

Jonathan A. Myers

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Research Interests

My research focuses on the causes of biodiversity at multiple scales, ranging from variation in the diversity of species' traits to gradients in the diversity and dynamics of ecological communities across the planet. I explore theories to explain how fundamental processes of community ecology (speciation, dispersal, ecological drift & niche selection) interact to determine patterns of biodiversity across scales. My current projects focus on three themes that integrate concepts from biogeography, community ecology, and evolutionary biology:

- **Community Assembly from Local to Global Scales:** What processes determine the assembly, diversity, and dynamics of communities across large-scale diversity gradients?
- **Biogeography, Community Ecology & Conservation:** How do biogeographic history and regional species pools influence patterns of biodiversity and mechanisms of community assembly in natural and human-modified landscapes?
- **Biodiversity & Environmental Change:** How does environmental change (e.g., drought, fire & net primary productivity) influence patterns of biodiversity at different scales within and across trophic levels?

My research group explores these questions using a combination of field experiments, large-scale and long-term observational studies, and modeling approaches in a wide range plant communities spanning temperate and tropical ecosystems.

Academic & Research Appointments

- Assistant Professor, Dept. of Biology, Washington University, St. Louis, MO 2012–Present
- Research Associate, Missouri Botanical Garden, St. Louis, MO 2012–Present
- Postdoctoral Research Fellow, Tyson Research Center, Washington University, St. Louis, MO; Advisor: Dr. Jonathan M. Chase 2010–2012
- Research Assistant (Luquillo Experimental Forest, Puerto Rico), Institute of Ecosystem Studies, Millbrook, NY 2002
- Research Assistant (Barro Colorado Island, Panama), Smithsonian Tropical Research Institute, Panama City, Panama 2001
- Botanist (Paul Smith's College Adirondack Visitor Interpretive Center, NY), U.S. Forest Service Northeastern Research Station, Burlington, VT 2000

Education

- Louisiana State University, Baton Rouge, LA 2005–2010
Ph.D., Department of Biological Sciences – Division of Systematics, Ecology and Evolution; Thesis: *Ecological assembly of high-diversity plant communities*; Advisor: Kyle E. Harms
- Organization for Tropical Studies, Universidad de Costa Rica, San Jose 2003
Graduate Field Course: *Tropical Biology – An Ecological Approach*

- University of Florida, Gainesville, FL 2002–2005
M.S., Department of Botany – Interdisciplinary Ecology Program; Thesis: *Seedling carbohydrate storage, survival, and stress tolerance in a neotropical forest*; Advisor: Kaoru Kitajima
- Cornell University, Ithaca, NY 2000–2002
B.S., Biological Sciences – Ecology & Evolutionary Biology (*Distinction in Research*); Thesis: *Seed dispersal by white-tailed deer*; Advisor: Peter L. Marks
- Paul Smith's College, Paul Smiths, NY 1997–1999
A.A.S., Forestry – Forest Recreation Concentration (*Summa Cum Laude*)

Publications

Authors in my research group in **red**

Peer-Reviewed Publications

28. Kirkman, L. Katherine and **Jonathan A. Myers**. 2017. Mechanistic controls of community assembly and biodiversity in longleaf pine ecosystems. Chapter 6 *In*: Kirkman, L. Katherine L. & Stephen B. Jack (editors) *Ecological Restoration of Longleaf Pine*. CRC Press, Boca Raton (*In Press*; forthcoming in May 2017)
27. **LaManna, Joseph A., Maranda L. Walton**, Benjamin L. Turner & **Jonathan A. Myers**. 2016. Negative density dependence is stronger in resource-rich environments and diversifies communities when stronger for common but not rare species. *Ecology Letters* 19: 657-667.
26. Fisher, Joshua B., Sean Sweeney, Edward R. Brzostek, Tom P. Evans, Daniel J. Johnson, **Jonathan A. Myers**, Norman A. Bourg, Amy T. Wolf, Robert W. Howe & Richard P. Phillips. 2016. Tree–mycorrhizal associations detected remotely from canopy spectral properties. *Global Change Biology* 22: 2596-2607.
 - **News Coverage**: NASA Earth Science News, "NASA Satellite Images Uncover Underground Forest Fungi", Published Mar. 31, 2016
 - **News Coverage**: Smithsonian News Desk, "Satellites Detect the Healthy Glow of a Forest with Underground Friends", Published May 2, 2016
25. Buckley, Hannah L., Bradley S. Case, Jess K. Zimmerman, Jill Thompson, **Jonathan A. Myers** & Aaron M. Ellison. 2016. Using codispersion analysis to quantify and understand spatial patterns in species–environment relationships. *New Phytologist* 211: 735-749.
24. Oberle, Brad, Amy M. Milo, **Jonathan A. Myers, Maranda L. Walton**, Darcy F. Young & Amy E. Zanne. 2016. Direct estimates of downslope deadwood movement over 30 years in a temperate forest illustrate impacts of treefall on forest ecosystem dynamics. *Canadian Journal of Forest Research* 46: 351-361.
23. **Spasojevic, Marko J.**, Benjamin L. Turner & **Jonathan A. Myers**. 2016. When does intraspecific trait variation contribute to functional beta-diversity? *Journal of Ecology* 104: 487-496.
22. Burkle, Laura A., **Jonathan A. Myers** & R. Travis Belote. 2016. The beta-diversity of species interactions: Untangling the drivers of geographic variation in plant–pollinator diversity and function across scales. *American Journal of Botany* 103: 118-128.
 - **Invited Paper for Species Issue**: Evolutionary Insights from Studies of Geographic Variation
21. Burkle, Laura A., **Jonathan A. Myers** & R. Travis Belote. 2015. Wildfire disturbance and productivity as drivers of plant species diversity across spatial scales. *Ecosphere* 6:art202.

