

Education

PhD in Ecology, Evolution, and Behavior University of Minnesota, St. Paul, MN Minor in Risk Analysis for Introduced Species and Genotypes	2011–2017
BS in Biology Georgia Institute of Technology, Atlanta, GA	2007–2011
Additional Training NSF Cyber Carpentry: Data Life-Cycle Training, Chapel Hill, NC Enhancing Linkages between Math and Ecology, Kellogg Biological Station, MI Ecology and Evolution of Infectious Diseases Workshop, Ann Arbor, MI	July 2019 June 2013 May 2012

Professional Experience

Postdoctoral Research Associate Agronomy Department, University of Florida, Gainesville, FL	2018–present
PhD Candidate Graduate Research Assistant, Minnesota Invasive Terrestrial Plants and Pests Center Graduate Teaching Assistant, College of Biological Sciences Graduate Program Fellow, Department of Ecology, Evolution, and Behavior NSF Graduate Research Fellow NSF IGERT Fellow in Risk Assessment of Introduced Species and Genotypes	2017 2014–2017 2016 2013–2014 2011–2013
Undergraduate Researcher Department of Biology, Georgia Institute of Technology, Atlanta, GA NSF REU, St. Olaf College, Northfield, MN NSF REU, University of California, Santa Barbara, CA SURE Fellow, Emory University, Atlanta, GA	2009–2011 2010 2009 2008

Peer-Reviewed Publications

*undergraduate mentee

- Phan, Tin, B. Pell, **A. E. Kendig**, E. T. Borer, and Y. Kuang. 2021. Rich dynamics of a simple delay host-pathogen model of cell-to-cell infection for plant virus. *Discrete and Continuous Dynamical Systems-B* 26: 515539. <https://doi.org/10.3934/dcdsb.2020261>
- Kendig, A. E.**, E. R. Spear, S. C. Daws, S. L. Flory, and E. A. Mordecai. 2020. Native perennial and non-native annual grasses shape pathogen community composition and disease severity in a California grassland. *Journal of Ecology*. <https://doi.org/10.1111/1365-2745.13515>
- Kendig, A. E.**, E. T. Borer, E. N. Boak*, T. C. Picard*, and E. W. Seabloom. 2020. Host nutrition mediates interactions between plant viruses, altering transmission and predicted disease spread. *Ecology*. <https://doi.org/10.1002/ecy.3155>
- Goss, E. M., **A. E. Kendig**, A. Adhikari, B. Lane, N. Kortessis, R. D. Holt, K. Clay, P. F. Harmon, and S. L. Flory. 2020. Disease in invasive plant populations. *Annual Review of Phytopathology* 58: 15.1-15.2. <https://doi.org/10.1146/annurev-phyto-010820-012757>
- Pell, B., **A. E. Kendig**, E. T. Borer, and Y. Kuang. 2019. Modeling nutrient and disease dynamics in a plant-pathogen system. *Mathematical Biosciences and Engineering* 16: 234-264. <https://doi.org/10.3934/mbe.2019013>
- Kendig, A. E.**, E. T. Borer, C. E. Mitchell, A. G. Power, and E. W. Seabloom. 2017. Characteristics and drivers of plant virus community spatial patterns in US west coast grasslands. *Oikos* 126: 1281-1290. <https://doi.org/10.1111/oik.04178>
- Seabloom, E. W., E. T. Borer, K. Gross, **A. E. Kendig**, C. Lacroix, C. E. Mitchell, E. A. Mordecai, and A. G. Power. 2015. The community ecology of pathogens: coinfection, coexistence and community composition. *Ecology Letters* 18: 401-415. <https://doi.org/10.1111/ele.12418>

MacDougall, A. S., J. R. Bennett, J. Firn, E. W. Seabloom, E. T. Borer, E. M. Lind, J. L. Orrock, W. S. Harpole, Y. Hautier, P. B. Adler, E. Cleland, K. Davies, B. Melbourne, S. M. Prober, J. D. Bakker, P. A. Fay, V. L. Jin, **A. Kendig**, K. J. La Pierre, J. Moore, J. Morgan, and C. J. Stevens. 2014. Anthropogenic-based regional-scale factors most consistently explain plot-level exotic diversity in grasslands. *Global Ecology and Biogeography* 23: 802-810. <https://doi.org/10.1111/geb.12157>

Book Chapter

Kendig, A. E., S. L. Flory, E. M. Goss, R. D. Holt, K. Clay, P. F. Harmon, B. R. Lane, A. Adhikari, and C. M. Wojan. The Role of Pathogens in Plant Invasions. 2020. Anna Traveset and David M. Richardson, editors. *Plant Invasions: The Role of Biotic Interactions*. CAB International Press. Wallingford, UK.

