

Tad Dallas



about

Assistant professor
University of South
Carolina
Dept of Biological Sciences

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💻 taddallas.github.io
🔊 taddallas

programming

Proficient

R
Matlab/Octave
SQL

Familiar

C++
julia
Python

Markup

LaTeX
Markdown
HTML/XML/XPath

Version control

git

🧪 experience

2022 -	Assistant professor <i>Dept. of Biological Sciences</i>	University of South Carolina, <i>Columbia, SC</i>
2019 - 2021	Assistant professor <i>Dept. of Biological Sciences</i>	Louisiana State University, <i>Baton Rouge, LA</i>
2019	Visiting researcher <i>Dept. of Mathematics</i>	International University of Rijeka, <i>Croatia</i>
2019	Visiting researcher <i>Lab of Pedro Jordano</i>	CSIC, <i>Estación Biológica de Doñana, Spain</i>
2018 - 2019	Postdoctoral fellow <i>Advised by Otso Ovaskainen</i>	University of Helsinki - <i>Centre for Ecological Change</i>
2016 - 2018	Postdoctoral fellow <i>Advised by Alan Hastings</i>	University of California–Davis - <i>Center for Population Biology</i>
2015	Distributed <i>R</i> Analytics Intern <i>Software development for analysis of large data</i>	HP Vertica - <i>Big Data Platform Dev Team</i>
2010-2011	Biological Science Technician <i>Subtropical Plant Pathology Lab</i>	USDA - <i>Agricultural Research Service</i>
2008	Mathematical Biology Program <i>Mathematical estimation of host range using mark-recapture data</i>	NSF Research Experience for Undergraduates (REU)

🎓 education

2011 - 2016	Ph.D. Ecology <i>Advised by John Drake</i>	U Georgia - <i>Odum School of Ecology</i>
2009 - 2010	M.S. Biology <i>Ecology of small mammal-tick interactions</i> <i>advised by Stephanie Foré</i>	Truman State University
2005 - 2009	B.S. Biology Majoring in Biology <i>Minor in Mathematical Biology</i>	Truman State University

📄 publications

pre-prints

- Richards, RL, Foster, G, Elder, BD, & **Tad Dallas**. Comparing Waves of COVID-19 in the US: Scale of response changes over time. medRxiv. doi: 10.1101/2022.03.01.22271713

- Dallas, TA, SJ Ryan, B Bellekom, A Fagre, R Christofferson, & C Carlson. Predicting the tripartite network of mosquito-borne disease. *ecoEvoRxiv*. doi: 10.32942/osf.io/xzmp8
- Thomas, RQ, *et al.* The NEON Ecological Forecasting Challenge. Authorea. doi: 10.22541/es-soar.167079499.99891914/v1

2023

- Cleveland, CA, TA Dallas, S Vigil, DG Mead, JL Corn & AW Park. 2023. Vector communities under global change may exacerbate and redistribute infectious disease risk. *Parasitology Research*. doi: 10.1007/s00436-023-07799-2