20. **Myers, Jonathan A.**, Jonathan M. Chase, Raelene M. Crandall & Iván Jiménez. 2015. Disturbance alters beta-diversity but not the relative importance of community assembly mechanisms. *Journal of Ecology* 103: 1291-1299.
 - **Cover Article:** onlinelibrary.wiley.com/doi/10.1111/jec.2015.103.issue-4/issuetoc
19. Gagnon, Paul R., Heather A. Passmore, Matthew Slocum, **Jonathan A. Myers**, Kyle E. Harms, William J. Platt & C.E. Timothy Paine. 2015. Fuels and fires influence vegetation via above- and below-ground pathways in a high-diversity plant community. *Journal of Ecology* 103: 1009-1019.
18. Tello, J. Sebastián, **Jonathan A. Myers**, Manuel J. Macía, Alfredo F. Fuentes, Leslie Cayola, Gabriel Arellano, M. Isabel Loza, Vania Torrez, Maritza Cornejo & Peter M. Jørgensen. 2015. Elevational gradients in β -diversity reflect variation in the strength of local community assembly mechanisms across spatial scales. *PLoS ONE* 10: e0121458.
17. Anderson-Teixeira, Kristina J. *et al.* (108 total authors including **Jonathan A. Myers**). 2015. CTFS-ForestGEO: A worldwide network monitoring forests in an era of global change. *Global Change Biology* 21: 528-549.
 - **News Coverage:** Smithsonian News Desk, "If Trees Could Talk: Forest Research Network Reveals Global Change Effects", Published Sep. 26, 2014
16. **Spasojevic, Marko J., Elizabeth A. Yablon**, Brad Oberle & **Jonathan A. Myers**. 2014. Ontogenetic trait variation influences tree community assembly across environmental gradients. *Ecosphere* 5:art129.
15. **Myers, Jonathan A.**, Jonathan M. Chase, Iván Jiménez, Peter M. Jørgensen, Alejandro Araujo-Murakami, Narel Paniagua-Zambrana & Renate Seidel. 2013. Beta-diversity in temperate and tropical forests reflects dissimilar mechanisms of community assembly. *Ecology Letters* 16: 151-157.
14. Stegen, James C., Amy L. Freestone, Thomas O. Crist, Marti J. Anderson, Jonathan M. Chase, Liza S. Comita, Howard V. Cornell, Kendi F. Davies, Susan P. Harrison, Allen H. Hurlbert, Brian D. Inouye, Nathan J.B. Kraft, **Jonathan A. Myers**, Nathan J. Sanders, Nathan G. Swenson & Mark Vellend. 2013. Stochastic and deterministic drivers of spatial and temporal turnover in breeding bird communities. *Global Ecology and Biogeography* 22: 202-212.
13. Lessard, Jean-Philippe, Jonathan Belmaker, **Jonathan A. Myers**, Jonathan M. Chase & Carsten Rahbek. 2012. Inferring local ecological processes amid species pool influences. *Trends in Ecology and Evolution* 27: 600-607.
 - **Cover Article:** cell.com/trends/ecology-evolution/
12. Kraft, Nathan J.B., Nathan J. Sanders, James C. Stegen, Marti J. Anderson, Thomas O. Crist, Howard V. Cornell, Mark Vellend, Jonathan M. Chase, Liza S. Comita, Kendi F. Davies, Amy L. Freestone, Susan P. Harrison, Brian D. Inouye, **Jonathan A. Myers** & Nathan G. Swenson. 2012. Response to Comments on "Disentangling the drivers of β -diversity along latitudinal and elevational gradients." *Science* 335: 1573.
11. Gagnon, Paul R., Kyle E. Harms, William J. Platt, Heather A. Passmore & **Jonathan A. Myers**. 2012. Small-Scale variation in fuel loads differentially affects two co-dominant bunchgrasses in a species-rich pine savanna. *PLoS ONE* 7: e29674.
10. Kraft, Nathan J.B., Liza S. Comita, Jonathan M. Chase, Nathan J. Sanders, Nathan G. Swenson, Thomas O. Crist, James C. Stegen, Mark Vellend, Brad Boyle, Marti J. Anderson, Howard V. Cornell, Kendi F. Davies, Amy L. Freestone, Brian D. Inouye, Susan P. Harrison & **Jonathan A. Myers**. 2011. Disentangling the drivers of β -diversity along latitudinal and elevational gradients. *Science* 333: 1755-1758.
 - **Cover Article:** sciencemag.org/content/333/6050.cover-expansion
 - **Featured in:** Friedman-Rudovsky, J. 2012. *Taking the Measure of Madidi*. *Science* 337: 285-287 (pg. 286).

9. Chase, Jonathan M. & **Jonathan A. Myers**. 2011. Disentangling the importance of ecological niches from stochastic processes across scales. *Philosophical Transactions of the Royal Society B* 366: 2351-2363.
 - **Invited Paper for Species Issue:** Biogeography and Ecology – Two Views of One World
8. **Myers, Jonathan A.** & Kyle E. Harms. 2011. Seed arrival and ecological filters interact to assemble high-diversity plant communities. *Ecology* 92: 676-686.
 - **Featured in:** Noss, Reed F. 2013. *Forgotten Grasslands of the South: Natural History and Conservation*. Island Press (pp. 102-103)
7. Gagnon, Paul R., Heather A. Passmore, William J. Platt, **Jonathan A. Myers**, C.E. Timothy Paine & Kyle E. Harms. 2010. Does pyrogenicity protect burning plants? *Ecology* 91: 3481-3486. [Concepts & Synthesis]
 - **Cover Article:** esajournals.org/toc/ecol/91/12
6. **Myers, Jonathan A.** & Kyle E. Harms. 2009. Seed arrival, ecological filters, and plant species richness: A meta-analysis. *Ecology Letters* 12: 1250-1260. [Review and Synthesis]
5. **Myers, Jonathan A.** & Kyle E. Harms. 2009. Local immigration, competition from dominant guilds, and the ecological assembly of high-diversity pine savannas. *Ecology* 90: 2745-54.
4. Kitajima, Kaoru & **Jonathan A. Myers**. 2008. Seedling ecophysiology: Strategies towards achievement of positive net carbon balance. Chapter 8 *In:* Leck, Mary A., V. Thomas Parker & Robert L. Simpson (editors) **Seedling Ecology and Evolution**. Cambridge University Press, Cambridge.
3. **Myers, Jonathan A.** & Kaoru Kitajima. 2007. Carbohydrate storage enhances seedling shade and stress tolerance in a neotropical forest. *Journal of Ecology* 95: 383-395.
 - **Recommended by the Faculty of 1000:** f1000.com/prime/1091490
2. **Myers, Jonathan A.**, Mark Vellend, Sana Gardescu & Peter L. Marks. 2004. Seed dispersal by white-tailed deer: Implications for long-distance dispersal, invasion, and migration in eastern North America. *Oecologia* 139: 35-44.
1. Vellend, Mark, **Jonathan A. Myers**, Sana Gardescu & Peter L. Marks. 2003. Dispersal of *Trillium* seeds by deer: Implications for long-distance migration of forest herbs. *Ecology* 84: 1067-1072.
 - **News Coverage:** Cornell Chronicle, "Dispersing seeds is newly discovered role for deer -- except the plants often are noxious weeds", Published Jul. 31, 2003

Reports

1. Wade, Gary L., **Jonathan A. Myers**, Cecilia R. Martin, Kathie Detmar, William Mator, Mark J. Twery & Michael Rechlin. 2003. Vascular plant species of the forest ecology research and demonstration area, Paul Smith's, New York. *USDA Forest Service, Northeastern Research Station Research Note*, Newton Square, PA.

