a total of \$1,595,500 in research grants and fellowships, including \$406,350 awarded to the Strauss Lab at UGA. The total amount awarded is listed for each grant or fellowship. For collaborative grants, the amount awarded to Dr. Strauss is listed separately. If funds were not awarded directly to Dr. Strauss, his contributions are briefly described in *italics*.

- 2023-2026: sDiv ECR11.03. Early Career Working Group: How does biodiversity drive disease and herbivory in a changing world? German Centre for Integrative Biodiversity Research (iDiv). Lead PI: Fletcher Halliday [Oregon St U]. Total awarded to group for travel: \$39,900. Awarded to Dr. Strauss for travel: \$6,561. *Dr. Strauss roles: Developed ideas and revised proposal.*
- 2023-2025: NSF DEB 2245422. Thermal Community Ecology of Disease. Sole PI: AT Strauss. Total awarded: \$200,000\*  
*\*amount requested: \$1,055,000; amount awarded: \$200,000*
- 2023-2024: CEID/IOB Seed Grant, UGA. Genome-informed approach to study ecological dynamics of parasites with complex lifecycles. PI: AT Strauss. Co-PIs: C Cleveland and C Bergman. Total awarded: \$25,000. Awarded to Dr. Strauss: \$13,250.
- 2023: UGA Developing Pathways Warnell Internship. Lead PI: R Abney. Co-PI: AT Strauss. Total awarded: \$15,239. *Dr. Strauss roles: Developed questions, writing.*
- 2022-2025: Carter Center A775857: Enhancing Guinea worm eradication efforts by understanding the ecology of copepods and their dynamic responses to predators and Abate treatment. Lead PI: DJ Civitello (Emory U). Co-PI: AT Strauss. Total awarded: \$798,309. Awarded to Dr. Strauss: \$137,538.
- 2021-2022: UGA Presidential Interdisciplinary Seed Grant: Bloom and Doom: Is increasing risk of harmful algal blooms an inevitable consequence of global change? Assessing risk and exploring strategies in Georgia from biological and social perspectives. Lead PI: C Struthers. Co-PIs: AT Strauss, K Capps, P Hazelton, and M Ritchie. Total awarded: \$142,245. Awarded to Dr. Strauss: \$49,000.
- 2020-2022: UMN Minnesota Futures Research Grant (427224). The emergence of chronic wasting disease in Minnesota: Transmission across a landscape of plants, soils, water, and deer. PI: EW Seabloom (UMN). *Dr. Strauss roles: led the proposal, assembled the team, wrote the first draft, managed revisions and submission. The budget would have supported Dr. Strauss as a postdoc at UMN but was reallocated when he accepted his position at UGA.* Total awarded: \$249,000.
- 2016: Floyd/Ogg/Cleland Final Year Fellowship, Indiana University. Total awarded: \$10,000

- 2014-2016: NSF DEB Doctoral Dissertation Improvement Grant (1406846). Dissertation Research: Eco-Evolutionary Dynamics of the Dilution Effect. Lead PI: SR Hall. Co-PI: AT Strauss. *Dr. Strauss roles: developed questions, wrote the first draft and revised.* Total awarded: \$20,000.
- 2013: David G. Frey Memorial Fund Award, Indiana University. Total awarded: \$2,000
- 2011-2016: NSF Graduate Research Fellowship (GRFP). Total awarded: \$94,000.