2022


- TA Dallas, G Foster, RL Richards & BD Elderd. 2022. Epidemic time series similarity is related to geographic distance and age structure. *Infectious Disease Modeling*. doi: 10.1016/j.idm.2022.09.002
- TA Dallas & D Kramer. 2022. A latitudinal signal in the relationship between species geographic range size and climatic niche area. *Ecography*. doi: 10.1111/ecog.06349
- G Foster, BD Elderd, RL Richards & TA Dallas. 2022. Estimating R_0 from early exponential growth: Parallels between 1918 influenza and 2020 SARS-CoV-2 pandemics. *PNAS Nexus*. doi: 10.1093/pnasnexus/pgac194
- TA Dallas, C Carlson, P Stephens, SJ Ryan, D Onstad. 2022. **insectDisease**: programmatic access to the Ecological Database of the World's Insect Pathogens. *Ecography* doi: 10.1111/ecog.06152
- Ten Caten, C, LA Holian, & TA Dallas. 2022. Effects of occupancy estimation on abundance-occupancy relationships. *Biology Letters*. doi: 10.1098/rsbl.2022.0137
- Antão, LH, B Weigel, G Strona, M Hällfors, E Kaarlejärvi, TA Dallas, *et al.* 2022. Climate change reshuffles northern species within their niches. *Nature Climate Change*. doi: 10.1038/s41558-022-01381-x
- Carlson, CJ, *et al.* 2022. The Global Virome in One Network (VIRION): an Atlas of Vertebrate-Virus Associations. *mBio*. doi: 10.1128/mbio.02985-21
- Fuzessy, L, *et al.* 2022. Functional roles of frugivores and plants shape hyper-diverse mutualistic interactions under two antagonistic conservation scenarios. *Biotropica*. doi: 10.1111/btp.13065
- Smolander, OP, *et al.* 2022. Improved chromosome-level genome assembly of the Glanville fritillary butterfly (*Melitaea cinxia*) integrating Pacific Biosciences long reads and a high-density linkage map. *GigaScience* doi: 10.1093/gigascience/giab097
- Dallas, TA & P Jordano. 2022. Parasite species richness and host range are not spatially conserved. *Global Ecology and Biogeography*. doi: 10.1111/geb.13452
- Ten Caten, C, LA Holian, & TA Dallas. 2022. Weak but consistent abundance-occupancy relationships across taxa, space, and time. *Global Ecology and Biogeography*. doi: 10.1111/geb.13472
- Becker, D, GF Albery, AR Sjödin, T Poisot, TA Dallas, EA Eskew, MJ Farrell, S Guth, BA Han, NB Simmons, CJ Carlson. 2022. Optimising predictive models to prioritise viral discovery in zoonotic reservoirs. *Lancet Microbe* doi: 10.1016/S2666-5247(21)00245-7
- Dallas, TA & D Kramer. 2022. Temporal variability in population and community dynamics. *Ecology*. doi: 10.1002/ecy.3577


2021

- Albery, GF, *et al.* 2021. The science of the host-virus network. *Nature Microbiology* doi: 10.1038/s41564-021-00999-5
- Dallas, TA & P Jordano. 2021. Spatial variation in species roles in host-helminth networks. *Philosophical Transactions B* doi: 10.1098/rstb.2020.0361


- Farrell, MJ, AW Park, C Cressler, **TA Dallas**, S Huang, N Mideo, I Morales-Castilla, TJ Davies & P Stephens. 2021. The ghost of hosts past: impacts of host extinction on parasite specificity. *Philosophical Transactions B* doi: 10.1098/rstb.2020.0351
- Morales-Castilla, I, P Pappalardo, MJ Farrell, AA Aguirre, S Huang, ALM Gehman, **TA Dallas**, D Gravel & TJ Davies. 2021. Forecasting parasite sharing under climate change. *Philosophical Transactions B* doi: 10.1098/rstb.2020.0360
- Carlson, CJ, *et al.* 2021. Zoonotic Risk Technology Enters the Viral Emergence Toolkit. *Philosophical Transactions B* doi: 10.1098/rstb.2020.0360
- Gibb, R, GF Albery, DJ Becker, L Brierley, R Connor, **TA Dallas**, EA Eskew, MJ Farrell, AL Rasmussen, SJ Ryan, A Sweeny, CJ Carlson, & T Poisot. 2021. Data proliferation, reconciliation, and synthesis in viral ecology. *BioScience*. doi: 10.1093/biosci/biab080
- **Dallas, TA** & P Jordano 2021. Species-area and network-area relationships in host-helminth interactions. *Proceedings of the Royal Society B*. doi:10.1098/rspb.2020.3143
- **Dallas, TA**, B Melbourne, G Legault, & A Hastings. 2021. Initial abundance and stochasticity influence competitive outcome in communities. *Journal of Animal Ecology* doi:10.1111/1365-2656.13485
- Poisot, T, G Bergeron, K Cazelles, **TA Dallas**, D Gravel, A MacDonald, B Mercier, C Violet & S Vissault. 2021. Global knowledge gaps in species interaction networks data. *Journal of Biogeography* doi:10.1111/jbi.14127
- **Dallas, TA**, M Saastamoinen, & O Ovaskainen. 2021. Exploring the dimensions of metapopulation persistence: a comparison of structural and temporal measures. *Theoretical Ecology* doi: 10.1007/s12080-020-00497-0
- **Dallas, TA** & D Becker. 2021. Taxonomic resolution affects host-parasite association model performance. *Parasitology* doi: 10.1017/S0031182020002371