Funding

Collaborators in my research group in **red**

Grants Awarded (2012–Present)

- National Science Foundation – Division of Environmental Biology, Population & Community Ecology Program, *Integrating species traits into species pools: A multi-scale approach to understanding community assembly*, DEB 1557094, **PI Jonathan A. Myers & Co-PI Marko J. Spasojevic**; \$758,675 2016–2020

- National Science Foundation – Division of Environmental Biology, Population & Community Ecology Program, *Collaborative Research: Disturbance and productivity as drivers of plant-pollinator diversity and function across scales*, Lead PI Laura A. Burke & Co-PI Russel T. Belote (awarded DEB 1256819) & **collaborating PI Jonathan A. Myers** (awarded DEB 1256788); \$700,000 total for the two separate collaborative awards (\$77,938 to Washington U.) 2013–2017
- National Science Foundation – Division of Environmental Biology, Population & Community Ecology Program, *Collaborative Research: Diversity, dominance and disturbance in species-rich pine savanna groundcover*, Lead PI Kyle E. Harms & **Co-PI Jonathan A. Myers** (awarded DEB 1144084) & collaborating PI Paul R. Gagnon (awarded DEB 1144079); \$530,000 total for the two separate collaborative awards (\$38,379 to Washington U.) 2012–2016
- International Center for Advanced Renewable Energy and Sustainability (I-CARES), Washington University in St. Louis – *From the Andes to the Amazon: Climate change and tropical forest dynamics along a large-scale elevational gradient in Madidi National Park, Bolivia*, **PI Jonathan A. Myers** & Co-PIs Peter M. Jørgensen, Iván Jiménez, J. Sebastián Tello, Laia Andreu Hayles, Leslie Cayola, Alfredo Fuentes & Rosa Isela Meneses; \$32,000 2015–2016
- Smithsonian Institution Center for Tropical Forest Science-Forest Global Earth Observatory (CTFS-ForestGEO) Grants Program – *Investigating the influence of regional functional diversity on local community assembly across a temperate biodiversity gradient*, **PIs Marko J. Spasojevic & Jonathan A. Myers**; \$13,400 2013–2015
- International Center for Advanced Renewable Energy and Sustainability (I-CARES), Washington University in St. Louis – *The Tyson Research Center Forest Drought Laboratory: Establishing a long-term resource for linking climate change, extreme droughts, and ecosystem dynamics*, **PI Jonathan A. Myers** & Co-PIs Amy E. Zanne, Brad Oberle & Sean M. McMahon; \$43,000 2013–2014

Other Grants (2005–2009)

- Torrey Botanical Society Graduate Student Research Fellowship (\$2000) 2008
- Louisiana Office of Environmental Education Research Grants (\$2000) 2007–2008
- McDaniel Travel Award, Dept. of Biological Sciences, LSU (\$1000) 2008
- Sigma Xi Grant-in-Aid, LSU Chapter (\$500) 2007

News Articles & Popular Press

- Smithsonian News Desk, "Satellites Detect the Healthy Glow of a Forest with Underground Friends", Published May 2, 2016; <http://newsdesk.si.edu/releases/satellites-detect-healthy-glow-forest-underground-friends> 2016
- NASA Earth Science News, "NASA Satellite Images Uncover Underground Forest Fungi", Published Mar. 31, 2016; <http://www.jpl.nasa.gov/news/news.php?release=2016-091> 2016
- Missouri Botanical Garden Bulletin, "Climate Change Study in Tropics and the Garden", Volume 104, Issue 1 2015
- Smithsonian News Desk, "If Trees Could Talk: Forest Research Network Reveals Global Change Effects", Published Sep. 26, 2014; <http://newsdesk.si.edu/releases/if-trees-could-talk-forest-research-network-reveals-global-change-effects> 2014
- St. Louis Post-Dispatch, "60-acre forest near Eureka joins Smithsonian survey on climate change", Published Jan. 8, 2014; <http://www.stltoday.com/news/> 2014

- Washington University Newsroom, "Tyson designated an Earth Observatory", Published Dec. 4, 2013; <https://source.wustl.edu/2013/12/tyson-designated-an-earth-observatory/> 2013
- Center for Tropical Forest Science Blog, "Tyson Research Center Plot joins CTFS-ForestGEO and expands the network to 52 plots worldwide", Published Nov. 15, 2013; <http://ctfsnews.blogspot.com/2013/11/tyson-research-center-plot-joins-ctfs.html> 2013

Awards, Honors & Other Recognition

Awards, Honors & Other Recognition

- Graduate Faculty Scholar, University of Central Florida (appointed to serve as external member of Ph.D. thesis committee) 2014
- Recognition for Excellence in Mentoring, Washington University Graduate Student Senate 2014
- C.W. Edgerton Award for Excellence in Plant Biology Research, LSU 2010
- Best Talk Award, Biological Sciences Graduate Student Symposium, LSU 2008, 2009
- Ellinor H. Behre Prize in Science Writing, Sigma-Xi, LSU Chapter 2006
- High Honors, Biological Sciences Honors Research Program, Cornell University 2002
- Cornell Tradition Fellowship, Cornell University 2000
- Most Outstanding Graduate Award, Paul Smith's College 1999
- Forestry Division Achievement Award, Paul Smith's College 1999
- William S. Sullivan Memorial Scholarship, Paul Smith's College 1997

Invited Participant in Working Groups & Workshops

- Invited workshop participant – *Integrating functional, phylogenetic and genetic components of diversity for an improved understanding of forest structure, dynamics, and change*, Smithsonian CTFS-ForestGEO, Chinese Academy of Forestry and Chinese Academy of Sciences Analytical Workshop, Hainan Island, China 2016
- Invited workshop participant – *Diversity and forest change - Characterizing functional, phylogenetic and genetic contributions to diversity gradients and dynamics in tree communities*, Smithsonian CTFS-ForestGEO & Chinese Forest Biodiversity Monitoring Network (CForBio) Analytical Workshop, Gamboa, Panama (workshop attended by Tyson post-doc Marko J. Spasojevic) 2015
- Invited workshop participant – *Temperate Forests: Model systems for studying global change*, Smithsonian CTFS-ForestGEO Temperate Forest Program Meeting (Edgewater, MD) & Symposium (Washington, D.C.) 2015
- Invited workshop participant – *Diversity and forest change - Characterizing functional, phylogenetic and genetic contributions to diversity gradients and dynamics in tree communities*, Smithsonian CTFS-ForestGEO & CForBio Analytical Workshop, Xishuangbanna Tropical Botanical Garden, Xishuangbanna, China 2014
- Invited working group participant – *A synthesis of patterns, analyses, and mechanisms of beta-diversity along ecological gradients*, National Center for Ecological Analysis and Synthesis (NCEAS), Santa Barbara, CA 2010

