

Education

- 2009 Ph.D. in Ecology, University of Georgia, Odum School of Ecology, Athens, GA.
- 2005 B.A. Biology (*Magna cum laude*), William Jewell College, Liberty, MO.

Professional Experience

Research

- 2017-Present Assistant Professor, Soil & Water Systems, University of Idaho, Moscow, ID
- 2017-Present Adjunct Assistant Professor, Biological Sciences, Virginia Tech, Blacksburg, VA
- 2012-2017 Assistant Professor, Biological Sciences, Virginia Tech, Blacksburg, VA
- 2009-2012 Postdoctoral research associate, Yale University, New Haven, CT
- 2005-2009 Graduate student (Ph.D.), University of Georgia, Athens, GA. Dissertation title:
Ecosystem Carbon Cycling: Relationships to Microbial Community Structure.
- 2005 Research assistant, Luquillo LTER, Puerto Rico. Assessed soil faunal communities.

Teaching

- 2017-Present *Microbial Ecology*, Lecturer, University of Idaho
- 2013-2017 *Ecology and Microbial Ecology*, Lecturer, Virginia Tech
- 2010-2012 *Soil Science*, Lecturer, Yale University
- 2010-2012 *Introductory Ecology*, Lecturer, Sacred Heart University

Other

- 1996-2001 U.S. Army Infantry, Sergeant (1999-2001)

Awards, Honors, and Fellowships

- 2010 • University of Georgia, Excellence in research award for the life sciences
- 2009 • Biogeoscience Section Elizabeth Sulzmann award, ESA
- Odum School of Ecology best student paper award
- 2008 • Doctoral dissertation improvement grant (DDIG), NSF (\$11,032)

Scholarly Activities

External Grants

- 2016 Collaborative Research: Volatile organic compounds (VOCs) \$822,000
 released during litter decomposition and their relevance to soil
 ecology (role: PI; \$283,110 to Strickland)

2016	Is a diverse grasshopper community beneficial to the health and functioning of rangeland ecosystems? (role: co-PI; \$15,210 to Strickland)	\$150,000
2014	Quantifying soil health: measuring the impacts of tillage and cover crop practices on nutrient retention and soil physical, biological and chemical properties (role: co-PI; \$83,000 to Strickland)	\$382,000
	Diverse cover crop mixtures for soil health (role: co-PI; \$7,900 to Strickland)	\$20,000
2013	Interactions between antibiotic resistance in soil microbial communities and coupled elemental cycles – USDA AFRI (role: PI)	\$493,333
2009	Soil microbial community composition in bottomland hardwood restorations on the Mississippi Delta – United States Forest Service (role: co-PI)	\$66,320
	Understanding the belowground impacts of managing for biofuels in loblolly pine plantations – Weyerhaeuser Company Southern R & D (role: co-PI)	\$30,000
2008	Functional dissimilarity in soil microbial communities – National Science Foundation, Doctoral dissertation improvement grant (role: co-PI)	\$11,032

Internal Grants

2015	Drivers of antibiotic resistance in soil – ICTAS, Virginia Tech (role: PI)	\$10,000
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Publications



38) Benbow, M.E., Barton, P.S., Ulyshen, M.D., Beasley, J.C., DeVault, T.L., **Strickland, M.S.**, Tomberlin, J.K., Jordan, H.R., Pechal, J.L. 2018. A necrobiome framework for bridging decomposition ecology of autotrophically- and heterotrophically-derived organic matter. *Ecological Monographs*, IN PRESS.

