• NATALIE SUSAN CHRISTIAN •

139 Life Sciences Building, Louisville, KY, 40292 www.nataliechristian.com natalie.christian@louisville.edu 502.852.3727

Education

2017 **PhD, Indiana University,** Bloomington, IN

Department of Biology, Evolution Ecology and Behavior Program

Minor in College Pedagogy

Graduate Certificate in College Pedagogy

Committee: Dr. Keith Clay (advisor), Dr. Spencer Hall, Dr. Thomas Nelson Laird, Dr. Jay Lennon

2012 BA, Vanderbilt University, Nashville, TN

Major in Ecology, Evolution, and Organismal Biology

Major in Spanish

Professional Appointments

| 2020 – present | Assistant Professor |
|----------------|--|
| | University of Louisville |
| | Department of Biology |
| 2018 – 2019 | United States Department of Agriculture NIFA Postdoctoral Research Fellow University of Illinois and Oregon State University Advisors: Dr. Katy Heath and Dr. Posy Busby |

Grants (\$1,441,682 total)

| 2023 | United States Department of Agriculture Ecology and Evolution of Infectious Diseases program (Co-PI; \$364,897 to UofL; \$2.5 million total) |
|------|--|
| 2023 | KY INBRE Equipment Grant (\$9,980; with M. Abolins-Abols) |
| 2022 | National Science Foundation Division of Environmental Biology (\$864,975; with Co-PI S. Emery) |
| 2022 | University of Louisville Jon Rieger Seed Grant (\$7,500) |
| 2021 | KY INBRE Course-based Undergraduate Research Experiences Award (\$92,400; with R. Pigg) |
| 2020 | University of Louisville College of Arts & Sciences Research and Creative Activities Grant (\$3,000; with R. Pigg) |
| 2019 | Mycological Society of America Special Topics Award (\$7,500) |
| 2019 | Mycological Society of America Translational Mycology Postdoctoral Award (\$1,250) |
| 2018 | University of Illinois Campus Research Board Award (\$22,329, with K. Heath) |
| 2017 | Simons Foundation Seed Grant (\$12,000, with E.A. Herre and B. Sedio) |
| 2017 | Indiana University Fred Seward Award (\$2,500) |
| 2017 | McCormick Science Grant (\$2,500) |
| 2017 | Garden Club of America Award in Tropical Botany (\$5,500) |
| 2017 | Indiana University Women in Science Program Provost Travel Grant (\$500) |
| 2016 | National Science Foundation Doctoral Dissertation Improvement Grant (DDIG) (\$19,551) |
| 2015 | Indiana Academy of Science Senior Research Grant (\$2,264) |
| 2015 | National Science Foundation Graduate Research Internship Program (GRIP) Grant (\$5,000) |
| 2015 | Indiana University Graduate Sustainability Research Development Grant (\$6,882) |
| 2014 | Sigma Xi Grant-in-Aid of Research (\$700) |
| 2014 | Indiana University Research and Teaching Preserve Grant (\$500) |
| 2014 | Mycological Society of America Forest Fungal Ecology Award (\$1,000) |
| 2014 | Garden Club of America Anne S. Chatham Fellowship in Medicinal Botany (\$4,500) |
| 2014 | Indiana University Sears Crowell Scholarship (\$1,000) |
| 2013 | Indiana University Women in Science Program Provost Travel Grant (\$1,000) |
| 2013 | Indiana Academy of Science Senior Research Grant (\$1,502) |
| 2013 | Organization for Tropical Studies Post-Course Grant (\$952; declined) |
| | |

Fellowships and Awards

| 2023 | University of Louisville Early Career Researcher of the Year |
|------|--|
| 2023 | Ecological Society of America Early Career Fellow |

| 2018 | United States Department of Agriculture AFRI Postdoctoral Fellowship |
|------|---|
| 2017 | Indiana University Floyd Plant and Fungal Summer Fellowship |
| 2017 | Indiana University Plant and Fungal Biology Program Floyd/Ogg/Cleland Final Year Fellowship |
| 2016 | Smithsonian Institution Predoctoral Student Fellowship |
| 2013 | Smithsonian Tropical Research Institute Short-Term Fellowship |
| 2013 | Indiana University Floyd Plant and Fungal Summer Fellowship |
| 2013 | Indiana University Departmental Research Recruitment Fellowship |
| 2012 | National Science Foundation Graduate Research Fellowship Program (GRFP) |