Academic Advising & Training

Post-doctoral Researchers Supervised

Joseph A. LaManna– Tyson Postdoctoral Fellow, 2015–present

Research emphasis: *Biodiversity and community assembly across trophic levels*

Marko J. Spasojevic – Tyson Postdoctoral Fellow, 2013–2015

Research emphasis: *Ecological consequences of plant functional diversity across scales*

Research Technicians Supervised

Aaron Steinberg – Seasonal Ecology Technician, 2016–present

Becky Roper – Ecology Technician, 2016–present

Brett Decker – Seasonal Ecology Technician, 2012

Edgar Javier Hernandez – Seasonal Ecology Technician, 2013

Jennifer Kidson – Seasonal Ecology Technician, 2013

Jocelyn Frazelle, Seasonal Ecology Technician, 2016–present

Maranda Walton – Ecology Technician, 2013–2015

Graduate Students Supervised for Ph.D. Theses

Christopher P. Catano – Ph.D. student, 2014–Present; Awards – Tyson Research Center Graduate Student Award (2015)

Dilys Vela Díaz – Ph.D. student, 2013–Present; Awards – William H. Danforth Plant Sciences Fellowship (4 years); Thesis: *Niche assembly, species diversity, and species relative abundance across temperate and tropical forests*

Emma Moran – Ph.D. student, 2012–Present (co-advised with Tiffany Knight); Thesis: *Beta-diversity patterns and community assembly across latitudes*

Graduate Students Supervised for Research Rotations

Rachel Becknell – Rotating Ph.D. student, Spring 2016

Vincent J. Fasanello – Rotating Ph.D. student, Fall 2015

James Lucas – Rotating Ph.D. student, Spring 2017

Marshall Wedger – Rotating Ph.D. student, Fall 2016

Graduate Student Committees – 12 students total

Current, at Washington University

Boahemaa Adu-Oppong (Evolution, Ecology & Population Biology)

Holly Bernardo (Evolution, Ecology & Population Biology)

Jennifer Gruhn (Evolution, Ecology & Population Biology)

Katherine Geist (Evolution, Ecology & Population Biology)

Sara Wright (Evolution, Ecology & Population Biology)

Current, at Institutions other than Washington University

Jason Schroeder – Ph.D. advisee of David Jenkins, Department of Biology, University of Central Florida, Orlando, FL

Previous

Erica Pehrsson – Ph.D. awarded 2015 (Computational & Systems Biology)

Molly Gibson – Ph.D. awarded 2015 (Computational & Systems Biology)

Nicholas Kooyers – Ph.D. awarded 2013 (Evolution, Ecology & Population Biology)

Kristin Powell – Ph.D. awarded 2013 (Evolution, Ecology & Population Biology)

Lauren Woods – Ph.D. awarded 2014 (Evolution, Ecology & Population Biology)

Matthew Schuler – Ph.D. awarded 2015 (Evolution, Ecology & Population Biology)

Undergraduate Students Supervised – 31 students total

*Tyson Summer Undergraduate Research Program Fellow

**Lennette Fellowship in Environmental Field Research

***Washington University Biology Summer Undergraduate Research Fellowship (BioSURF)

Students Supervised for Honors Thesis Research at Washington University

*Amal Al-Lozi (2011–2012) – Thesis: *Unraveling mechanisms of recruitment limitation in temperate forest seedling communities*; Lennette Fellowship in Environmental Field Research

*Elizabeth Yablon (2012–2013) – Thesis: *Functional traits, environmental gradients and community assembly in a temperate forest*

Students Supervised for Non-Thesis Research at Washington University

*Alexandra Porter (Summer 2015, Summer 2016), *Alison Palmer (Summer 2015), *Anna Liang (Summer 2013), ***Ashley Knudson (Fall 2014, Fall 2015, Spring 2016, Summer 2016, Fall 2016), *Evan Alger-Meyer (Summer 2015), *Diana Jerome (Summer 2015), *Emily Wen (Spring 2014, Summer 2014), *Iris Seto (Summer 2016), Jacqueline Reu (Fall 2016), *Jacqueline Treiger (Summer 2013), *Jamal Gaddis (Summer 2014), *Katherine Harline (Fall 2013, Spring 2014, Summer 2014, Fall 2014), *Madeline Salzman (Summer 2011), **Mary Gardner (Spring 2014, Summer 2014), **Micaela Hyams (Summer 2013), *Michael Gjelsten (Summer 2015), *Merrill Rudd (Summer 2011), *Patricia Chen (Summer 2015), *Vanessa Hensley (Summer 2012)

Students Supervised for Non-Thesis Research at Institutions other than Washington University

*Adam Vorel – Maryville University, St. Louis, MO (Summer 2016)

*Camila Chiriboga – Missouri State University, Springfield, MO (Summer 2016)

*Dev Harrington – Columbia University, New York, NY (Summer 2013, Summer 2014)

*Eduardo Koerich Nery – Brazil Scientific Mobility Program (Summer 2014)

*Maria Weston – Northern Illinois University, DeKalb, IL (Summer 2015)

Morgan Kerns – Louisiana State University, Baton Rouge, LA (2009–2010)

Natalia Aristizábal – Louisiana State University, Baton Rouge, LA (2007–2009)

Sarah Tarrant – University of Florida, Gainesville, FL (2003)

*Tess Rogers – University of Minnesota, Minneapolis, MN (Summer 2015)

*Vincent Spradling – McKendree University, Lebanon, IL (Summer 2016)

High School Students Supervised for Summer Field Research – 46 students total from 22 high schools in the St. Louis area

Tyson Environmental Research Fellowship (TERF) Program, Tyson Research Center

Adam Vorel (2013–2014), Adil Hassan (2012), Aidan Kelly (2011), Albert Wang (2015), Alexander Duchild (2012), Calvin Schaefer (2016), Ciara Shaffer (2015), Clayton Hillermann (2013–2014), Dasha Malkova (2014), Dev Harrington (2011–2012), Devin Haas (2016), Ellen Sulser (2013–2014), Hannah Walkowski (2013–2014), Hayley Huntley (2016), Kelly McKinley (2010), Marie Manzo (2011), Max Margherio (2010), Mya Miranda (2016), Thomas Hogancamp (2012), Zach Rhodes (2011)

Shaw Institute for Field Training (SIFT) Program, Missouri Botanical Garden

Amy Stimmel (2016), Bailee Warsing (2014), Ben Difani (2013), Carly Steffan (2013), Chris Dye (2013), Ciara Shaffer (2014), Dasha Malkova (2013), Elizabeth King (2012), Esha Sharma (2016), Genesis Dancer (2016), Hank McCrimmon (2013), Hannah Kruse (2012), Hannah Walkowski (2012), Hiba Al-Ramahi (2016), Jamielee Buenemann (2012), Jenita Larry (2014), Johannes Schrader (2012), Jonathan Winkler (2012), Katie Buatois (2014), Kyle Lang (2013), Lexie Beckermann (2014), Matilda Workman (2014), Megan Kerr (2014), Michaela Quist (2013), Nicole Wang (2016), Owen Kathriner (2016), Peter Volmert (2013), Suraj Puvvada (2012), Xihu He (2014)