2020

- **Dallas, TA**, L Santini, R Decker, & A Hastings. 2020. Weighing the evidence for the abundant-centre hypothesis. *Biodiversity Informatics*. doi: 10.17161/bi.v15i3.11989
- Carlson, CJ, Phillips, AJ, **TA Dallas**, Alexander, LW, Phelan, A, & Bansal, S. 2020. What would it take to describe the global diversity of parasites?. *Proceedings of the Royal Society B*. doi: 10.1098/rspb.2020.1841
- **Dallas, TA**, B Melbourne, & A Hastings. 2020. Community context and dispersal stochasticity drive variation in spatial spread. *Journal of Animal Ecology*. doi: 10.1111/1365-2656.13331
- **Dallas, TA**, L Holian, & G Foster. 2020. What determines parasite species richness across host species? *Journal of Animal Ecology*. doi: 10.1111/1365-2656.13276
- **Dallas, TA** & L Santini. 2020. The influence of stochasticity, landscape structure, and species traits on abundant-centre relationships. *Ecography* doi:10.1111/ecog.05164
- **Dallas, TA**, LH Antao, J Pöyry, R Leinonen, & O Ovaskainen. 2020. Spatial synchrony is related to the rate of environmental change in Finnish moth communities. *Proceedings of the Royal Society B*. doi: 10.1098/rspb.2020.0684
- van Bergen, E, **TA Dallas**, DiLeo, MF, Kahilainen, A, Mattila, AL, Luoto, M, & Saastamoinen, M. 2020. The effect of summer drought on the predictability of local extinctions in a butterfly metapopulation. *Conservation Biology*. doi: 10.1111/cobi.13515
-  **Dallas, TA**, S Pironon, & L Santini. 2020. Weak support for the abundant niche-centre hypothesis in North American birds. *bioRxiv*. doi:10.1101/2020.02.27.968586


-  Poisot, T, Bergeron, G, Cazelles, K, **TA Dallas**, Gravel, D, MacDonald, A, ... & Vissault, S. 2020. Environmental biases in the study of ecological networks at the planetary scale. *bioRxiv*. doi:10.1101/2020.01.27.921429

2019




- **Dallas, TA**, M Saastamoinen, T Schulz, O Ovaskainen. 2019. The relative importance of local and regional processes to metapopulation dynamics. *Journal of Animal Ecology*. doi: 10.1111/1365-2656.13141
-  **Dallas, TA**, CJ Carlson, T Poisot. 2019. Testing predictability of disease outbreaks with a simple model of pathogen biogeography. *Royal Society Open Science*. doi: 10.1098/rsos.190883
- **Dallas, TA**, Laine A-L, & Ovaskainen O. 2019. Detecting parasite associations within multi-species host and parasite communities. *Proceedings of the Royal Society B* doi: 10.1098/rspb.2019.1109
- **Dallas, TA**, Pöyry J, Leinonen R, Ovaskainen O. 2019. Temporal sampling and abundance measurement influences support for occupancy–abundance relationships. *Journal of Biogeography* doi:10.1111/jbi.13718
- Norberg, A, N Abrego Antia, F Guillaume Blanchet, FR Adler, BJ Anderson, J Anttila, MB Araújo, **TA Dallas**, D Dunson, J Elith, S Foster, R Fox, J Franklin, W Godsoe, A Guisan, B O'Hara, NA Hill, RD Holt, FKC Hui, M Husby, JA Kålås, A Lehtikainen, M Luoto, HK Mod, G Newell, I Renner, TV Roslin, J Soininen, W Thuiller, JP Vanhatalo, D Warton, M White, NE Zimmermann, D Gravel, and OT Ovaskainen. 2019. A comprehensive evaluation of predictive performance of 33 species distribution models at species & community levels. *Ecological Monographs* doi:10.1002/ecm.1370
- Cornelius Ruhs, E, Borden, DM, **TA Dallas**, & E Pitman. 2019. Do feather traits convey information about bird condition during fall migration? *Wilson Journal of Ornithology* doi:10.1676/18-174
- **Dallas, TA**, AL Gehman, AA Aguirre, SA Budischak, JM Drake, MJ Farrell, R Ghai, S Huang, & I Morales-Castilla. 2019. Contrasting latitudinal gradients of body size in helminth parasites and their hosts. *Global Ecology and Biogeography* doi: 10.1111/geb.12894
- **Dallas, TA**, BA Han, CL Nunn, AW Park, PR Stephens, and JM Drake. 2018. Host traits associated with species roles in parasite sharing networks. *Oikos* doi: 10.1111/oik.05602