- 37)** Waller, L., Evanylo, G., Krometis, L., Strickland, M.S., Wynn-Thompson, T., Badgley, B. 2018. Engineered and environmental controls of microbial denitrification in established bioretention cells. *Environmental Science & Technology*, 52: 5358-5366.
- 36)** Wilson, C., **Strickland, M.S.**, Hutchings, J., Bianchi, T., Flory, S. 2018. Grazing enhances belowground carbon allocation, microbial biomass, and soil carbon in a subtropical grassland. *Global Change Biology*, 24: 2997-3009.
- 35)** Singh, B., Minick, K.*, **Strickland, M.S.**‡, Wickings, K., Crippen, T., Tarone, A., Benbow, E., Sufrin, N., Tomberlin, J., Pechal, J. The legacy of human cadaver decomposition on soil biological structure and function. *Frontiers in Microbiology*, 8: 2616.
*Minick is co-first author and was a Post-doc in my lab, ‡Co-corresponding author
- 34)** Bierer, A.M., Maguire, R.O., **Strickland, M.S.**, Thomason, W.E., Stewart, R.D. 2017. Effects of dairy slurry injection on carbon and nitrogen cycling. *Soil Science*, 18: 181-187.
- 33)** **Strickland, M.S.**, Callaham, M.A., Gardiner, E.S., Stanturf, J.A., Leff, J.W., Fierer, N., Bradford, M.A. 2017. Response of soil microbial community composition and function to bottomland forest restoration. *Applied Soil Ecology*, 119: 317-326.
- 32)** Ulyshen, M.D., Shefferson, R., Horn, S., Taylor, M.K., Bush, B., Brownie, C., Seibold, S. **Strickland, M.S.** 2017. Below- and above-ground effects of dead wood and termites in plantation forests. *Ecosphere*, 8: e01910.
- 31)** Prather, C., **Strickland, M.S.**, Laws, A., Branson, D. 2017. Herbivore species identity and composition affect soil enzymatic activity through altered plant composition in a coastal tallgrass prairie. *Soil Biology & Biochemistry*, 112: 277-280.
- 30)** Wepking, C., Avera, B., Badgley, B., Barrett, J.E., Franklin, J., Knowlton, K.F., Ray, P.P., Smitherman, C., **Strickland, M.S.** 2017. Increased antibiotic resistance – Effects on microbial communities and ecosystem function. *Proceedings of the Royal Society – B*, 284: 1851.
- 29)** Carini, P., Marsden, P.J., Leff, J.W., Morgan, E.E., **Strickland, M.S.**, Fierer, N. 2016. Relic DNA inflates soil microbial diversity. *Nature Microbiology*, 2: e16242. ***Featured in *Sciencemag – Science Magazine*.
- 28)** Graham, E., et al. (1 of 49 co-authors). 2016. Microbes as engines of ecosystem function: when does community structure enhance predictions of ecosystem processes? *Frontiers in Microbiology*, 7: 1-10. ***Featured in *SiNC – La ciencia es noticia, and Comunidad de Madrid*.
- 27)** **Strickland, M.S.**, McCulley, R.L., Nelson, J., Bradford, M.A. 2015. Compositional differences in root exudates elicit a limited functional and compositional response in soil microbial communities. *Frontiers in Microbiology*, 6: 1-9.
- 26)** Chambers, L.R., Yang, Y., Littler, H., Ray, P., Pruden, A., **Strickland, M.S.**, Knowlton, K.F. 2015. Metagenomic analysis of antibiotic resistance genes in the fecal microbiome in dairy cows following therapeutic administration of third generation cephalosporin. *PLOS ONE*, 10: e0133764.
- 25)** **Strickland, M.S.**, Keiser, A.D., Bradford, M.A. 2015. Climate history shapes contemporary leaf litter decomposition. *Biogeochemistry*, 122: 165-174.
- 24)** **Strickland, M.S.**, Leggett, Z.H., Sucre, E.B., Bradford, M.A. 2015. Biofuel intercropping

effects on soil carbon and microbial activity. *Ecological Applications*, 25: 140-150.

23) Keiser, A.D., Keiser, D.A., **Strickland, M.S.**, Bradford, M.A. 2014. Disentangling mechanisms underlying functional differences in decomposer communities. *Journal of Ecology*, 102: 603-609.

22) Oldfield, E., Felson, A.J., Wood, S.A., Hallett, R.A., **Strickland, M.S.**, Bradford, M.A. 2014. Positive effects of afforestation efforts on the health of urban soils. *Forest Ecology and Management*, 313: 266-273.