Teaching at Washington University

Courses Taught

| Course | Role | Semester |
|--|--|-------------|
| R Workshop in Biology (Bio 3100), 1 unit | Course master: 23 undergraduate students | Fall 2016 |
| Community Ecology (Bio 419), 3 units | Course master: 15 students (9 undergraduates, 6 graduate students) | Spring 2016 |
| Seminar in Ecology (Bio 580), 1 unit | Course master (with Scott Mangan): 10 graduate students | Spring 2016 |
| R Workshop in Biology (Bio 3100), 1 unit | Course master: 19 undergraduate students | Fall 2015 |
| Community Ecology (Bio 419), 4 units | Course master: 11 students (9 undergraduates, 2 graduate students) | Spring 2015 |
| Practical Skills in Environmental Biology Research (Bio 393), 2 units | Course master (with Scott Mangan): 6 undergraduate students | Spring 2015 |
| R Workshop in Biology (Bio 493), 1 unit | Course master: 7 students (5 undergraduates, 2 graduate students) | Fall 2014 |
| Community Ecology (Bio 419), 3 units | Course master: 19 students (15 undergraduates, 4 graduate students) | Spring 2014 |

Invited Speaker

| Course | Semester (Number of Students) |
|--|---|
| Freshman Seminar in Biology (Bio 181) | Fall 2013 (50), Fall 2014 (41), Fall 2015 (41), Fall 2016 (50) |
| Practical Skills in Environmental Biology Research (Bio 393) | Spring 2013 (6) |
| The Tyson Seminar: Grounding Research in Nature (Freshman Seminar – GeSt 160) | Fall 2012 (10), Fall 2013 (16), Fall 2014 (9) |

Invited Presentations & Seminars (18 total)

- University of Georgia, Odum School of Ecology, Athens, GA: *Untangling drivers of biodiversity across ecological and biogeographic gradients* (scheduled for Nov. 2016) 2016
- Clemson University, Clemson, SC: *Untangling drivers of biodiversity across ecological and biogeographic gradients* (scheduled for Oct. 2016) 2016
- Smithsonian CTFS-ForestGEO, Chinese Academy of Forestry & Chinese Academy of Sciences Analytical Workshop, Hainan Island, China: *Negative density dependence and diversity-environment relationships across temperate and tropical forests* 2016
- University of Missouri, St. Louis, MO (BioLunch Seminar Series): *From the Ozarks to the Rockies (and possibly to the Andes): The beta-diversity of species and species interactions across ecological gradients* 2015
- University of Missouri, Columbia, MO (Forestry, Fisheries & Wildlife Seminar Series): *Biodiversity and community assembly in heterogeneous landscapes: Insights from comparative studies in temperate and tropical ecosystems* 2015
- Missouri Native Plant Society, St. Louis, MO: *The paradox of plant diversity: Insights from comparative studies across temperate and tropical ecosystems* 2015
- Smithsonian CTFS-ForestGEO & Chinese Forest Biodiversity Monitoring Network (CForBio) Analytical Workshop, Xishuangbanna Tropical Botanical Garden, Xishuangbanna, China: *Biodiversity, community assembly & global change: Insights from comparative studies in temperate and tropical forests* 2014

- Montana State University, Bozeman, MT (Dept. of Ecology): 2013
Biodiversity and community assembly across ecological and biogeographic gradients
- Southern Illinois University, Edwardsville, IL (Dept. of Biological Sciences): 2013
Biodiversity and community assembly across ecological and biogeographic gradients
- University of Missouri, St. Louis, MO (Biology Dept.): 2013
Biodiversity and community assembly across ecological and biogeographic gradients
- Saint Louis University, St. Louis, MO (Dept. of Biology): 2013
Biodiversity and community assembly across ecological and biogeographic gradients
- Murray State University, Murray, KY (Dept. of Biological Sciences): 2012
Biodiversity and community assembly across ecological and biogeographic gradients
- Tyson Research Center, Eureka, MO (Washington University Plant Biology Retreat): 2012
Ecological assembly of temperate and tropical forests through space and time
- University of Missouri, Columbia, MO (Division of Biological Sciences, Evolutionary Biology & Ecology Series): 2011
Community assembly across ecological and biogeographic gradients
- Washington University in St. Louis, MO (Dept. of Biology): 2011
Community assembly across ecological and biogeographic gradients
- Washington University in St. Louis, MO (Dept. of Biology): 2009
Ecological assembly of high-diversity plant communities
- Louisiana State University, Baton Rouge, LA (Sigma Xi Seminar): 2008
Ecological mechanisms maintaining plant species diversity: Dispersal and niche assembly of high-diversity longleaf pine communities
- Smithsonian Tropical Research Institute, Panama (Barro Colorado Island Seminar): 2003
Carbon allocation to storage as a basis for trade-offs between growth and survival of tropical forest seedlings

Presentations at Local, National & International Meetings (45 total)

Authors in my research group in **red**

- Burkle, Laura A., **Joseph A. LaManna**, R. Travis Belote & **Jonathan A. Myers**. 2016
Evaluating the effects of wildfire on pollinator diversity and their interactions with plants across landscapes in the Northern Rockies. XXV International Congress of Entomology, Orlando, FL (talk scheduled for Sep. 2016)
- LaManna, Joseph A., Maranda L. Walton**, Benjamin L. Turner, **Dilys M. Vela Díaz**, **Jonathan A. Myers** & the Center for Tropical Forest Science–Forest Global Earth Observatory (CTFS-ForestGEO) Network*. 2016
Negative density dependence, species relative abundance, and diversity–environment relationships across temperate and tropical forests. **Saint Louis Ecology, Evolution and Conservation 6th Annual Retreat**, Elsah, IL. *42 collaborators from 21 forest-dynamics plots in 9 countries (talk)
- Vela Díaz, Dilys M., Marko J. Spasojevic**, James W. Dalling, Sean M. McMahon, Benjamin L. Turner, **Joseph A. LaManna, Jonathan A. Myers** & the Center for Tropical Forest Science–Forest Global Earth Observatory (CTFS-ForestGEO) Network*. 2016
MacArthur's niche hypotheses revisited: the role of niche space, niche breadth and niche overlap in explaining global patterns of species diversity. **Saint Louis Ecology, Evolution and Conservation 6th Annual Retreat**, Elsah, IL. *27 collaborators from 15 forest-dynamics plots in 9 countries (poster)