### **3. Grants under review**

- NSF DBI 2447680: REU Site: Population Biology of Infectious Diseases. Lead PI: S Altizer. Co-PI: AT Strauss\*  
*\*1<sup>st</sup> version submitted 9/27/2023; budget \$558,330; panel decision: "Highly Meritorious" (not funded)*  
*\*2<sup>nd</sup> version submitted 8/21/2024; budget \$549,969; panel decision: "Highly Meritorious" (not funded)*  
*\*3<sup>rd</sup> version submitted 8/20/2025 (currently under review)*
- NIH R35 GM162506: Population Dynamics of Environmentally-Transmitted Pathogens. Sole PI: AT Strauss.  
*\*1<sup>st</sup> version submitted 2/3/2025; budget \$1,887,500 (not funded)*  
*\*2<sup>nd</sup> version submitted 8/3/2025; budget \$1,887,500 (currently under review)*
- Simons Collaboration in Ecology and Evolution: Development and tests of eco-evo-epidemiological theory for epidemics at whole ecosystem scales. Spokesperson PI: AT Strauss. other PIs: J Wares (UGA), M Cortez (FSU), S Hall (IUB).  
*\*1<sup>st</sup> version submitted 10/15/2025; budget \$10,000,000 (currently under review)*
- Carter Center Guinea Worm Eradication Program: The ecology of copepod hosts: Effectiveness of Abate in the field and interactions with L1s in the lab. Lead PI: DJ Civitello (Emory U). Co-PI: AT Strauss. Total requested: \$863,736. Requested for Dr. Strauss: \$443,826.  
*\*Pre-proposal accepted: 7/25/2025*  
*\*Full proposal submitted: 11/14/2025 (currently under review)*
- Department of Defense SERDP: Lime time is the prime time to slime: Calcium, invasive aquatic snails, and the emergence of rat lungworm disease in the Southeast Coastal Plain. Lead PI: AT Strauss. co-PIs: DJ Civitello (Emory U) and N Marzolf (Jones Center at Ichauway). Total requested: \$1,953,522. Requested for Dr. Strauss: \$1,473,402.

### **4. Grants to be resubmitted in spring 2026**

- NSF DEB 2447205: Collaborative Research: The Joint Effects of Interspecific and Intraspecific Variation on the Temporal Dynamics of Host-Parasite Systems. Lead PI: AT Strauss. Co-PI: J Wares. PI at FSU: M Cortez. Next planned submission: Feb 15 2026\*  
*\*1<sup>st</sup> version submitted 9/11/2023; UGA budget \$789,606; decision: "Low Priority Fund" (not funded)*  
*\*2<sup>nd</sup> version submitted 8/19/2024; UGA budget \$894,031; decision: "Low Priority Fund" (not funded)*

### **5. Invited participation in international working groups**

- 2023-2025: sConsume: How does biodiversity drive disease and herbivory in a changing world? Early Career Working Group, German Centre for Integrative Biodiversity Research (iDiv).  
  - meetings attended: Jan 22-26, 2024; March 17-21, 2025
- 2018-2022: Microbial disease dynamics, ecosystem processes, and human eutrophication of the environment, National Socio-Environmental Synthesis Center
- 2017-2021: Nutrient Network Annual Meetings and Workshops, University of Minnesota

### **6. Recognitions and outstanding achievements**

- 2019: JBS Haldane Early Career Award, British Ecological Society
- 2017: Thomas Frost Award in Graduate Research, Ecological Society America, Aquatic Section
- 2015: Outstanding Paper Award, Ecological Society of America, Disease Ecology Section
- 2014: Doctoral Dissertation Improvement Grant Award, NSF
- 2010: Doctoral Dissertation Enhancement Program Awardee, NSF

### **8. Supervision of student research**

**TABLE 2: SUMMARY OF SUPERVISION OF STUDENT RESEARCH AT UGA\***

Year	# Undergraduate research projects advised (CURO, REU, 4960, or similar)	# MS theses advised	# PhD dissertations advised
2025	4 (Babb, Ritacco, Scott, Brook)	1 (Mayes)	2 (Schroeder, Oni)
2024	7 (Scott [2x], Akins [2x], Dudgeon [2x], McCain)	1 (Mayes)	2 (Schroeder, Oni)
2023	4 (Romiluyi, Sullivan-Brugger, Adekunle, Wood)	1 (Mayes)	2 (Schroeder, Oni)
2022	4 (Adams, Mancao, Tejada, Landolt)	0	2 (Schroeder)
2021	2 (Anderson, O'Grady)	0	1 (Schroeder)

*\*Student Success Activities*

#### GRANTS AND OTHER ACCOLADES AWARDED TO GRADUATE MENTEES

- 2025: K. Mayes: Best Poster Basic Research Award, Society for Freshwater Science
- 2025: K. Schroeder: Distinguished Teaching Award, Odum School of Ecology
- 2025: K. Schroeder: Outstanding Teaching Assistant Award, Center for Teaching & Learning
- 2024: K. Mayes: Horseshoe Bend Power Grant, Odum School of Ecology
- 2024: K. Mayes: Graduate Student Research Small Grant, Odum School of Ecology
- 2024: K. Schroeder: Best Presentation in Session, Graduate Student Symposium, Odum School
- 2023: J. Oni: AG Leventis Foundation Grant
- 2023: J. Oni: Presidential Award, UGA Graduate School
- 2023: K. Schroeder: Honorable Mention, NSF Graduate Research Fellowship Program
- 2022: K. Schroeder: Graduate Student Research Small Grant, Odum School of Ecology