21) **Strickland, M.S.**, Hawlena, D., Reese, A., Bradford, M.A., Schmitz, O.J. 2013. Trophic cascade alters ecosystem carbon exchange. *Proceedings of the National Academy of Science USA*, 110: 11035-11038. ***Featured in *Science Daily*, *Climate Wire*, *Mongabay.com*, *Eureka Alert*, and *Scientific American*.

20) **Strickland, M.S.**, McCulley, R.L., Bradford, M.A. 2013. The effect of a quorum-quenching enzyme on leaf litter decomposition. *Soil Biology & Biochemistry*, 64: 65-67.

19) Schmitz, O.J., Bradford, M.A., **Strickland, M.S.**, Hawlena, D. 2013. Linking predation risk, physiological stress and microbial decomposition of plant litter. *Journal of Visualized Experiments*, 73: e50061.

18) Bradford, M.A., Keiser, A.D., Davies, C.A., Mersmann, C.A., **Strickland, M.S.** 2013. Empirical evidence that soil carbon formation from plant inputs is positively related to microbial growth. *Biogeochemistry*, 113: 271-288.

17) Hawlena, D., **Strickland, M.S.**, Bradford, M.A., Schmitz, O.J. 2012. Fear of predation slows plant-litter decomposition. *Science*, 336: 1434-1438. ***Recommended as being of "special significance" by Faculty of 1000 and featured in the *L.A. Times* and *Science Daily*.

16) **Strickland, M.S.**, Wickings, K., Bradford, M.A. 2012. The fate of glucose, a low molecular weight compound of root exudates, in the belowground foodweb of forests and pastures. *Soil Biology & Biochemistry*, 49: 23-29.

15) Bradford, M.A., **Strickland, M.S.**, DeVore, J.L., Maerz, J.C. 2012. Root carbon flow from an invasive plant to belowground foodwebs. *Plant and Soil*, 359: 233-244.

14) Carrillo, Y., Ball, B.A., **Strickland, M.S.**, Bradford, M.A. 2012. Legacies of plant litter on carbon and nitrogen dynamics and the role of the soil community. *Pedobiologia*, 55: 185-192.

13) Fraterrigo, J.M., **Strickland, M.S.**, Keiser, A.D., Bradford, M.A. 2011. Nitrogen uptake and preferences in a forest understory following invasion by an exotic grass. *Oecologia*, 167: 781-791.

12) Keiser, A.D., **Strickland, M.S.**, Fierer, N., Bradford, M.A. 2011. History structures microbial community composition. *Biogeosciences*, 8: 1477-1486.

11) **Strickland, M.S.**, DeVore, J.L., Maerz, J.C., Bradford, M.A. 2011. Loss of faster-cycling soil carbon pools following grass invasion across multiple forest sites. *Soil Biology & Biochemistry*, 43: 452-454.

10) **Strickland, M.S.**, Rousk, J. 2010. Considering fungal:bacterial dominance in soils –

Methods, controls, and ecosystem implications. *Soil Biology & Biochemistry*, 42: 1385-1395. ***Ranked 7th most cited article published since 2010 in *Soil Biology & Biochemistry*. Highly Cited Article on Web of Science.

9) **Strickland, M.S.**, DeVore, J.L., Maerz, J.C., Bradford, M.A. 2010. Grass invasion of a hardwood forest is associated with declines in belowground carbon pools. *Global Change Biology*, 16: 1338-1350.

8) **Strickland, M.S.**, Callaham, M.A., Jr., Davies, C.A., Lauber, C.L., Ramirez, D.D., Richter, D.D., Jr, Fierer, N., Bradford, M.A. 2010. Rates of in situ carbon mineralization in relation to land-use, microbial community and edaphic characteristics. *Soil Biology & Biochemistry*, 42: 260-269.