Teaching Awards

| 2023 | | University of Louisville Student Champion |
|--------|--------|--|
| 2021 - | - 2022 | Nominated for University of Louisville Faculty Favorite Award |
| 2022 | | University of Louisville Furnish Teaching Award |
| 2022 | | University of Louisville TILL Teaching Innovation Award |
| 2020 - | - 2021 | Nominated for University of Louisville Faculty Favorite Award |
| 2021 | | University of Louisville Student Champion |
| 2021 | | University of Louisville Furnish Teaching Award |
| 2019 - | - 2020 | Nominated for University of Louisville Faculty Favorite Award |
| 2020 | | University of Louisville Furnish Teaching Award |
| 2017 | | Indiana University Albert Ruesink Outstanding Associate Instructor Teaching Award in Biology |
| 2020 | - 2020 | University of Louisville Furnish Teaching Award |

Publications (†undergraduate co-author, †graduate co-author)

- 15. Abolins-Abols, M., **N. Christian**, J.A. Masters, and R.M. Pigg. In press. "A customizable inquiry-based statistics teaching application for introductory biology students." Course Source.
- 14. **Christian, N.** and M.H. Perlin. 2024. "Plant-endophyte communication: scaling from molecular mechanisms to ecological outcomes." Mycologia DOI: 10.1080/00275514.2023.2299658.
- 13. Garces, K.R.^o, H.E. Sage[†], **N. Christian**, and S.M. Emery. 2022. "*Epichloë* increases root fungal endophyte richness and alters root fungal endophyte composition in a changing world." Journal of Fungi 8: 1142.
- 12. **Christian, N**, B. Espino Basurto[†], A. Toussaint[†], X. Xu[†], E. A. Ainsworth, P. E. Busby, and K. D. Heath. 2021. "Elevated carbon dioxide reduces a dominant soybean leaf endophyte." Global Change Biology 27(17): 4154-4168.
- 11. Whitaker, B.K., **N. Christian**, Q. Chai, and K. Clay. 2020. "Foliar microbiome community structure is independent of phylogenetic relatedness in an Asteraceae common garden." Ecology and Evolution. 10:13895–13912.
- 10. **Christian, N.,** B. E. Sedio, X. Florez-Buitrago, L. A. Ramírez-Camejo, E. I. Rojas, L. C. Mejía, S. Palmedo, A. Rose, J. W. Schroeder, E. A. Herre. 2020. "Host affinity of endophytic fungi and the potential for reciprocal interactions involving host secondary chemistry." American Journal of Botany 107: 219-228 (Special Issue).
- 9. Zanne, A., K. Abarenkov, M. Afkhami, C. Aguilar-Trigueros, S. Bates, P. Busby, **N. Christian**, et al. 2020. "Fungal functional ecology: Bringing a trait-based approach to plant-associated fungi." Biological Reviews 95: 409-433.
- 8. **Christian, N.**, E.A. Herre, and K. Clay. 2019. "Foliar endophytic fungi alter patterns of nitrogen uptake and distribution in *Theobroma cacao.*" New Phytologist 222: 1573-1583.
- 7. **Christian, N.** and K.D. Kearns. 2018. "Using scaffolding and deliberate practice to improve abstract writing in an introductory biology laboratory course." Journal of Microbiology and Biology Education. 19(2): doi:10.1128/jmbe.v19i2.1564.
- 6. **Christian, N.**, and J.D. Bever. 2018. "Carbon allocation and competition maintain variation in plant root mutualisms." Ecology and Evolution 8(11):5792-5800.
- 5. **Christian, N.**, E. A. Herre, L. C. Mejia, and K. Clay. 2017. "Exposure to the leaf litter microbiome of healthy adults protects cacao seedlings from pathogen damage." Proceedings of the Royal Society B 284(1858).
 - Awarded Honorary Mention Organization for Tropical Studies Best Student Paper Award (2018)
 - Selected News Coverage:
 - Scientific American: "Chocolate Trees Shower Young with Disease-Fighting Leaves"
 - CBC Radio's Quirks and Quarks: "Chocolate plants get fungus armour from their parents"