2018






- **Dallas, TA**, BA Melbourne, & A Hastings. 2018. When can competition and dispersal lead to checkerboard distributions? *Journal of Animal Ecology* doi: 10.1111/1365-2656.12913
- **Dallas, TA** & A Hastings. 2018. Habitat suitability estimated by niche models is largely unrelated to species abundance. *Global Ecology and Biogeography* doi: 10.1111/geb.12820
- **Dallas, TA**, S Budischak, C Carlson, V Ezenwa, B Han, S Huang, AA Aguirre, & PR Stephens. 2018. Gauging support for macroecological patterns in helminth parasites. *Global Ecology and Biogeography* doi: 10.1111/geb.12819
- **Dallas, TA**, R Decker, & AM Hastings. 2018. Multiple data sources and freely available code is critical when investigating species distributions and diversity: a response to Knouft (2018). *Ecology Letters* doi: 10.1111/ele.13105
- **Dallas, TA**, A Gehman, & MJ Farrell. 2018. Variable bibliographic database access could limit reproducibility. *BioScience* doi:10.1093/biosci/biy074
- Park, AW, MJ Farrell, JP Schmidt, S Huang, **TA Dallas**, P Pappalardo, JM Drake, PR Stephens, R Poulin, CL Nunn, & TJ Davies. 2018. Characterizing the phylogenetic specialism-generalism spectrum of mammal parasites. *Proceedings of the Royal Society B* doi: 10.1098/rspb.2017.2613

-  Dallas, TA, JM Drake, & M Krkosek. 2018. Experimental evidence of a pathogen invasion threshold. *Royal Society Open Science* doi: 10.1098/rsos.171975
- Dallas, TA & T Poisot. 2018. Compositional turnover in host and parasite communities does not change network structure. *Ecography* doi: 10.1111/ecog.03514


2017

- Dallas, TA, R Decker, & AM Hastings. 2017. Species are not most abundant in the center of their geographic range or climatic niche. *Ecology Letters* doi: 10.1111/ele.12860
- Carlson, CJ, KR Burgio, TA Dallas, & WM Getz. The Mathematics of Extinction Across Scales: From Populations to the Biosphere. In *Mathematics of Planet Earth. Mathematics of Planet Earth*, vol 5. Springer.
-  Carlson, CJ, KR Burgio, ER Dougherty, AJ Phillips, VM Bueno, CF Clements, G Castaldo, TA Dallas, CA Cizauska, GS Cumming, J Doña, NC Harris, R Jovani, S Mironov, O Muellerklein, HC Proctor, & WM Getz. 2017. Parasite biodiversity faces extinction and redistribution in a changing climate. *Science Advances* doi: 10.1126/sciadv.1602422
- Dallas, TA, S Huang, C Nunn, AW Park, & JM Drake. 2017. Estimating parasite host range. *Proceedings of the Royal Society B*. 284:1861. doi:10.1098/rspb.2017.1250.
-  Dallas, TA, AW Park, & JM Drake. 2017. Predicting cryptic links in host-parasite networks. *PLoS Computational Biology*. 13(5): e1005557 doi:10.1371/journal.pcbi.1005557
-  Evans, MV, TA Dallas, BA Han, CC Murdock, & JM Drake. 2017. Data-driven identification of potential Zika virus vectors. *eLife*. e22053. doi:10.7554/eLife.22053