#### ACCOLADES AWARDED TO UNDERGRADUATE & POST-BACCALAUREATE MENTEES\*

- 2024: C. Brandon: Honorable Mention, NSF Graduate Research Fellowship Program
- 2023: C. Brandon: 3<sup>rd</sup> place prize, UGA River Basin Center Confluence Poster Event
- 2022: J. Tejada: Travel Award, SACNAS National Diversity in STEM Conference

*\*CURO research awards listed in Section II.5*

## **9. Presentations**

Dr. Strauss has delivered 30 scholarly presentations at regional and national conferences, symposia, and academic institutions, including 15 invited oral presentations since arriving at UGA. Advisees at UGA have delivered an additional 12 talks and 23 posters with Dr. Strauss as senior author (indicated with \*; presenter names underlined), indicating both Student Success Activities (for undergraduate presentations) and research projects that are well underway but may not yet have resulted in publications. Presentations by other students or collaborators (with Dr. Strauss as co-author) are not listed but are available upon request.

### A. INVITED SEMINARS AT ACADEMIC INSTITUTIONS, CONFERENCES, AND SYMPOSIA

- 2025: Thermal & community ecology of disease. Seminar Series, School of Earth, Environment and Sustainability, University of Iowa. (Dec 1)
- 2025: Thermal & community ecology of disease. Seminar Series, Odum School of Ecology, University of Georgia. (Apr 18)
- 2025: Copepod population dynamics and effects of fish predation. Research Review Meeting, Guinea Worm Eradication Program, The Carter Center. Atlanta, Georgia, USA. (Apr 2)
- 2025: Thermal & community ecology of disease. Seminar Series, The Jones Center at Ichauway. (Mar 13)
- 2025: A legacy of competitive exclusion: Temperature-dependent effects on host stage structure and disease. Invited symposium talk. Society for Integrative and Comparative Biology Annual Meeting, Atlanta, Georgia, USA. (Jan 4)

- 2024: Thermal & community ecology of disease. International Forum on Ecology and Evolution of Avian Influenza (IFEEAI). Zoom Webinar. (Nov 12)
- 2024: Ecology and evolution of parasites with complex lifecycles. Workshop. Center for the Ecology of Infectious Diseases, UGA. (Oct 15)
- 2024: The thermal community ecology of disease. Ecology and Evolution Seminar Series, Florida State University. (Feb 23)
- 2024: Why you should care about parasites that infect zooplankton: Population dynamics, Guinea worm disease, and ecosystem function. Biology Colloquium Series, Florida State University. (Feb 22)
- 2023: Ecological drivers of infectious disease in zooplankton study systems. Ecology and Evolution Graduate Seminar Series, University of Maryland, College Park. (Sep 11)
- 2022: Ecosystem and community drivers of disease: Tales of aphid vectored viruses and mysterious microsporidians. Center for the Ecology of Infectious Diseases, UGA (Apr 13)
- 2022: Effects of nutrients on disease across scales: Coinfection, movement, and demography of vectors. Asa Gray Biology Seminar Series, Utica College (Mar 30)
- 2021: Effects of nutrients on disease across scales: Coinfection, movement, and demography of vectors. Department of Plant Biology, University of Georgia (Nov 15)
- 2021: Effects of nutrients on disease across scales: Coinfection, movement, and demography of vectors. Department of Ecology, Evolution, and Organismal Biology, Kennesaw State University (Oct 13)
- 2021: Effects of host resources on disease across scales: Coinfection, movement, and demography of vectors. VectorBITE Symposium. (Jul 9)
- 2020: Disease ecology and global change. Odum School of Ecology, UGA (April 15)