- Science News: "How plant microbes could feed the world and save endangered species"
- IFL Science: "How shared microbes are saving chocolate"
- Science Daily: "Litter bugs may protect chocolate supply: Microbiome from mother trees protects baby trees from disease"
- Phys.org: "Litter bugs may protect chocolate supply"
- ScIU Blog: "Horton Hears a Who Hidden Communities in Leaves"
- Copa Airlines Inflight Magazine: "Microbios benéficos para la salud del cacao/Microbes help protect cacao plants"
- 4. **Christian, N.**, C. Sullivan[†], N. D. Visser[†], and K. Clay. 2016. "Plant host and geographic location drive endophyte community composition in the face of perturbation." Microbial Ecology 72(3): 621-632.
- 3. **Christian, N.,** B.K. Whitaker, and K. Clay. 2015. "Microbiomes: unifying animal and plant systems through the lens of community ecology theory." Frontiers in Microbiology. 6:869.
- 2. Lawson, S., **N. Christian**, and P. Abbott. 2014. "Comparative analysis of the biodiversity of fungal endophytes in insect-induced galls and surrounding foliar tissue." Fungal Diversity 66:89-97.
- 1. Mitchell, S., C. Ellingston, T. Coyne, L. Hall, M. Neill, **N. Christian**, C. Higham, S. F Dobrowolski, M. Trachman, and M. Summar. 2009. "Genetic variation in the urea cycle: a model resource for investigating key candidate genes for common diseases." Human Mutation 30:56-60.

Book Chapters

- 3. **Christian, N.** 2022. "Who am I? How I reconciled my identity as a woman in science and education through pedagogy courses and evidence-based teaching." In *Teaching as if Learning Matters: Pedagogies of becoming by next-generation faculty*. Eds. Jennifer Meta Robinson, Valerie Dean O'Loughlin, Katherine D. Kearns, and Laura Plummer. Bloomington: Indiana University Press.
- 2. **Christian, N.** and M. Marasco. 2022. "Avoiding the easy way out: How we pushed ourselves and our students to try something new." In *Teaching as if Learning Matters: Pedagogies of becoming by next-generation faculty*. Eds. Jennifer Meta Robinson, Valerie Dean O'Loughlin, Katherine D. Kearns, and Laura Plummer. Bloomington: Indiana University Press.
- 1. **Christian, N.**, B.K. Whitaker, and K. Clay. 2017. "A novel framework for decoding fungal endophyte diversity." In *The Fungal Community: Its Organization and Role in the Ecosystem 4th Edition*. Eds. John Dighton, James White and Peter Oudemans. Boca Raton: CRC Press.

Manuscripts in Review and in Revision (†undergraduate co-author, ♦graduate co-author)

Garces, K.*⁰, A. Sexton, A. Hazelwood[†], N. Steffens, L. Fuselier, and **N. Christian**. "Online and in-person discussions offer complementary learning opportunities for students." In revision.

Christian, N. and E.A. Herre. "From life to litter: host affinity and persistence of endophytes in early-stage leaf litter decomposition." Submitted.

Invited Talks

| 2023 | Washington State University, Richland, WA |
|------|---|
| 2023 | University of Louisville 2023 Celebration of Teaching and Learning, Louisville, KY |
| 2022 | KY INBRE Seminar Series, Louisville, KY |
| 2022 | University of Louisville 2022 Celebration of Teaching and Learning, Louisville, KY |
| 2021 | Kentucky-Tennessee Branch of the American Society for Microbiology, University of Kentucky, Lexington, KY |
| 2021 | University of San Francisco, San Francisco, CA |
| 2021 | University of Kentucky, Lexington, KY |
| 2021 | Plant Biology 2021 Worldwide Summit |
| 2021 | Smithsonian Tropical Research Institute, Frontiers in Tropical Marine and Terrestrial Microbial Ecology Symposium |
| 2020 | KY STEMinar, Kentucky Science Center, Louisville, KY |
| 2019 | Purdue University, West Lafayette, IN |
| 2019 | Ecological Society of America Organized Oral Session, Louisville, KY (Session Organizer) |
| 2019 | Smithsonian Tropical Research Institute, Tupper Talk, Panama City, Panama |
| 2019 | University of Louisville, Louisville, KY |
| 2017 | Association for Tropical Biology and Conservation, Merida, Mexico |
| 2016 | Smithsonian Tropical Research Institute, Science Symposium, Panama City, Panama |

Posters and Presentations (*presenting author, †mentored undergraduate student, ¢mentored graduate student)

Throneburg, E.*\(\), R. Pigg, **N. Christian**, M. Abolins-Abols, J. Masters. 2024. Investigating science identity development within a course-based undergraduate research experience (CURE). Southeastern STEM Education Conference. Murfreesboro, TN. Poster.