Manuscripts in Prep

Kendig, A. E.[†], V. J. Svahnstrom^{†*}, A. Adhikari, P. F. Harmon, and S. L. Flory. Emerging fungal pathogen on an invasive grass differentially affects native species. *In review for PLOS ONE*. <https://doi.org/10.1101/2020.08.06.239319>

[†]co-first authors

Kazanski, C., J. Cowles, S. Dymond, A. Clark, A. David, J. M. Jungers, **A. Kendig**, C. Riggs, J. Trost, and X. Wei. Water availability modifies productivity response to biodiversity and nitrogen in long-term grassland experiments. *In review for Ecological Applications*.

Grants and Awards

Travel Award, NSF Cyber Carpentry Workshop: Data Life-Cycle Training (\$682)	2019
Thompson Earth Systems Institute Outreach Grant (\$665)	2018
Travel Award, Dept. of EEB, UMN (3 awards, \$2,068)	2013–2018
Alexander and Lydia Anderson Research Grant, UMN (\$3,000)	2015
Research Award, Dept. of EEB, UMN (2 awards, \$3,944)	2014–2015
National Science Foundation Graduate Research Fellowship Program (\$30,000)	2013–2014
Research and Stipend Award, HHMI Research Mentor Program, UMN (\$3,000)	2014
Research Award, ISG-IGERT Program, UMN (\$2,000)	2013
Travel Award, Enhancing Linkages between Math and Ecology (travel, room, and board)	2013
Travel Award, Ecology and Evolution of Infectious Diseases Workshop (\$526)	2012
National Science Foundation Integrative Graduate Education and Research Traineeship (IGERT) in Risk Assessment of Introduced Species and Genotypes (ISG) (\$60,000)	2011–2013
Georgia HOPE Scholarship (full undergraduate tuition)	2007–2011
William-Walls Life Science Award (\$500)	2011
Travel Award, ACC Meeting of the Minds (travel, room, and board)	2011
President's Undergraduate Research Award (\$1000)	2010
Ryder Roundtable Scholarship (\$10,000)	2007

Invited Presentations

Panelist, Community Coding Groups, ResBaz (Research Bazaar), Gainesville, FL	2019
Seminar, Department of Plant Pathology, University of Minnesota, St. Paul, MN	2018
Seminar, INRA Plant Pathology Unit, Avignon, France	2017
Brown Bag Seminar, Kellogg Biological Station, Michigan State University, Hickory Corners, MI	2017
Interview, University of Florida, Gainesville, FL	2017
Interview, Stanford University, Stanford, CA	2017
Five Minute Thesis Presentation, UMN SIAM Minneapolis, MN	2016

Co-Organized Symposia

<i>Invasive Species and Infectious Diseases: Interactive Effects in Ecological Communities</i> . Symposium, Ecological Society of America (ESA) Annual Meeting, virtual.	2020
<i>When a Raindrop is a Tsunami: Impacts of Disturbance on Plant-Associated Microbial Communities</i> . Organized Oral Session, ESA Annual Meeting: New Orleans, LA.	2018
<i>The Introduction of Microbes: For Better or for Worse</i> . University of Minnesota ISG-IGERT Annual Symposium: St. Paul, MN	2013

Contributed Presentations

<i>Generalist fungal pathogens may increase the impacts of an invasive understory grass on native grasses.</i> ESA Annual Meeting: virtual (talk)	2020
<i>Effects of pathogen accumulation on native-invasive plant interactions.</i> ESA Annual Meeting: Louisville, KY (talk)	2019
<i>Pathogen accumulation on an invasive species: Implications for native-invasive interactions.</i> Florida Exotic Pest Plant Council Annual Symposium: Daytona Beach Shores, FL (poster)	2019
<i>Pathogen accumulation on an invasive species: Implications for native-invasive interactions.</i> Emerging Pathogens Institute Research Day: Gainesville, FL (poster)	2019
<i>EDDMapS Plant Damage: Using citizen science to understand drivers of invasive plant disease and herbivory.</i> North American Invasive Species Management Association/Upper Midwest Invasive Species Joint Conference: Rochester, MN (talk)	2018
<i>Native and invasive grasses share foliar fungal pathogens.</i> ESA Annual Meeting: New Orleans, LA (talk)	2018
<i>Plant size-virus richness relationships depend on host species and nitrogen inputs.</i> Population Biology of Vector-borne Diseases Symposium: Athens, GA (poster)	2018
<i>Soil nutrients and within-host niche differentiation mediate plant virus interactions.</i> Jacques Monod Conference: Roscoff, France (talk)	2017
<i>Nutrient mediation of within-host and among-host plant virus dynamics.</i> ESA Annual Meeting: Ft. Lauderdale, FL (talk)	2016
<i>The power of analogy: Unifying principles of infectious disease.</i> 5 th International Conference on Infectious Disease Dynamics: Clearwater Beach, FL (poster)	2015
<i>Using spatial patterns to infer disease processes in a multi-host, multi-pathogen system.</i> ESA Annual Meeting: Minneapolis, MN (talk)	2013
<i>Productivity and soil characteristics as indices of tallgrass prairie success.</i> ESA Annual Meeting: Austin, TX (poster)	2011
<i>Characterization of the chemical defenses of Sagittaria graminea, a freshwater plant, against crayfish herbivory.</i> ACC Meeting of the Minds: Miami, FL (poster)	2011
<i>The impact of paternal involvement on patterns of brain activity to male and female speech.</i> Georgia State University Psychology Undergraduate Research Conference: Atlanta, GA (poster)	2008