#### B. CONTRIBUTED TALKS

- 2023: Mysterious Microsporidians: Springtime outbreaks of disease in *Daphnia* in shallow Georgia reservoirs. 1 of 3 Faculty Speed Talks. Odum School of Ecology, UGA (Sep 5)
- 2023: Mysterious Microsporidians: Springtime outbreaks of disease in *Daphnia* communities in shallow pond ecosystems. 4<sup>th</sup> Annual Microsporidiafest. Virtual Conference. (Sep 12)
- 2023: Mysterious Microsporidians: Springtime outbreaks of disease in *Daphnia* communities in shallow pond ecosystems. Ecological Society of America Annual Meeting, Portland, Oregon, USA. (Aug 7)
- 2022: The HABs and HABS notes: Variation in timing and severity of harmful algal blooms. Climate and Water Research Slam, River Basin Center, UGA, Athens, GA. (May 12)
- 2018: Unpacking the black box of disease models. Ecological Society of America Annual Meeting, New Orleans, Louisiana, USA.
- 2016: Host traits and modular species interactions predict dynamical disease outcomes. Ecological Society of America Annual Meeting, Fort Lauderdale, Florida, USA.
- 2015: Habitat, hosts, and fungus in the field: Synthesizing hypotheses from the community ecology of disease. Ecological Society of America Annual Meeting, Baltimore, Maryland, USA.
- 2015: Habitat, hosts, and fungus in the field: Synthesizing hypotheses from the community ecology of disease. Midwest Ecology and Evolution Conference, Bloomington, Indiana, USA.
- 2014: The dilution effect among competing, evolving hosts. Ecological Society of America Annual Meeting, Sacramento, California, USA.
- 2013: Outcomes of the dilution effect when hosts compete. Ecological Society of America Annual Meeting, Minneapolis, Minnesota, USA.

#### C. POSTER PRESENTATIONS

- 2024: Hot and hungry healthy herds: Predators reverse the effects of temperature on disease. Ecology and Evolution of Infectious Disease Annual Meeting, Palo Alto, California, USA (Jun 26).

- 2015: Community drivers of disease. Ecology and Evolution of Infectious Disease Annual Meeting, Athens, Georgia, USA.
- 2013: Trait dependent outcomes of the dilution effect. Ecology and Evolution of Infectious Disease Annual Meeting, State College, Pennsylvania, USA.
- 2012: Invertebrate community structure helps explain the distribution of amphibian chytrid in Eastern Missouri. Ecological Society of America Ecological Society of America Annual Meeting, Portland, Oregon, USA

#### D. ORAL PRESENTATIONS BY ADVISEES WITH DR. STRAUSS AS SENIOR AUTHOR

- \*2025: presenter: E Warburton. Role of ecosystem characteristics in the evolution of complex helminth lifecycles. American Society of Parasitologists Annual Meeting, Winston-Salem, NC, USA.
- \*2025: presenter: R Scott. Interspecific infigting: How competitors, not predators, drive *Daphnia* densities and *Metschnikowia bicuspidata* infections. UGA CURO Symposium, Athens, GA, USA.
- \*2025: presenter: J Oni. The combined effect of parasites and predators could force *Daphnia* to terminally invest. 31st Graduate Student Symposium, Odum School of Ecology, UGA, Athens, GA.
- \*2025: presenter: K Mayes. Pretty fly for a Chironomini: How do seasonal changes in midge community composition influence disease transmission? 31st Graduate Student Symposium, Odum School of Ecology, UGA, Athens, GA.
- \*2024: presenter: D Suh. Temperature and resource conditions jointly influence transmission of *Metschnikowia bicuspidata* in *Daphnia dentifera*. Ecological Society of America Annual Meeting, Long Beach, CA, USA.
- \*2024: presenter: R Scott. Too hot to handle: Impact of random temperature fluctuations on the transmission dynamics of *Metschnikowia bicuspidata* in *Daphnia dentifera* populations. UGA Summer Fellowship Final Forum, Athens, GA, USA.
- \*2024: presenter: K Mayes. Do changes in nutrient input affect seasonal infections of microsporidians in midges? Climate and Water Research Slam, River Basin Center, UGA, Athens, GA.
- \*2024: presenter: K Mayes. Do changes in nutrient input affect seasonal infections of microsporidians in midges? 30th Graduate Student Symposium, Odum School of Ecology, UGA, Athens, GA.
- \*2024: presenter: K Schroeder. Thermal fluctuations increase disease transmission of a fungal parasite in a zooplankton host at the individual and population scale. 30th Graduate Student Symposium, Odum School of Ecology, UGA, Athens, GA. (*awarded best presentation in session*)
- \*2023: presenter: K Schroeder. Thermal fluctuations increase disease transmission of a fungal parasite in a zooplankton host at the individual and population scale. Ecological Society of America Annual Meeting, Portland, Oregon, USA.
- \*2022: presenter: D Suh. Temperature and resource conditions jointly influence the infection of *Daphnia dentifera* by the fungal parasite *Metschnikowia bicuspidata*. Ecological Society of America Annual Meeting, Montréal, Québec, Canada.
- \*2022: presenter: K Schroeder. Implications of temperature variation and resource availability during diel vertical migration on disease transmission in a zooplankton - fungal parasite system. 28th Graduate Student Symposium, Odum School of Ecology, UGA, Athens, GA.