Throneburg, E.*\(\), R. Pigg, **N. Christian**, M. Abolins-Abols, J. Masters. 2023. Investigating science identity development within a course-based undergraduate research experience (CURE). National Association of Biology Teachers. Baltimore, ML. Poster.

Morozumi, C.*, K. Heath, L. Ainsworth, K. Griesbaum, I. Sosa, and **N. Christian**. 2023. Elevated CO₂ drives community and network structural change within foliar microbiomes of soybean. Ecological Society of America. Portland, OR. Talk.

Paolucci, A*0., N. Gauthier, and **N. Christian**. 2023. Endophytic leaf microbes in hemp respond to fungicide application and pathogen inoculation. Kentucky-Tennessee Branch of the American Society for Microbiology Spring Meeting. Midway, KY. Talk (awarded 3rd place oral presentation).

Goshorn, W., R. Isaacs, R. Hopp, **N. Christian**, J. Masters, and M.S. DeCaro. 2023. Do Clicker Questions Enhance Students' Conceptual Understanding? University of Louisville Undergraduate Arts and Research Showcase. Louisville, KY. Poster.

Morozumi, C.*, K. Heath, L. Ainsworth, K. Griesbaum, I. Sosa, and **N. Christian**. 2023. Elevated CO₂ drives community and network structural change within foliar microbiomes of soybean. Midwestern Ecology and Evolution Conference. Louisville, KY. Talk.

Visser, N.D.*[†] and **N. Christian**. 2023. Foliar endophytic fungi alter plant host chemistry. Midwestern Ecology and Evolution Conference. Louisville, KY. Talk.

G. Bryant*, K. Garces⁰, **N** .Christian, and S. Emery. 2023. Fungal root endophyte growth rates along nutrient stress gradient. Midwest Ecology and Evolution Conference. Louisville, KY. Poster.

Garces, K.*⁰, H. Sage[†], **N. Christian**, and S. Emery. 2023. A key aboveground fungal symbiont increases root endophyte richness in a changing world. Global Soil Biodiversity Conference. Dublin, Ireland. Talk.

Pigg, R.*, **N. Christian***, M. Abolins-Abols*, and J. Masters*. 2022. Scaffolding Scientific Inquiry, Quantitative Skills, and Collaborative Writing within a Course-based Undergraduate Research Experience (CURE). National Association of Biology Teachers. Indianapolis, IN. Talk.

Garces, K.*⁰, A. Sexton, N. Steffens, A. Hazelwood[†], and **N. Christian**. 2022. Addressing student engagement and comprehension within online versus in-person discussions. National Association of Biology Teachers. Indianapolis, IN. Poster (awarded 2nd place poster).

Steffens, N.*, **N. Christian**, Garces, K.⁰, A. Hazelwood[†], and A. Sexton. 2022. Discussion modality and exam performance in introductory environmental biology. National Association of Biology Teachers. Indianapolis, IN. Poster.

Garces, K.*⁰, H. Sage[†], **N. Christian**, and S. Emery, 2022. A key aboveground fungal symbiont increases root endophyte richness in a changing world. Ecological Society of America. Montreal, Canada. Talk.

Matthews, A*†, K. Garces⁰, and **N. Christian**. 2022. Impact of nitrogen availability on fungal biomass. University of Louisville Undergraduate Arts and Research Showcase. Louisville, KY. Poster.

Hazelwood, A.*†, K. Garces⁰, N. Steffens, A. Sexton, and **N. Christian**. 2022. Addressing learning comprehension of online versus face-to-face discussions. University of Louisville Undergraduate Arts and Research Showcase. Louisville, KY. Poster (awarded 2nd place poster).

Qassi, H.*†, V. Kukharskaya*†, **N. Christian**, and R. Pigg. 2022. The correlation between active learning and the achievement gap in introductory biology courses. University of Louisville Undergraduate Arts and Research Showcase. Louisville, KY. Poster (awarded 1st place poster).

Ayer, K., R. Isaacs, J. Masters, **N. Christian**, R. Hopp, M. DeCaro. 2022. Does collaborative learning enhance exploratory learning? University of Louisville Undergraduate Arts and Research Showcase. Louisville, KY. Poster.

Garces, K.*⁰, S. Emery, and **N. Christian**. 2021. Fungal life-history traits vary along a resource availability gradient. Kentucky Academy of Sciences. Virtual meeting. Talk.