2016





-  Dallas, TA, A Kramer, M Zokan, & JM Drake. 2016. Ordination obscures the influence of environment on plankton metacommunity structure. *Limnology and Oceanography Letters*. 54-61. doi:10.1002/lol2.10028
- Dallas, TA, AW Park, & JM Drake. 2016. Predictability of helminth parasite host range using information on geography, host traits and parasite community structure. *Parasitology*. doi:10.1017/S0031182016001608
-  Dallas, TA & JM Drake. 2016. Fluctuating temperatures alter environmental pathogen transmission in a *Daphnia*-pathogen system. *Ecology and Evolution* 00: 1-8. doi:10.1002/ece3.2539
-  Stephens, P, Altizer, S, Smith, K, Aguirre, A, Brown, J, Budischak, S, Byers, J, TA Dallas, Davies, J, Drake, J, Ezenwa, V, Farrell, M, Gittleman, J, Han, B, Huang, S, Hutchinson, R, Johnson, P, Nunn, C, Onstad, D, Park, A, Vazquez-Prokopec, G, Schmidt, J, & R Poulin. 2016. The Macroecology of Infectious Diseases: A New Perspective on Global-scale Drivers of Pathogen Distributions and Impacts. *Ecology Letters* 19(9): 1159-1171. doi: 10.1111/ele.12644
-  Dallas, TA. 2016. *helminthR*: An R interface to the London Natural History Museum's Host-Parasite Database. *Ecography* 39(4): 391-393. doi: 10.1111/ecog.02131
- Dallas, TA, R Hall, & J Drake. 2016. Competition-mediated feedbacks in experimental multi-species epizootics. *Ecology* 97(3):661-670. doi:10.1890/15-0305.1
-  Dallas, TA, M Holtackers, & J Drake. 2016. Costs of resistance and infection by a generalist pathogen. *Ecology and Evolution* 6(6): 1737-1744. doi: 10.1002/ece3.1889

2015

-  Dallas, TA & E Cornelius. 2015. Co-extinction in a host-parasite network: identifying key hosts for network stability. *Nature Scientific Reports* doi: 10.1038/srep13185
- Park, AW, C Cleveland, TA Dallas, & J Corn. 2015. Vector species richness increases hemorrhagic disease prevalence through functional diversity modulating the duration of seasonal transmission. *Parasitology* 10: 1-6. doi: 10.1017/S0031182015000578

- Presley SJ, [TA Dallas](#), BT Klingbeil, & MR Willig. 2015. Phylogenetic signals in host-parasite associations for Neotropical bats and Nearctic desert rodents. *Biological Journal of the Linnean Society* 116(2): 312-327.

2014 and prior

-  [Dallas, TA](#) & JM Drake. 2014. Relative importance of environmental, geographic, and spatial variables on zooplankton metacommunities. *Ecosphere* 5(9): art104 doi:10.1890/ES14-00071.1.
-  [Dallas, TA](#). 2014. *metacom*: an R package for the analysis of metacommunity structure. *Ecography* 37(4):402-405. doi:10.1111/j.1600-0587.2013.00695.x
- [Dallas, TA](#) & SJ Presley. 2014. Relative importance of host environment, transmission potential, and host phylogeny to the structure of parasite metacommunities. *Oikos* 123: 866–874. doi:10.1111/oik.00707
-  [Dallas, TA](#) & JM Drake. 2014. Nitrate enrichment alters a Daphnia-microparasite interaction through multiple pathways. *Ecology and Evolution* 4(3):243-250. doi: 10.1002/ece3.925
- Kim, HJ, Cavanaugh, JE, [TA Dallas](#), & S Foré. 2013. Model selection criteria for overdispersed data and their application to the characterization of a host-parasite relationship. *Environmental and Ecological Statistics* doi:10.1007/s10651-013-0257-0
-  [Dallas, TA](#). 2013. *metacom*: Analysis of the 'Elements of Metacommunity Structure'. R package version 1.2. <http://CRAN.R-project.org/package=metacom>
- [Dallas, TA](#) & S Foré. 2013. Chemical attraction of *Dermacentor variabilis* ticks parasitic to *Peromyscus leucopus* based on host body mass and sex. *Experimental and Applied Acarology* 61(2): 243-250. doi:10.1007/s10493-013-9690-x
- [Dallas, TA](#), S Foré, & HJ Kim. 2012. Modeling the influence of *Peromyscus leucopus* body mass, sex and habitat on immature *Dermacentor variabilis* burdens. *Journal of Vector Ecology*. 37(2):338-341.doi:10.1111/j.1948-7134.2012.00236.x
- [Dallas, TA](#), S Foré, & HJ Kim. 2010. Factors influencing immature *Dermacentor variabilis* load on the white-footed mouse (*Peromyscus leucopus*). *Technical Report, Truman State University*.