- Vela Díaz, Dilys M., Marko J. Spasojevic**, James W. Dalling, Sean M. McMahon, Benjamin L. Turner, **Joseph A. LaManna, Jonathan A. Myers** & the Center for Tropical Forest Science-Forest Global Earth Observatory (CTFS-ForestGEO) Network*. MacArthur's niche hypotheses revisited: the role of niche space, niche breadth and niche overlap in explaining global patterns of species diversity. 53rd **Annual Meeting of the Association for Tropical Biology and Conservation**, Montpellier, France. *27 collaborators from 15 forest-dynamics plots in 9 countries (poster) 2016
- LaManna, Joseph A., Maranda L. Walton**, Benjamin L. Turner & **Jonathan A. Myers**. Negative density dependence is stronger in resource-rich environments and diversifies communities when stronger for common but not rare species. **Ecological Society of America 101st Annual Meeting**, Fort Lauderdale, FL (talk) 2016
- Myers, Jonathan A.**, Peter M. Jørgensen, Iván Jiménez, J. Sebastián Tello, Laia Andreu Hayles, Leslie Cayola, Alfredo Fuentes & Rosa Isela Meneses. From the Andes to the Amazon: Climate change and tropical forest dynamics along a large-scale elevational gradient in Madidi National Park, Bolivia. **International Center for Advanced Renewable Energy and Sustainability Annual Research Symposium**, Washington University, St. Louis, MO (talk) 2016
- Myers, Jonathan A.**, Kyle E. Harms & Paul R. Gagnon. Species sorting trumps the importance of local species interactions in the assembly of hyperdiverse communities. **British Ecological Society Meeting**, Edinburgh, Scotland (talk) 2015
- Vela Díaz, Dilys, Marko J. Spasojevic & Jonathan A. Myers**. Ecological niche specialization of temperate and tropical forest trees across large-scale diversity gradients. **Danforth Plant Science Center & Missouri Botanical Garden Joint Symposium – From Darwin to Borlaug: Biocomplexity in Natural and Agricultural Systems**, St. Louis, MO (poster) 2015
- Catano, Christopher P.**, Timothy L. Dickson & **Jonathan A. Myers**. Disturbance and dispersal interactively drive biotic homogenization: A synthesis of experiments. **Saint Louis Ecology, Evolution and Conservation 5th Annual Retreat**, St. Louis, MO & **Danforth Plant Science Center & Missouri Botanical Garden Joint Symposium – From Darwin to Borlaug: Biocomplexity in Natural and Agricultural Systems**, St. Louis, MO (2 separate poster presentations) 2015
- LaManna, Joseph. A, Maranda L. Walton & Jonathan A. Myers**. Negative density dependence is stronger in resource-rich environments across species and associated with higher diversity. **Saint Louis Ecology, Evolution and Conservation 5th Annual Retreat**, St. Louis, MO & **Danforth Plant Science Center & Missouri Botanical Garden Joint Symposium – From Darwin to Borlaug: Biocomplexity in Natural and Agricultural Systems**, St. Louis, MO (2 separate poster presentations) 2015
- Myers, Jonathan A.**, Laura A. Burkle & R. Travis Belote. Regional species pools interact with local community assembly mechanisms to shape plant and pollinator beta-diversity across wildfire-disturbance gradients. **Ecological Society of America 100th Annual Meeting**, Baltimore, MD (talk) 2015
- Spasojevic, Marko J.**, James A. Lutz, Sean M. McMahon, Andrew L. Larson, Geoffrey G. Parker, Benjamin L. Turner, **Christopher P. Catano, Dilys Vela Díaz & Jonathan A. Myers**. Species pool functional diversity and environmental heterogeneity jointly influence beta-diversity in temperate forests. **Ecological Society of America 100th Annual Meeting**, Baltimore, MD (talk) 2015
- Catano, Christopher P.**, Timothy L. Dickson & **Jonathan A. Myers**. Disturbance and dispersal as drivers of beta-diversity: A synthesis of experiments. **Ecological Society of America 100th Annual Meeting**, Baltimore, MD (talk) 2015

- Johnson, Daniel, **Jonathan A. Myers**, Richard P. Phillips & Keith Clay. Role of mycorrhizal associations in structuring forest communities across environmental and climatic gradients. **Ecological Society of America 100th Annual Meeting**, Baltimore, MD. **Invited talk** for Organized Session: “Functional, Phylogenetic and Genetic Dimensions of Forest Diversity and Change”. 2015
- Spasojevic, Marko J. & Jonathan A. Myers**. From the leaf to the continent: Integrating trait variation across scales to understand spatial variation in forest biodiversity. **11th Annual Postdoc Symposium**, Washington University, St. Louis, MO (talk) 2015
- Vela Díaz, Dilys & Jonathan A. Myers**. Patterns of species commonness and rarity in temperate tree communities. **Washington University Plant Biology Retreat**, Tyson Research Center, MO (talk) 2014
- Spasojevic, Marko J. & Jonathan A. Myers**. Does intraspecific trait variation mediate the relative importance of selection, drift, and dispersal as drivers of beta-diversity? **Ecological Society of America 99th Annual Meeting**, Sacramento, CA (talk) 2014
- Burkle, Laura, R. Travis Belote & **Jonathan A. Myers**. Responses of plant and pollinator biodiversity to wildfires across a productivity gradient in the Northern Rockies. **Ecological Society of America 99th Annual Meeting**, Sacramento, CA (talk) 2014
- Myers, Jonathan A.**, Brad Oberle, Sean M. McMahon & Amy E. Zanne. The Tyson Research Center Forest Drought Laboratory: A resource for interdisciplinary collaborations on climate change, drought, and ecosystem dynamics. **International Center for Advanced Renewable Energy and Sustainability Annual Research Symposium**, Washington University, St. Louis, MO (talk) 2014
- Tello, J. Sebastián, Iván Jiménez, Peter Jørgensen, M. Isabel Loza-Rivera, **Jonathan A. Myers**, Manuel J. Macía, Alfredo F. Fuentes-Claros, Leslie Cayola-Pérez, Gabriel Arellano, Maritza Cornejo-Mejía & Vania W. Torrez. The evolutionary and ecological assembly of a tropical flora along an elevational gradient in the Andes. **60th Annual Systematics Symposium – Phylogeny Meets Ecology: Patterns of Diversity, Community Assembly, and Niche Evolution**, St. Louis, MO (talk) 2013
- Spasojevic, Marko J., Elizabeth A. Yablon**, Brad Oberle, **Maranda L. Walton**, Amy E. Zanne & **Jonathan A. Myers**. Community assembly mechanisms differ between saplings and adults: The importance of ontogeny in trait-based ecology. **Saint Louis Ecology, Evolution and Conservation 3rd Annual Retreat**, St. Louis, MO (poster) 2013
- Milo, Amy M., Brad Oberle, **Jonathan A. Myers**, Darcy F. Young & Amy E. Zanne. Patterns of fine scale deadwood distribution in an Ozark Highlands forest. **Ecological Society of America 98th Annual Meeting**, Minneapolis, MN (poster) 2013
- Myers, Jonathan A.**, Juan S. Tello, Peter M. Jørgensen, Alejandro Araujo-Murakami, Leslie Cayola-Pérez, Maritza Cornejo-Mejía, Alfredo F. Fuentes-Claros & M. Isabel Loza-Rivera. Untangling determinism and stochasticity within local species neighborhoods across a tropical biodiversity gradient. **Association for Tropical Biology & Conservation Meeting**, San José, Costa Rica (talk) 2013
- Tello, Juan S., Iván Jiménez, Peter M. Jørgensen, **Jonathan A. Myers**, Manuel J. Macia, Alfredo F. Fuentes-Claros, Leslie Cayola-Pérez, Gabriel Arellano, Maritza Cornejo-Mejía, M. Isabel Loza-Rivera, Javier Quisbert-Quispe & Vania W. Torrez. Elevational gradients in beta-diversity reflect both regional effects and scale-dependent variation in the strength of local assembly processes. **Association for Tropical Biology & Conservation Meeting**, San José, Costa Rica (talk) 2013
- Al-Lozi, Amal & Jonathan A. Myers**. Unraveling the roles of dispersal limitation and a dominant herbivore on seedling diversity and dynamics in temperate forests. **Ecological Society of America 97th Annual Meeting**, Portland, OR (poster) 2012