Christian, N.*, B. E. Sedio, X. Florez-Buitrago, L. A. Ramírez-Camejo, E. I. Rojas, L. C. Mejía, S. Palmedo, A. Rose, J. W. Schroeder, and E. A. Herre. 2021. Plant-fungal chemical feedbacks mediate host affinity and functional roles of endophytes. Ecological Society of America. Long Beach, CA. Poster.

Whitaker, B. K., Q. Chai, **N. Christian**, K. Clay, H. L. Reynolds, and C. V. Hawkes. 2021. Host genetic by environment interactions in crop and wild plant microbiomes. Ecological Society of America. Long Beach, CA. Symposium Talk.

Sage, H.*†, K. Garces⁶., H. Payne[†], M. Huber, and **N. Christian**. 2021. Root endophyte community response to Nitrogen availability. Summer Research Opportunity Program Poster Symposium. Louisville, KY. Poster

Payne, H.*†, H. Sage*†, M. Huber, **N. Christian**, and K. Garces[†]. 2021. Root endophyte community response to increased resource availability. University of Louisville Undergraduate Arts and Research Showcase. Louisville, KY. Poster.

Comissiong, A.*†, M. Huber, **N. Christian**, and K. Garces[†]. 2021. Does resource availability influence traits of root endophytes in native dune grasses? University of Louisville Undergraduate Arts and Research Showcase. Louisville, KY. Poster.

Basurto, B.*†, **N. Christian,** and K. Heath. 2019. Fungal endophytes interact with endophytic yeast isolated from soybean leaves. Illinois Summer Research Symposium. Urbana, IL. Poster.

Visser, N.*†, **N. Christian**, and K. Clay. 2019. Foliar endophytic fungi alter plant host chemistry. Mycological Society of America. Minneapolis, MN. Poster.

Christian, N.*, E. A. Herre, L.C. Mejia, and K. Clay. 2018. Exposure to the leaf litter microbiome of healthy adults protects cacao seedlings from pathogen damage. Green Life Sciences Symposium. Ann Arbor, MI. Speedtalk.

Christian, N.* and E. A. Herre. 2018. Rapid changes associated with fungal communities of decomposing tropical leaf litter. Ecological Society of America. New Orleans, LA. Talk.

Toussaint, A.*†, **N. Christian**, and K. Heath. 2018. How does climate change affect endophytic fungi? Illinois Summer Research Symposium. Urbana, IL. Poster.

Christian, N.*, A. E. Zanne, K. Abarenkov, M. E. Afkhami, C. A. Aguilar-Trigueros, S. Bates, P. E. Busby, W. Cornwell, T. W. Crowther, H. Flores-Moreno, D. Floudas, R. Gazis, D. Hibbett, P. Kennedy, D. L. Lindner, D. S. Maynard, A. M. Milo, R. H. Nilsson, J. Powell, M. Schildhauer, J. Schilling, J. M. Bhatnagar, and K. K. Treseder. 2018. Fungal functional ecology: Bringing a trait-based approach to plant-associated fungi. International Mycological Congress. San Juan, Puerto Rico. Poster.

Christian, N.*, N.D. Visser[†], and K. Clay. 2017. Foliar endophytic fungi alter plant host chemistry. Ecological Society of America. Portland, OR. Poster **(ESA Microbial Ecology Section Student Travel Grant)**.

Whitaker, B.K.*, **N. Christian**, Q. Chai, and K. Clay. 2017. Foliar microbiome community assembly driven by phylogenetic relatedness of Asteraceae hosts in a common garden. Ecological Society of America. Portland, OR. Talk.

Christian, N.*, E. A. Herre, and K. Clay. 2016. Preferential allocation of nutrients to foliar endophytic fungi. Ecological Society of America. Ft. Lauderdale, FL. Talk.

Whitaker, B.K.*, Q. Chai, **N. Christian**, and K. Clay. 2016. Fungal endophyte community characterization in the plant family Asteraceae - do microbiomes correlate with plant phylogenetic relatedness? Indiana Academy of Science Annual Meeting. Indianapolis, IN. Poster.

Nagle, M.*, L. Montroni*, **N. Christian***, M. Marasco*, and K. Kearns*. 2016. Filling the Gaps: Engaging Advanced Graduate Students in Scholarship of Teaching and Learning. E.C. Moore Symposium on Excellence in Teaching. Indianapolis, IN. Talk.