7) Bradford, M.A., DeVore, J.L., Maerz, J.C., McHugh, J.V., Smith, C.L., **Strickland, M.S.** 2010. Native, insect herbivore communities derive a significant proportion of their carbon from a widespread invader of forest understories. *Biological Invasions*, 4: 721-724.

6) **Strickland, M.S.**, Lauber, C., Fierer, N., Bradford, M.A. 2009. Testing the functional significance of microbial community composition. *Ecology*, 90 (2): 441-451. ***Received Odum School of Ecology's Best Student Paper Award and ESA Biogeoscience's Elizabeth Sulzman Award. Highly Cited Article on Web of Science.

5) **Strickland, M.S.**, Osburn, E., Lauber, C., Fierer, N., Bradford, M.A. 2009. Litter quality is in the eye of the beholder: decomposition rates as a function of inoculum characteristics. *Functional Ecology*, 23: 627-636.

4) Grandy, A.S., **Strickland, M.S.**, Lauber, C.L., Bradford, M.A., Fierer, N. 2009. The influence of microbial communities, management, and soil texture on soil organic matter chemistry. *Geoderma*, 150: 278-286.

3) Hamilton, H.C., **Strickland, M.S.**, Wickings, K., Bradford, M.A., Fierer, N. 2009. Surveying soil mesofaunal communities using a direct molecular approach. *Soil Biology & Biochemistry*, 41: 1311-1314.

2) Fierer, N., **Strickland, M.S.**, Liptzin, D., Bradford, M.A., Cleveland, C.C. 2009. Global patterns in belowground communities. *Ecology Letters*, 12: 1238-1249. ***Highly Cited Article on Web of Science.

1) Lauber, C.L., **Strickland, M.S.**, Bradford, M.A., Fierer, N. 2008. The influence of soil properties on the structure of bacterial and fungal communities across land-use types. *Soil Biology & Biochemistry*, 40: 2407-2415. ***Ranked 3rd most cited article published since 2008 on *Soil Biology & Biochemistry's* website. Highly Cited Article on Web of Science.

Book Chapters

2) **Strickland, M.S.**, Wickings, K. 2015. Carrion effects on soil biogeochemistry, *IN Carrion Ecology, Evolution, and Their Applications*. M.E. Benbow, J.K. Tomberlin, A.M. Tarone (eds). CRC Press Taylor & Francis Group, Boca Raton, FL, USA.

1) Richter, D.deB, Bacon, A.R., Billings, S.A., Binkley, D., Buford, M., Callaham, M.A., Curry, A.E., Fimmen, R.L., Grandy, A.S., Heine, P.R., Hofmockel, M., Jackson, J.A., Lemaster, E., Li, J.W., Markewitz, D., Mobley, M.L., Morrison, M.W., **Strickland, M.S.**, Waldrop, T., and Wells, C.G. 2014. Evolution of Soil, Ecosystem, and Critical Zone Research at the Calhoun Experimental Forest, *IN Research for the Long-Term: The interplay of societal need and*

research on USDA Forest Service Experimental Forests and Ranges. D.C. Hayes, S. Stout, A. Hoover, and R. Crawford (eds). Springer Verlag, New York, NY, USA.

Contributed Presentations

Wepking, C., Badgley, B., Barrett, J., Hedin, M., Knowlton, K., Minick, K., Ray, P., **Strickland, M.S.** Ecological effects of livestock antibiotics on agricultural soils. Poster presented at: Soil Ecology Society Meeting, Fort Collins, CO, 2017.

Hedin, M., Barrett, J., **Strickland, M.S.** Effects of antibiotic residues on extracellular enzyme activity in soils. Presented at: Soil Ecology Society Meeting, Fort Collins, CO, 2017.

Bierer, A., Maguire, R.O., Thomason, W.E., **Strickland, M.S.**, Stewart, R. Addressing pre-sidedress nitrogen testing in fields injected with dairy slurry. Presented at: CSA, ASA, SSSA Annual Meeting, Tampa, FL, 2017.