</> software

metacom	Analysis of metacommunity structure	R package (author)
insectDisease	Access to the Ecological Database of the World's Insect Pathogens	R package (author)
helminthR	Portal to London Natural History Museum host-helminth database	R package (author)
Hmsc	Hierarchical modeling of species communities	R package (author)
spatExtinct	Spatially interpolated extinction date estimation	R package (contributor)

presentations

- [T Dallas](#). Invited seminar to University of South Carolina's "Mathematical Foundations of Data Science" group. October 2022.
- [T Dallas](#). Departmental seminar at University of South Carolina. October 2022.
- [T Dallas](#). Invited seminar at Duke University. Hosted by Jean-Philippe Gibert. September 2022.

- T Dallas Ecological Society of America Meeting. August 2022.
- T Dallas, C Ten Caten, L Holian. British Ecological Society Macroecology meeting. July 2022.
- T Dallas, G Foster, R Richards, and B Elderd. Ecology and Evolution of Infectious Disease meeting. June 2022.
- T Dallas and B Elderd. *Invited talk at "Science and Spirits"* at LSU. November 2021.
- T Dallas. *Invited seminar at University of South Carolina*. Hosted by Tammi Richardson. May 2021.
- T Dallas. *Invited seminar at Truman State University*. Student invited speaker. April 2021.
- T Dallas. *Invited seminar at International University of Rijeka*. Hosted by Danijel Krismanic. June 2019.
- T Dallas. *Invited seminar at Osnabrück University*. Hosted by Frank Hilker. December 2018.
- T Dallas. *Invited seminar at McGill University*. Hosted by Rowan Barrett. April 2018.
- T Dallas. *Invited seminar at University of Arkansas*. Hosted by John David Wilson. February 2018.
- T Dallas. *Invited seminar at Louisiana State University*. Hosted by Bret Elderd. January 2018.
- T Dallas. *Invited seminar at University of California - Los Angeles*. Hosted by Jamie Lloyd-Smith. January 2018.
- T Dallas, B Melbourne, G Legault, A Hastings. Initial abundance and stochasticity influence species coexistence *Society for Mathematical Biology*, July 2017.
- T Dallas and JM Drake. Using niche modeling to detect unobserved interactions in host-parasite networks. *Ecological Society of America*, August 2015.
- JE Byers, P Pappalardo, JP Schmidt, PR Stephens, S Haas, C Nunn, JM Drake, and T Dallas. What parasite and host traits best explain the geographic range of mammal parasites and diseases? *Ecological Society of America*, August 2015.
- T Dallas and JM Drake. Costs of resistance and infection in *Daphnia* species exposed to a generalist microparasite. *Ecology and Evolution of Infectious Disease Conference*. Fort Collins, CO. June 2014
- T Dallas, JM Drake, M Krkosek. Thresholds to pathogen invasion: theory + experiment. *Ecological Society of America*. Sacramento, California. August 2014
- T Dallas and JM Drake. The Influence of Nitrate on Fungal Parasitism of *Daphnia*. *98th annual American Society for Microbiology (Southeastern Branch)*. October 2012.
- T Dallas. Effects of competition and selective predation in a two-host system. *Odum School of Ecology Graduate Student Symposium*. Athens GA. January 2011.
- T Dallas. Thesis defense: An examination of variation in *Dermacentor variabilis* burdens within and between host species. *Truman State University*. August 2010.