Christian, N.*, E. A. Herre, L. C. Mejia, and K. Clay. 2016. Canopy and leaf litter affect composition and function of tropical endophyte communities. Smithsonian Tropical Research Institute Fellows and Interns Symposium. Panama City, Panama. Poster.

Christian, N.*, E. A. Herre, L. C. Mejia, and K. Clay. 2015. Canopy height and litter-derived spore sources affect both composition and function of tropical endophyte communities. Ecological Society of America. Baltimore, ML. Talk.

Christian, N.*, E. A. Herre, L. C. Mejia, and K. Clay. 2015. Canopy height and litter-derived spore sources affect both composition and function of tropical endophyte communities. Midwest Ecology and Evolution Conference. Bloomington, IN. Talk.

Sullivan, C.*†, N. Visser*†, **N. Christian**, and K. Clay. 2015. Fungicide application increases diversity of foliar endophytic fungi. Midwest Ecology and Evolution Conference. Bloomington, IN. Poster.

Christian, N.*, C. Sullivan[†], N. Visser[†], and K. Clay. 2015. Fungal endophyte biodiversity at the plant-insect interface. Indiana Academy of Science Annual Meeting. Indianapolis, IN. Talk.

Christian, N.* 2014. Assembly of tropical fungal endophyte communities. Indiana University EEB Brown Bag Seminar Series. Bloomington, IN. Talk

Christian, N.* 2014. Fungal endophyte biodiversity at the plant-insect interface. Smithsonian Tropical Research Institute "Bambi" Seminar Series. Barro Colorado Island, Panama. Talk.

Christian, N.* and J. Bever. 2013. Maintenance of mutualistic plant-soil symbiont interactions by means of differential carbon allocation. Association for Tropical Biology and Conservation, San José, Costa Rica. Poster (Davidson-Cristoph Travel Award).

Christian, N.* and J. Bever. 2013. Maintenance of the plant-soil symbiont mutualism by means of differential carbon allocation. Midwest Ecology and Evolution Conference, South Bend, IN. Poster.

Christian, N.* and M. Summer. 2008. Using glutathione levels as indicators of oxidant injury and post-surgical pulmonary hypertension. Tennessee Junior Academy of Sciences Symposium, Nashville, TN. Talk (second-place presentation).

Christian, N.* and M. Summer. 2007. Effects of citrulline on the regulation of urea cycle enzymes and nitric oxide cycle synthases. Vanderbilt Center for Science Outreach Research Internship Program Symposium, Nashville, TN. Poster.

Christian, N.* and M. Summer. 2006. Finding polymorphisms in the enzyme ornithine transcarbamylase of urea cycle disorder patients. Vanderbilt Center for Science Outreach Research Internship Program Symposium, Nashville, TN. Poster (awarded best poster).

Courses Taught

| Spring 2024 | Biology: Issues and Applications (2 sections); University of Louisville |
|-------------|--|
| Spring 2023 | Biology: Issues and Applications (2 sections); University of Louisville |
| Fall 2022 | Experimental Biology I (17 lab sections), Biology: Issues and Applications; University of Louisville |
| Spring 2022 | Biology: Issues and Applications (2 sections); University of Louisville |
| Fall 2021 | Experimental Biology I (23 lab sections), Biology: Issues and Applications; University of Louisville |
| Spring 2021 | Biology: Issues and Applications (2 sections); University of Louisville |
| Fall 2020 | Biology: Issues and Applications (2 sections); University of Louisville |
| Spring 2020 | Biology: Issues and Applications (2 sections); University of Louisville |
| Summer 2016 | Roots, Fruits, and Resiliency: Cultural Ecology, Sustainable Agriculture & Eco-Heritage Tourism in |
| | Jamaica ; Indiana University |
| Fall 2016 | The Feminist Scientist: What's the problem with women in science?; Indiana University |
| Summer 2015 | Roots, Fruits, and Resiliency: Cultural Ecology, Sustainable Agriculture & Eco-Heritage Tourism in |
| | Jamaica ; Indiana University |

Other Teaching and Pedagogy Experience

| 2022 | Participant; Delphi Center Course Design Institute; University of Louisville |
|----------------|---|
| 2021 – present | Participant; Exploratory learning in STEM Faculty Learning Community; University of Louisville |
| 2017 | Head Associate Instructor; Introduction to Biology Laboratory; Indiana University |
| 2017 | Site Visitor; Advance College Project; Indiana University |
| 2016 | Panelist; Course Design Workshop; Center for Innovative Teaching and Learning at Indiana University |
| 2015, 2017 | Facilitator; Associate Instructor Orientation Workshop on Classroom Climate; Indiana University |
| 2015 | Center for Innovative Teaching and Learning Faculty Advisory Board; Indiana University |
| 2015 | Co-course developer; Biodiverse-City! The art and science of green infrastructure; Indiana University |
| 2014 – 2016 | Member; Graduate Student Learning Community |
| 2012 | Head Associate Instructor; Introduction to Biology Laboratory; Indiana University |
| 2009 – 2012 | Tutor; Academic Support for Student Athletes; Vanderbilt University |