- Davies, Kendi F. *et al.* (>20 total authors including **Jonathan A. Myers**). Relative influence of deterministic versus stochastic community assembly under increasing productivity. **Ecological Society of America 97th Annual Meeting**, Portland, OR (talk) 2012
- Oberle, Brad, **Jonathan A. Myers**, Juan Carlos Penagos, Jonathan Sweeny, Kiona Ogle & Amy Zanne. Climate change, death, and decomposition: Xylem vessel length influences both mortality and decay among Ozark forest trees. **Ecological Society of America 97th Annual Meeting**, Portland, OR (talk) 2012
- Tello, Juan S., Iván Jiménez, Peter M. Jørgensen, **Jonathan A. Myers**, Manuel J. Macia, Alfredo F. Fuentes-Claros, Leslie Cayola-Pérez, Gabriel Arellano, Maritza Cornejo-Mejía, M. Isabel Loza-Rivera, Javier Quisbert-Quispe & Vania W. Torrez. Beta-diversity, gamma diversity, and community assembly along a tropical elevational gradient. **Ecological Society of America 97th Annual Meeting**, Portland, OR (talk) 2012
- Myers, Jonathan A.**, Jonathan M. Chase, Ivan Jiménez, Peter M. Jørgensen, Renate Seidel, Narel Paniagua & Alejandro Araujo. Disentangling regional, environmental, and spatial influences on beta-diversity in temperate and tropical forests. **Saint Louis Ecology, Evolution and Conservation 1st Annual Retreat**, Saint Louis, MO (talk) 2011
- Myers, Jonathan A.**, Jonathan M. Chase, Ivan Jiménez, Peter M. Jørgensen, Renate Seidel, Narel Paniagua & Alejandro Araujo. Disentangling regional, environmental, and spatial influences on beta-diversity in temperate and tropical forests. **Ecological Society of America 96th Annual Meeting**, Austin, TX (talk) 2011
- Myers, Jonathan A.**, Jonathan M. Chase, Ivan Jiménez, Peter M. Jørgensen, Renate Seidel, Narel Paniagua & Alejandro Araujo. Disentangling regional, environmental, and spatial influences on beta-diversity in temperate and tropical forests. **Botanical Society of America Conference**, St. Louis, MO (talk) 2011
- Myers, Jonathan A.**, Jonathan M. Chase, Peter M. Jørgensen, Ivan Jiménez, Renate Seidel, Narel Paniagua & Alejandro Araujo. Comparing biogeographical, spatial, and environmental influences on patterns of beta-diversity among temperate and tropical forests. **International Biogeography Society 5th Conference**, Crete, Greece (poster) 2011
- Chase, Jonathan M. & **Jonathan A. Myers**. Disentangling the importance of niches for the maintenance of species diversity at local and regional scales amidst a gauntlet of stochastic and biogeographic processes. **International Biogeography Society 5th Conference**, Crete, Greece (talk) 2011
- Myers, Jonathan A.** & Kyle E. Harms. Resource-disturbance interactions influence community assembly in high-diversity pine savannas. **Ecological Society of America 95th Annual Meeting**, Pittsburgh, PA (talk) 2010
- Myers, Jonathan A.** & Kyle E. Harms. Climate, disturbance, and seed arrival interact to assemble high-diversity pine savanna groundcover communities. **Ecological Society of America 94th Annual Meeting**, Albuquerque, NM (talk) 2009
- Gagnon, Paul R., Heather A. Passmore, William J. Platt, **Jonathan A. Myers**, C.E. Timothy Paine & Kyle E. Harms. Flammability as self-protection. **4th International Fire Ecology and Management Congress**, Savannah, GA (talk) 2009
- Myers, Jonathan A.** & Kyle E. Harms. Competition and recruitment limitation in high-diversity pine savanna: Mechanistic effects of dominant species. **Ecological Society of America 93rd Annual Meeting**, Milwaukee, WI (talk) 2008
- Kitajima, Kaoru & **Jonathan A. Myers**. Role of storage for photosynthetic acclimation and maintenance of carbon balance in seedlings. **Phenotypic Plasticity in Response to Environmental Changes: Scaling from the Molecular to Ecosystem Levels**, Japan (talk) 2007

- Passmore, Heather A., Kyle E. Harms, William J. Platt, **Jonathan A. Myers** & Paul R. Gagnon. Influences of fire intensity on vegetation cover and local biodiversity in species-rich pine savanna groundcover. **Ecological Society of America 92nd Annual Meeting**, San Jose, CA (poster) 2007
- Myers, Jonathan A.** & Kaoru Kitajima. 2006. Seedling acclimation to dynamic forest light environments: The contributions of carbon storage and carbon gain. **Ecological Society of America 91st Annual Meeting**, Memphis, TN (poster) 2006
- Myers, Jonathan A.** & Kaoru Kitajima. Carbohydrate storage enhances seedling shade tolerance and mediates growth-survival tradeoffs in a neotropical forest. **Ecological Society of America 90th Annual Meeting**, Montreal, Canada. **Invited talk** for Organized Session: "Comparative Ecology of Tropical Trees: Linking Physiology to Dynamics and Distributions". 2005
- Myers, Jonathan A.** & Kaoru Kitajima. 2004. Carbon allocation to storage as a basis for tradeoffs between seedling growth and survival in a tropical forest. **Ecological Society of America 89th Annual Meeting**, Portland, OR (talk) 2004
- Vellend, Mark, **Jonathan A. Myers**, Sana Gardescu & Peter L. Marks. Seed dispersal by white-tailed deer: Implications for long-distance dispersal and plant migrations. **Ecological Society of America 88th Annual Meeting**, Savanna, GA (talk) 2003
- Myers, Jonathan A.**, Mark Vellend, Sana Gardescu & Peter L. Marks. Seed dispersal by white-tailed deer. **Northeast Natural History Conference VII**, Albany, NY (talk) 2003
- Twery, Mark J., Gary L. Wade, **Jonathan A. Myers**, Kathie Detmar & William Mattor. A comparison of study techniques for evaluating plant species richness in northern hardwood forests. **Ecological Society of America 86th Annual Meeting**, Madison, WI (poster) 2002