#### E. POSTER PRESENTATIONS BY ADVISEES WITH DR. STRAUSS AS SENIOR AUTHOR

- \*2025: presenter: K Mayes. Pretty fly for a Chironomini: How does chironomid community composition change throughout the spring? Society for Freshwater Science Annual Meeting, San Juan, Puerto Rico.
- \*2025: presenter: J Oni. The combined effects of predators and parasites induce terminal

investment in *Daphnia* hosts. Ecology and Evolution of Infectious Disease Annual Meeting, South Bend, IN, USA.

- \*2025: presenter: L Ritacco. Heat of the moment: Host and parasite responses to differing temperature fluctuation frequencies. UGA CURO Symposium, Athens, GA, USA.
- \*2025: presenter: A McCain. Sex ratio variation of chironomid midges in Athens ponds. UGA CURO Symposium, Athens, GA, USA.
- \*2025: presenter: T Adekunle. Mosquitofish prey preference in a predator-prey/host-parasite system. Posters at the Capitol, Georgia Undergraduate Research Collective, Atlanta, GA.
- \*2025: presenter: R Scott. Predators, competitors, and disease: Untangling direct and indirect effects on host-parasite dynamics in freshwater communities. 31st Graduate Student Symposium, Odum School of Ecology, UGA, Athens, GA.
- \*2025: presenter: E Dudgeon. Intrinsic growth rates and carrying capacity of algae at different constant and periodically fluctuating temperatures. 31st Graduate Student Symposium, Odum School of Ecology, UGA, Athens, GA.
- \*2024: presenter: A Akins. Spore infectivity over a time and temperature gradient. UGA CURO Symposium, Athens, GA, USA.
- \*2024: presenter: K Mayes. Mysterious microsporidians: Timing and severity of outbreaks in freshwater ponds. Ecology and Evolution of Infectious Disease Annual Meeting, Palo Alto, California, USA.
- \*2024: presenter: T Adekunle. Would mosquitofish choose you? Mosquitofish prey preference in a *Daphnia*-based system. Emerging Researchers National (ERN) Conference in STEM, Washington D.C., USA
- \*2023: presenter: I Wood. Microsporidian midge mystery: Chironomidae emergence timing in relation to *Daphnia* outbreaks. UGA Summer Fellowship Final Forum, Athens, GA, USA.
- \*2023: presenter: C Brandon. Mysterious microsporidians: Springtime outbreaks & Co-occurring parasites. UGA River Basin Center Confluence Poster Event, Athens, GA, USA.
- \*2023: presenter: T Adekunle. Would mosquitofish choose you? Mosquitofish prey preference in a *Daphnia*-based system. UGA REU Symposium, Athens, GA, USA.
- \*2023: presenter: R Richards. Stage structure disrupts predator-parasite interactions. Ecology and Evolution of Infectious Disease Annual Meeting, State College, Pennsylvania, USA.
- \*2023: presenter: C Romiluyi. Foraging rate across resources and temperature gradient in *Daphnia dentifera*. UGA CURO Symposium, Athens, GA, USA.
- \*2023: presenter: G Sullivan-Brugger. Spring (Out)Break: Investigating spring epidemics in *Daphnia spp.* (host) and microsporidia (parasite) in ponds located in Whitehall forest. UGA CURO Symposium, Athens, GA, USA.
- \*2022: presenter: J Tejada. Effects of temperature fluctuation on disease transmission in multi-host communities. Society for Advancement of Chicanos/Hispanics & Native Americans in Science (SACNAS) National Diversity in STEM Conference, San Juan, Puerto Rico.
- \*2022: presenter: J Tejada. Effects of temperature fluctuation on disease transmission in multi-host communities. UGA REU Symposium, Athens, GA, USA.
- \*2022: presenter: E Landolt. Approximating abundance of *Daphnia dentifera* using environmental DNA (eDNA) samples. UGA REU Symposium, Athens, GA, USA.
- \*2022: presenter: A Mancao. Relative climate change effects on interspecific competition of *Daphnia* vs. *Ceriodaphnia*. UGA CURO Symposium, Athens, GA, USA.
- \*2022: presenter: AM Jordan. Disease transmission influenced by temperature and host competency. UGA CURO Symposium, Athens, GA, USA.
- \*2021: presenter: H O'Grady. Infection and spore yield of a *Daphnia* microsporidian. UGA REU Symposium, Athens, GA, USA.
- \*2021: presenter: A Anderson. The ecology of fescue endophytes: One approach to

understanding epichloe infection. UGA CURO Symposium, Athens, GA, USA.