meeting participation

2022-	British Ecological Society Macroecology Special Interest Group	Co-organized 10 year anniversary plenary and was invited speaker on predictive macroecology
2020-	Ecological Forecasting Initiative	Co-designer of beetle forecast challenge
2021	Ecological Forecasting Initiative	Empowering Development of the Next Generation of Educational Materials for Ecological Forecasting
2021	BES Macroecology meeting	Panel participant on early career transitions

teaching

spring 2023	Grad seminar on website development	University of South Carolina
spring 2023	Theoretical Ecology (Biol 599/765)	University of South Carolina
spring 2022	Reproducible Research in R (Biol 599)	University of South Carolina
2020	Vector-borne disease (Biol 7901)	Louisiana State University
2020	Reproducible Research in R (Biol 4800)	Louisiana State University
2019, 2021	Principles of Ecology (Biol 4253)	Louisiana State University

grants

2022 - 2023	U of South Carolina; Aspire track 1	Establishing a pigmented yeast microcosm system to understand ecological communities; \$15000 (PI)
2021 -	Actively engaging students in hardware and software development	LSU Foundation and LSU College of Science; \$44,000 (PI)
2020 - 2022	RAPID: Epidemic control strategies for COVID-19 in age-structured populations: A multi-model approach	NSF RAPID; \$200,000 (PI)
2020 - 2022	BII-Design: Exploring the ecology and evolution of the global virome with big data and machine learning	NSF Bio Institute - Design; \$166,189 (co-PI)
2020 - 2023	MSA: Understanding spatial patterns of abundance and occupancy in terms of taxa, traits, and space	NSF Macrosystems and NEON Science; \$274,542 (PI)
2023-2024	U of South Carolina; theme semester grant ("play")	Sayi Sathish Kumar (PI); \$500 (mentor)

professional service

Editorial positions and professional affiliations

2020-	Ecology Letters	Editor
2019-	Ecosphere	Editor - disease track
2019-	Github Education	Campus advisor
2019-	The Carpentries	Instructor
2019-	LIFEPLAN: A Planetary Inventory of Life	Sampling site

For information on my service, see my Publons page. I have served as a reviewer for the following journals:

- African Journal of Wildlife Research
- American Naturalist
- Applied Network Science
- Basic and Applied Ecology
- Biological Conservation
- Ecography
- Ecology
- Ecology and Evolution
- Ecology Letters
- Ecological Complexity
- EcoHealth
- Ecosphere
- Functional Ecology
- Freshwater Biology
- Global Change Biology
- Global Ecology and Biogeography
- International Journal of Parasitology
- Invertebrate Biology
- Journal of Animal Ecology
- Journal of Biogeography
- Journal of Ecology
- Journal of Natural History
- Journal of Vector Ecology
- Landscape Ecology
- Methods in Ecology and Evolution
- Nature Ecology & Evolution
- Oecologia
- Oikos
- Parasitology
- Philosophical Transactions B
- PLoS One
- Proceedings of the Royal Society B
- Proceedings of the National Academy of Sciences
- Scientometrics
- Theoretical Ecology

awards

2022	Echo 25 award; Truman State University	\$0
2021	LSU Non-Tenured Faculty Research Award	\$1000

community engagement

2022	Virtual Kitchen Lab	interview/podcast
2021	LSU Science and Spirits podcast	interview/podcast
2021-	Futures Fund coding instructor	https://www.thewallsproject.org/futuresfund
2019-2022	Front Yard Bikes volunteer	https://www.frontyardbikes.com/

mentoring

2023 -	Doctoral dissertation committee, Université de Montréal	Gabriel Dansereau
2022 -	Masters thesis committee, U of SC	Caitlyn Mettetal
2023 -	Doctoral dissertation committee, U of SC	Laurent Duverglas
2022 -	Masters thesis committee, U of SC, Arnold School of Public Health	Kayla Bramlett
2022 -	Doctoral dissertation committee, U of SC	Alexander Barth
2021 -	Doctoral dissertation committee, U of SC, SEOE	Birch Lazo-Murphy
2021 -	Doctoral dissertation committee, LSU	Wissam Jawad
2021 -	Dissertation committee chair, U of SC	Lauren Holian
2020 -	Dissertation committee chair, U of SC	Grant Foster
2019 -	Dissertation committee chair, U of SC	Cleber Ten Caten
2019 -	Doctoral dissertation committee, LSU	Jason Janeaux
2014	Population Biology of Infectious Disease REU	Trianna Humphries
2013	Young Dawgs Program	Mathieu Holtackers