Professional Service

Invited Member of Grant Review Panels

- Population & Community Ecology Panel, National Science Foundation, Washington, D.C. 2016
- Doctoral Dissertation Improvement Grant Panel, National Science Foundation, Washington, D.C. 2014

Reviewer for National & International Granting Agencies (5 proposals reviewed)

National Science Foundation (NSF) – Population and Community Ecology; NSF – Biological Oceanography; Estonian Research Council (ETAg); ETH Zurich Research Commission (Switzerland)

Reviewer for 29 Professional Journals (73 invitations accepted)

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|------------------------------------|--|---|
| <i>Acta Oecologia</i> | <i>Ecology Letters</i> (7) | <i>Methods in Ecology and Evolution</i> |
| <i>American Naturalist</i> (2) | <i>Ecosphere</i> | <i>Nature Communications</i> |
| <i>Basic and Applied Ecology</i> | <i>Functional Ecology</i> (5) | <i>Oecologia</i> (4) |
| <i>Biological Invasions</i> | <i>Global Ecology and Biogeography</i> (2) | <i>Oikos</i> |
| <i>Biotropica</i> (2) | <i>Heredity</i> | <i>Perspectives in Plant Ecology</i> |
| <i>Ecography</i> | <i>Journal of Animal Ecology</i> | <i>Evolution, and Systematics</i> |
| <i>Ecología en Bolivia</i> | <i>Journal of Arid Environments</i> | <i>Plant Ecology & Diversity</i> |
| <i>Ecological Applications</i> (2) | <i>Journal of Ecology</i> (12) | <i>PLoS ONE</i> (4) |
| <i>Ecological Research</i> | <i>Journal of Vegetation Science</i> (2) | <i>PNAS</i> |
| <i>Ecology</i> (12) | <i>Landscape Ecology</i> | <i>Proceedings of the Royal Society B</i> |

Organizer for Analytical and Scientific Workshops

- Co-organized and co-funded workshop for 32 participants with Laura Burkle and Travis Belote: "R Basics Workshop"; Montana State University, Bozeman, MT 2014
- Co-organized and co-funded workshop for 37 participants with Kyle Harms and Paul Gagnon: "Exploring heterogeneity in the ecology, restoration, and management of longleaf groundcover"; Longleaf Alliance 10th Biennial Conference, Mobile, AL 2014

Service at Washington University

Committees & Service

- Washington University Delegate, Organization for Tropical Studies (OTS) 2016–Present
- Ecology Faculty Search Committee, Dept. of Biology 2015–2016
- Environmental Biology Major Steering Committee, Dept. of Biology 2015–Present
- Environmental Studies Committee, College of Arts and Sciences 2014–Present
- Tour Leader for Evolution, Ecology and Population Biology (EEPB) Prospective Graduate Student Visit to the Tyson Research Center (3 years) 2014–Present
- EEPB Graduate Program Admissions & Steering Committee, Dept. of Biology 2012–Present
- Tyson Research Center Steering Committee, College of Arts and Sciences 2012–Present
- Saint Louis Ecology, Evolution & Conservation (SLEEC) Steering Committee 2012–Present
- Host for Seminar Speakers (15 speakers hosted): Department of Biology Seminar Series (3 speakers); Evolution, Ecology & Population Biology (EEPB) Seminar Series (2 speakers); Tyson Summer Seminar Series (10 speakers) 2011–Present
- I-CARES Faculty Search Committee (Tyson Research Center Director), College of Arts and Sciences 2013–2014
- EEPB Graduate Program Qualifying Exam Committee, Dept. of Biology 2014, 2015

Participation in Educational Training & Transdisciplinary Research Initiatives

- Participant in "Harnessing Big Data for Environment, Livelihoods, and Population Wellbeing in India" Project, a transdisciplinary research initiative involving eight faculty members representing five departments in Arts & Sciences and the Brown School of Social Work. 2015
- Participant in STEM Teaching (MiST) Program for Junior Faculty to bring together assistant professors with tenured faculty for a two-year mentoring experience focused on teaching and designed to foster a multi-disciplinary, multi-level learning community of faculty engaged in scholarly teaching. 2015–2016

Mentoring, Outreach & Training

- Participant in welcome session for biology majors 2015
- Participant in welcome session for environmental biology majors (2 years) 2014–2015
- Research mentor for student presentations the Tyson Environmental Research Fellowship (TERF) High School Research Symposium, Tyson Research Center, MO (6 years: 10 poster presentations; 3 talks) 2011–2016
- Research mentor for student presentations at the Washington U. Undergraduate Research Symposium (4 years: 8 poster presentations) 2012–2015
- Participant in "What does success look like?" event for the undergraduate student-discussion group "Controversy N' Coffee" 2014
- Participant in the Washington U. Office of Undergraduate Research "Mentor Connections" event for freshman and sophomore students (2 years) 2012–2013

- Reader for undergraduate honors theses in environmental biology and environmental studies – Kelly Muething (2013), Merrill Rudd (2011), Vanessa Hensley (2013) 2011–2013
- Reviewer for the Marion Smith Spector Prize for best undergraduate honors thesis in biology – Kai Jones (2015), Muxi Yang (2013) 2013, 2015
- Panel member for the Washington U. Undergraduate Biostatistics Training Program, Tyson Research Center, MO (3 years) 2010–2012
- Research mentor for student presentation at the MidStates Consortium for Math and Science Undergraduate Research Symposium, Washington U. 2011

Professional Workshops Attended

- Statistical estimation of species richness and biotic similarity using EstimateS, Association for Tropical Biology & Conservation 2013
- Hierarchical Bayesian Modeling in Ecology, Ecological Society of America 2012
- Spatial & Phylogenetic Analysis in Macroecology, International Biogeography Society 2011
- Structural Equation Modeling, LSU 2010
- Multiple Linear Regression using R, Ecological Society of America 2006
- Likelihood Methods in Forest Ecology, Institute of Ecosystem Studies 2005

Membership in Professional Societies

- Association for Tropical Biology and Conservation
- British Ecological Society
- Ecological Society of America
- International Biogeography Society