#### **IV. PUBLIC SERVICE**

##### **1. International programs**

- 2023-2025: Guinea Worm Eradication Program
  - meetings attended: Annual Program Review, Atlanta, GA, USA (April 17-19 2024; April 1-3 2025)

##### **2. Local community services and relations**

- 2024: Horseshoe Bend tour for high school students. (Environmental Science class, Clarke Central High School, Athens, GA)
- 2024: Lab tour for high school students. (Green Steps Club, Walhalla HS, South Carolina)
- 2022-present: Who lives in your lake? Interactive freshwater science education booth. Athens Annual Water Festivals, Athens-Clarke County.
- 2023-present: Can you catch a water flea? Tailgating outreach booth at UGA football games (in collaboration with STEMZone). G-Day 2023.
- 2022: Freshwater Food Webs. Show-and-tell after school module for local children (in collaboration with EcoReach). Athens-Clarke County Library.

#### **V. PROFESSIONAL SERVICE**

##### **1. Service to professional societies, organizations, or agencies**

- 2024-present: Secretary-Treasurer. Disease Section, Ecological Society of America
- 2023: Judge for best student talk. Aquatic Section, Ecological Society of America
- 2022-2023: Acting co-Director, Site REU Program: Population Biology of Infectious Disease Site REU, University of Georgia
- 2021: Session moderator. Virtual Symposium: Research Frontiers in Animal Behavior and Parasitism, Center for Ecology of Infectious Disease, University of Georgia
- 2017-2019: Judge for paper awards. Disease Ecology Section, Ecological Society of America
- 2015: Conference organizer. Midwest Ecology & Evolution Conference, Indiana University

##### **2. Ad hoc manuscript reviews**

*Journal of Applied Ecology* (4), *Ecology Letters* (7), *Ecology* (9), *EcoHealth* (1), *The American Naturalist* (2), *Nature Ecology & Evolution* (1), *Journal of Animal Ecology* (7), *Oecologia* (7), *Biological Invasions* (3), *Methods in Ecology and Evolution* (2), *Functional Ecology* (2), *Nature Communications* (2), *Proceedings of the Royal Society B* (1), *Journal of Ecology* (1), *Limnology and Oceanography* (3), *Global Ecology and Biogeography* (2), Book Chapters (2)

Total by year: 2025 (3); 2024 (3); 2023 (6); 2022 (8); 2021 (7); 2020 (7); 2019 (10); 2018 (9); 2017 (2); 2016 (1)

All reviews listed in Dr. Strauss's Publons profile: <https://publons.com/author/1267621>

##### **3. Grant review panel member**

- 2025: Center for the Ecology of Infectious Diseases Seed Grants, UGA
- 2025: NSF reviewer
- 2025: Presidential Graduate Fellowships, UGA
- 2024: NSF reviewer
- 2024: Postdoc Travel Program, UGA

##### **4. Ad-hoc grant reviewer**

- 2025: NSF reviewer

##### **5. Service on departmental, college, or university committees**

- 2025-present: Search Committee, Ecosystem Cluster Hire (4 positions), Odum School of Ecology

- 2025-present: Strategic Planning Subcommittee 2: Lead in Ecological Research, Odum School
- 2023-present: Graduation Program Committee, Odum School of Ecology
- 2023: Search Committee, Research & Teaching Postdoctoral Associate, Odum School of Ecology
- 2023: Search Committee, Academic Professional Associate, Odum School of Ecology
- 2021-2023: Seminar Committee, Odum School of Ecology
- 2021: Search Committee, Environmental Policy & Ecology, Odum School of Ecology
- 2021: University Council Representative (substitute fall 2021)
- 2020: Search Committee, Environmental Policy & Ecology, Odum School of Ecology