Guest Lectures and Panels

| 2022 | |
|------------------|---|
| 2023 | Panel Moderator. "DEI in Science and Science Education." Midwest Ecology and Evolution Conference. |
| | Louisville, KY. |
| 2023 | Panelist. Graduate School Publishing Academy. University of Louisville. |
| 2022 | Career Panelist. Conservation Leader Internship Program. The Land Conservancy of McHenry County, IL. |
| 2021 | Research integrity and ethics seminar. Graduate Seminar I. University of Louisville. |
| 2021 | Women in Science and Health Panelist. Conservation Leader Internship Program. The Land Conservancy of |
| | McHenry County, IL. |
| 2021 | Guest speaker. Mycology. Utah Valley University |
| 2020 | "A hidden world: fungal endophytes, where they come from, and how they change the lives of plants." Biology |
| | Honors Seminar. University of Louisville |
| 2020 | Research integrity and ethics seminar. Graduate Seminar I. University of Louisville. |
| 2020 | Panelist. Dentist Hygiene Living Learning Community. University of Louisville. |
| 2020 | Panelist. Public Health Living Learning Community. University of Louisville. |
| 2019 | "Evolution is Infectious." Honors Evolution of Molecules and Cells. University of Illinois. |
| 2019 | Ethics of scientific collaboration panel. Science Communication Skills. University of Illinois. |
| 2016, 2017 | "Fixing the leaky pipeline: The importance of women in science, and the role of STEM education." Women in |
| | Science, Technology, Engineering, and Mathematics Living-Learning Center Seminar Course. Indiana University. |
| 2014, 2016, 2017 | "Seeing beyond the 'green wall': Tropical rainforest biodiversity." Biodiversity. Indiana University. |
| 2015 | "Guiding student inquiry in biology." Teaching in Biology (graduate course). Indiana University. |
| 2014 | "El desarrollo de comunidades de hongos endofíticos tropicales." Introductory Field Course to Tropical Biology. |
| | Smithsonian Tropical Research Institution, Barro Colorado Island, Panama. Presented in Spanish. |

Postdoctoral Mentees

Dr. Connor Morozumi (2022 – Present); Achievements: USDA NIFA Postdoctoral Fellowship; NSF Postdoctoral Fellowship (declined)

Graduate Student Mentees

Allison Paolucci (PhD student; 2020 – Present)

Noelle Visser (PhD student; 2021 – Present)

Emma Throneburg (PhD student; 2022 – Present); Achievements: University of Louisville Graduate School Fellowship

Graduate Student Committee Service

Sarah Fortner (Yanoviak Lab; 2024 – Present)
Jack Rosen (Kolmann Lab; 2023 – Present)
Nathan Earl (Mehring Lab; 2023 – Present)
Morhan McCool (Fuselier Lab; 2023 – Present)
Andrew Nisip (Yanoviak Lab; 2023 – Present)
Aysha Tapp Ross (Emery Lab; 2022 – Present)
Shannon Walker (Emery Lab; 2022 – Present)
Kane Lawhorn (Yanoviak Lab; 2020 – Present)
Andrew Seiler (Yanoviak Lab; 2020 – Present
Kylea Garces (Emery Lab; 2020 – 2022)
Rachel Wells (Yanoviak Lab; 2020 – 2021)
Binod Basyal (Emery Lab; 2020)

Undergraduate Student Mentees

| University of Louisville | | |
|--------------------------|--|--|
| 2023 – present | Sarah Hobbs | |
| 2023 – present | Nabaa Majeed | |
| 2022 – present | Lucia Amani | |
| 2021 – present | Heba Qaissi | |
| 2022 | Alexandra Matthews; Achievements: Mentored Undergraduate Research Grant | |
| 2021 – 2022 | Abigail Hazelwood | |
| 2021 – 2022 | Valeryia Kukharskaya | |
| 2021 – 2022 | Elizabeth Rogers | |
| 2021 | Alexa Comissiong | |
| 2020 – 2022 | Hillary Payne | |
| | | |