Teaching and Mentoring

Helper Instructor, Data Carpentry, The Carpentries	2020–present
Guest Lecture, Biological Invaders, University of Florida	2018
Teaching Assistant, Toward Conquest of Disease, University of Minnesota (2 semesters)	2016–2017
Teaching Assistant, Ecology, University of Minnesota (2 semesters)	2015–2016
Teaching Assistant, Foundations of Biology II, University of Minnesota (1 semester)	2014
Teaching Assistant, Honors Biological Principles, Georgia Tech (1 semester)	2010
Teaching Assistant, Freshman Seminar, Georgia Tech (1 semester)	2009
University of Florida undergraduate mentees	2018–2020
Liliana Benitez (NSF REU, visiting student from New College of Florida), Zobia Chanda, Trevor Green, Mariam Higginbotham, Zadok Jollie, Daniela Menendez, David Notman, Teresa Orosa, Shannon Regan, Penny Reif, Callie San Antonio, Vida Svahnstrom (NSF REU, visiting student from St. Andrews), Ryan Truesdell	
University of Minnesota undergraduate mentees	2013–2017
Emily Boak (directed research), Ryan Campbell, Nicholas Cupery (honors thesis), Casey Easterday (NSF REU), Jessica Lettelier, Timothy Martin, Tashina Picard (HHMI Transfer Student Program, UROP Program), Kurra Renner, Luc Robichaud, Alexis Rogers	

Science Outreach and Education

Organizer, <i>EDDMapS Plant Damage</i>	2018–present
Collect citizen science data on invasive plant infectious diseases with EDDMapS.org.	

Speaker, <i>UF CPET Climate Change Resiliency Program</i> Taught a virtual lesson on invasive species and infectious disease to high school students.	2020
Organizer, <i>Coding in the Environmental Sciences Workshops</i> K-12 students to learn about environmental science research and basic coding.	2017–2019
Volunteer, <i>Collaborative Curriculum Design for Invasive Species Education</i> Helped Florida K-12 teachers design lesson plans that incorporate authentic science.	2019
Volunteer, <i>Girls Who Code</i> Mentored K-12 students learning how to code and build a smartphone app.	2016–2017
Curriculum Developer and Teacher, <i>Market Science</i> Science demonstrations at local farmer's markets and events.	2015–2017
Guest Teacher, <i>Heritage Middle School</i> and <i>Southside Family Charter School</i> Taught lessons on plant disease, population growth, and DNA extraction.	2011–2017
Science Fair Judge (5x)	2012–2016
Co-Producer, <i>Biodiversity Briefs Podcast Series</i> https://cbs.umn.edu/blogs/cbs-connect/biodiversity-briefs-podcast-series-launches	2015

Service and Leadership

Manuscript reviewer: <i>The American Naturalist</i> , <i>Biological Invasions</i> , <i>Ecology and Evolution</i> , <i>Ecology Letters</i> , <i>Fungal Ecology</i> , <i>Journal of Animal Ecology</i> , <i>Journal of Applied Ecology</i> , <i>Journal of Ecology</i> , <i>Journal of Environmental Management</i> , <i>Land Degradation and Development</i> , <i>New Phytologist</i> , <i>Proceedings of the Royal Society B</i>	
Co-Organizer, R-Ladies Gainesville <i>Sessions led: book club discussion, Introduction to R, Docker and RStudio, Tidy Tuesday</i>	2019–present
Invasion Ecology Student Presentation Award Judge, Ecological Society of America	2018
Undergraduate Research Opportunities Program Committee, UMN	2016
Friday Noon Seminar Planning Committee, UMN Department of EEB	2013–2014, 2016
Sexual Harassment Complaint Liaison, UMN Department of EEB	2015–2016
Volunteer Coordinator, UMN TeachingSMART	2012–2014
Graduate Student President Committee, UMN Department of EEB	2012–2013
Travel Grant Committee, UMN Department of EEB	2012
Council of Graduate Students Representative, UMN Department of EEB	2011–2012
Executive Committee Student Representative, UMN IGERT	2011–2012