**6. Service to student groups and organizations\***

- 2024: Faculty Enrichment Fund social gathering with students from ECOL 4000/6000
- 2023: Faculty Enrichment Fund social gathering with students from ECOL 4000/6000
- 2022: Co-development of learning modules in collaboration with EcoReach, Odum School of Ecology
- 2021-present: Judge, Graduate Student Symposium, Odum School of Ecology

*\*Student Success Activities*

## **ACCOMPLISHMENTS IN RESEARCH, TEACHING, AND SERVICE**

### **1. ACHIEVEMENTS IN TEACHING**

Dr. Strauss is an award-winning instructor who strives to engage his students' curiosity, hone their critical thinking, and foster their scientific literacy. Since arriving at UGA in 2020, Dr. Strauss has taught 11 lecture-based courses, including seven with associated lab sections (four unique courses; three taught multiple years; three with labs). He has received universally strong course evaluation scores (grand mean 4.61/5; n=103 student respondents). Three of his courses are foundational to the undergraduate curriculum of the Odum School. Ecology B.S. majors must enroll in either Population and Community Ecology (taught by Dr. Strauss in 2020, 2021, 2023, and 2024) or Population Biology of Infectious Disease (taught by Dr. Strauss in 2021, 2022, and 2023). Ecology B.S. majors must additionally enroll in either Freshwater Ecosystems (taught by Dr. Strauss in 2021, 2023, and 2024) or an alternative course about terrestrial ecosystems. Dr. Strauss has developed innovative content for all three of these core Ecology courses, including novel lab activities, scaffolded coding-based problem sets, structured paper discussions, and in-class activities on interpreting equations and sketching graphs. He also designed and added a one-credit lab section to Population and Community Ecology, first offered in 2024 (ECOL-4000L). Dr. Strauss contributes to graduate level instruction through a quantitative 'model module' in an introductory course for all first-semester PhD students (ECOL-8000), and through the enrollment of MS and PhD students in the three abovementioned foundational ecology courses (4000/6000, 4150/6150, and 4310/6310). Because of these achievements and his ongoing excellence in teaching, Dr. Strauss was selected for UGA's Lilly Teaching Fellows program in 2022. Dr. Strauss was also awarded the Outstanding Teaching Faculty Award by the Odum School of Ecology in 2024. Most recently, in 2025, Dr. Strauss was awarded a Richard B. Russell Award for Excellence in Undergraduate Teaching.

### **2. ACHIEVEMENTS IN GRADUATE AND UNDERGRADUATE MENTORING**

Dr. Strauss is a dedicated mentor of both graduate and undergraduate research. He serves as major advisor for two PhD students (K. Schroder and J. Oni) and one MS student (K. Mayes) in the Odum School. He also serves on the committees of four UGA MS students (M. Hoyle, J. Kaderis, J. Lott, N. Warner), two UGA PhD students (B. Haile, A. Bushong), and one PhD student at another institution (N. Raytselis; Emory University). One former PhD student (D. Suh) conducted a chapter of their dissertation research in the Strauss lab before defending. Graduate students advised by Dr. Strauss regularly present their research at local and national conferences (e.g., talks presented by K. Schroeder and D. Suh at the Ecological Society of America in 2022, 2023, and 2024).

Dr. Strauss has supervised research by 17 undergraduate students since arriving at UGA and serves as Acting Co-Director for a Site REU Program. He advises students through this Site REU Program (Population Biology of Infectious Diseases; 4 students), UGA CURO (12 students), and the course Independent Research in Ecology (ECOL-4960; 6 students). Dr. Strauss strives to provide opportunities for students from underrepresented groups (6 of 17 students). All undergraduates mentored by Dr. Strauss present their research at local symposia. One student (J. Tejada) additionally presented their research at SACNAS National Diversity in STEM Conference in 2022, and another (T. Adekunle) presented their research at the Emerging Researchers National (ERN) Conference in STEM in 2024. Because of his commitment to undergraduate research and Inclusive Excellence, Dr. Strauss became Acting Co-Director for the NSF-funded Population of Infectious Disease Site REU Program at UGA in 2022. He submitted NSF proposals as co-PI to renew the program in 2023 and 2024, which were both rated "highly meritorious" but not funded. A revised proposal is currently under review.