2020 – 2022 Haley Sage; **Honors thesis**: Nitrogen availability in dune systems and its effect on root fungal endophyte communities; **Achievements:** Selected for University of Louisville's Summer Research Opportunity Program

University of Illinois

2019 Julia Paoli

2019 Baldemar Basurto (Bakersfield College); Phenotypic Plasticity Research Experience for Community College

Students (NSF REU program)

2018 – 2019 Xinyan Xu (Fujian Agriculture and Forestry University)

2018 Amber Toussaint (Malcolm X College); Phenotypic Plasticity Research Experience for Community College

Students (NSF REU program)

Indiana University

2014 – 2016 Noelle Visser

2013 – 2015 Courtney Sullivan; **Honors thesis**: Endophytic fungal community dynamics of White Snakeroot

(Ageratina altissima) in the face of disturbance; Achievements: Hutton Honors College Grant; Fox Glen

Research and Education Fund Award

Undergraduate Honors Thesis Committee Service

Taylor Humphreys (Balabanoff Lab; 2024)

Service and Outreach

| 2023 – present | Biology Department Graduate Curriculum Review Committee; University of Louisville |
|----------------|--|
| 2022 – present | Biology Department Seminar Committee; University of Louisville |
| 2020 – present | Organizer; Biology Department Anti-Racist Journal Club; University of Louisville |
| 2020 – 2022 | Biology Department Graduate Committee; University of Louisville |
| 2020 – 2022 | Biology Department Diversity Committee; University of Louisville |
| 2022 | Hiring Committee Member for Assistant Professor (Term); University of Louisville |
| 2021 | Hiring Committee Member for Postdoctoral Researcher; University of Louisville |
| 2020 | Faculty Advisor; Biology Graduate Student Association; University of Louisville |
| 2020 | Poster Judge; Graduate Student Council Research Conference; University of Louisville |
| 2019 | Presentation Judge; Graduates in Ecology and Evolutionary Biology Symposium; University of Illinois |
| 2017 | Invasive Species Ecologist Search Committee; Indiana University; Department of Biology |
| 2016 – 2017 | EcoLunch Social Chair; Indiana University Department of Biology |
| 2016 – 2017 | Volunteer; Bloomington Urban Woodlands Project |
| 2015 | Publicity Committee Member; Midwest Ecology and Evolution Conference |
| 2014 – 2016 | Coordinator; "Fruits of the Forest" Service Learning Program; Bloomington Urban Woodlands Project; |
| | Achievements: George E. Archer Foundation Discretionary Grant (\$2,195) |
| 2013 – 2014 | Outreach Intern; Bloomington Urban Woodlands Project; Achievements: City of Bloomington Dr. Martin Luther |
| | King, Jr. Commission Grant (\$250) |
| 2013 – 2014 | Member; Indiana University Office of Sustainability Environmental Quality and Land Use Working Group |
| 2012 – 2013 | Hosting Committee Chair; Indiana University Department of Biology Graduate Recruiting Weekend |
| | |

Working Groups and Professional Societies

Working Groups: NCEAS WG: Fungal Traits (2016-2019)

Professional Societies: American Association for the Advancement of Science, Ecological Society of America, Indiana Academy of Sciences, Mycological Society of America

Ad hoc Reviews: American Journal of Botany, Biotropica, Ecology, Frontiers in Ecology and Evolution, Environmental Microbiology, Fungal Biology, Fungal Ecology, The ISME Journal, Journal of Ecology, New Phytologist, Microbial Ecology, Molecular Ecology, Mycologia, Oecologia, Pedobiologia, Philosophical Transactions of the Royal Society B, PloS ONE

Previous Research Experience

| 2010 – 2012 | Vanderbilt University Undergraduate Student; Advisor: Dr. Patrick Abbot; Biodiversity of endophytic fungi in insect-induced galls; Social behavior of <i>Pemphigus</i> aphids |
|-------------|--|
| 2010 | Vanderbilt University Research Assistant, Advisor: Dr. Antonis Rokas; Next-generation sequencing and whole- genome phylogenetic analysis of various species of yeast |
| 2006 – 2009 | Vanderbilt University Medical Center Intern, Advisor: Dr. Marshall Summar; Oxidant injury and post-surgical pulmonary hypertension in congenital heart defect patients; Enzymatic polymorphisms in urea cycle disorder |