### **3. ACHIEVEMENTS IN RESEARCH**

Dr. Strauss is a disease and community ecologist whose published articles have won multiple awards. His research program seeks to understand the ways that species interactions and environmental conditions shape the transmission of infectious disease. Dr. Strauss asks basic questions (e.g., How do losses of biodiversity shape infectious disease dynamics?) as well as more

applied questions with implications for human health (e.g., How does predation of zooplankton hosts by fish affect transmission of Guinea worm parasites into people?). Dr. Strauss approaches these research questions through an iterative combination of field studies, experiments at organismal and mesocosm scales, and mathematical modeling. Current research in the Strauss lab is focused on four themes: 1) relationships between biodiversity and disease; 2) effects of predators on disease; 3) the thermal ecology of infectious disease; and 4) ecology and evolution of complex lifecycle parasites. Dr. Strauss has built substantial resources at the University of Georgia to enable research along these themes. These resources include an IACUC-approved thermostatically-controlled indoor aquatic mesocosm facility, discovery of a novel multi-host, multi-parasite study system based on field surveys of local ponds and reservoirs, and establishment of a local site for a globally-distributed experiment in grasslands (DRAGNet).

The Strauss lab is funded by a combination of federal agencies and private foundations. A total of \$406,350 has been awarded specifically to the Strauss lab at UGA. Dr. Strauss has received funding from the National Science Foundation (\$200,000 awarded to Dr. Strauss as sole PI), the Carter Center (\$137,538 awarded to Dr. Strauss as co-PI), the German Centre for Integrative Biodiversity Research (\$6,500 awarded to Dr. Strauss as working group member [and proposal writer]), and the University of Georgia (two seed grants funded; \$62,250 total awarded to Dr. Strauss). Revisions of previously unsuccessful federal proposals that received encouraging decisions are currently back in review. Dr. Strauss was recently invited to submit a new full proposal to continue research for the Carter Center, after a pre-proposal was accepted in July 2025.

Dr. Strauss has authored 34 peer-reviewed publications. He has an H-index of 17, and an i10 index of 19 on Google Scholar, and has been cited 1,049 times (accessed Oct 29, 2025). He is the first author on 12 of these publications and senior author on 3, with 20 of the 34 works published after Dr. Strauss arrived at UGA in 2020. Dr. Strauss publishes regularly in the top journals of his field, including *Ecology* (6x), *Ecology Letters* (4x), *Functional Ecology* (4x), *Ecological Monographs* (2x), *Journal of Ecology* (1x), *The American Naturalist* (1x), *Trends in Ecology and Evolution* (2x), and *Proceedings of the Royal Society B* (2x). Five of these articles have won awards, including three led by Dr. Strauss as first author. These awards include the JBS Haldane Early Career Award from the British Ecological Society (Strauss *et al.* 2018 *Functional Ecology*), the Thomas M. Frost Award for Excellence in Graduate Research from the Ecological Society of America Aquatic Section (Strauss *et al.* 2016 *Ecological Monographs*), and the Outstanding Paper Award from the Ecological Society of America Disease Ecology Section (Strauss *et al.* 2015 *Ecology Letters*). Since arriving at UGA, Dr. Strauss has been invited to deliver six seminars at academic institutions outside UGA (Florida State U [2x]; U Maryland; Utica College; Kennesaw State; Jones Center), three talks at international symposia (VectorBITE; Microsporidiafest; IFEEAI; Guinea Worm Eradication Program), and one invited conference symposium talk (SICB 2025). Dr. Strauss was also invited to join one international working group (sConsume; funded by Germany's sDiv Synthesis Centre).

#### **4. ACHIEVEMENTS IN SERVICE TO SOCIETY, THE UNIVERSITY, AND THE PROFESSION**

Dr. Strauss is an engaged member of the Odum School of Ecology, the University of Georgia, the Athens-Clarke community, and the Ecological Society of America. In collaboration with EcoReach, he has developed science education outreach activities and implemented them at the annual Athens Water Festival and Public Library. He also collaborates with STEMZone to provide science education opportunities at tailgating events and provides tours of lab and field sites to local high school environmental clubs. He has served on nine departmental or university level committees, two UGA awards panels, and currently serves on the Graduate Program Committee of the Odum School. At the national scale, Dr. Strauss serves as Secretary/Treasurer of the Disease Section of the Ecological Society of America. Finally, he has served the broader scientific community by serving on two NSF panels, as a conference organizer, symposium session moderator, judge for 'best paper' and 'best student talk' awards, and as a reviewer for 55 manuscripts submitted to ecological journals.