Gyawali, A.J., Stewart, R., **Strickland, M.S.**, Thomason, W.E., Hodges, S. Understanding time and system dependent dynamics of soil health. Poster presented at: CSA, ASA, SSSA Annual Meeting, Tampa, FL, 2017.

Badgley, B., Waller, L.J., Evanylo, G., Krometis, L.H., **Strickland, M.S.**, Wynn-Thompson, T. Comparing engineered and environmental controls of microbial denitrification in mature bioretention cells. Presented at: UNC Water Microbiology Conference, Chapel Hill, NC, 2017.

McBride, S., Waller, L., **Strickland, M.S.** Effects of quorum sensing manipulation and litter recalcitrance on soil microbial ecology and metabolism. Presented at: 16th International Symposium on Microbial Ecology, Montreal, Canada, 2016.

Bierer, A., Maguire, R.O., **Strickland, M.S.**, Thomason, W., Stewart, R. Effects of dairy slurry injection on soil health and nitrogen cycling. Presented at: ASA, CSSA, SSSA International Meeting, Phoenix, AZ, USA. 2016.

Spencer, B., Stewart, R. D., Gyawali, A., **Strickland, M.** Measuring microbial respiration using a fluorometric dye. Presented at: ASA, CSSA, SSSA International Meeting, Phoenix, AZ, USA. 2016.

McBride, S., Waller, L., **Strickland, M.** Quorum sensing's effect on soil ecosystem processes. Presented at: Virginia Branch ASM, Roanoke, VA, USA. 2016.

Wepking, C.J., Badgley, B., Barrett, J.E., Knowlton, K., **Strickland, M.S.** Antibiotic exposure in agroecosystems: Evidence for altered microbial community structure and ecosystem function. Presented at: 100th Ecological Society of America Annual Meeting, Baltimore, MD, USA, 2015.

Strickland, M.S., Bradford, M.A., Callahan, M.A., Jr. Compositional and Functional Response of Soil Microbial Communities to Forest Restoration. Poster presented at: Soil Ecology Society Meeting, Rutgers University, Camden, NJ, USA, 2013.

Hawlena, D., **Strickland, M.S.**, Bradford, M.A., Schmitz, O.J. Fear of predation slows plant-litter decomposition. Presented at: 97th Ecological Society of America Annual Meeting, Portland, OR, USA, 2012.

Bradford, M.A., Keiser, A.D., Mersmann, C.A., **Strickland, M.S.** Fates of low molecular weight carbon inputs to the belowground. Paper presented at: 96th Ecological Society of America

Annual Meeting, Austin, TX, USA, 2011.

Strickland, M.S., Bradford, M.A. Simulated root exudates do not alter the function of soil microbial communities. Poster presented at: 95th Ecological Society of America Annual Meeting, Pittsburgh, PA, USA, 2010.

Fontana, C.G., **Strickland, M.S.**, Keiser, A.D., Bradford, M.A. The climate history of microbial communities influences the optimal temperature and moisture regimes of decomposition. Poster presented at: 95th Ecological Society of America Annual Meeting, Pittsburgh, PA, USA, 2010.

DeVore, J.L., Maerz, J.C., **Strickland, M.S.**, Bradford, M.A. The impact of plant invasion on the performance of American toads: Top-down and bottom-up influences. Paper presented at: 94th Ecological Society of America Annual Meeting, Albuquerque, NM, USA, 2009.

Strickland, M.S., Davies, C., Lauber, C., Fierer, N., Bradford, M.A. Testing the relationship between fungal-to-bacterial dominance and carbon mineralization. Paper presented at: 93rd Ecological Society of America Annual Meeting, Milwaukee, WI, USA, 2008.

Fierer, N., Redford, A.J., **Strickland, M.S.**, Lauber, C., Bradford, M.A. Can the study of microbial community succession improve our understanding of successional processes in plant and animal communities? Paper presented at: 93rd Ecological Society of America Annual Meeting, Milwaukee, WI, USA, 2008.

Strickland, M.S., Osburn, E.D., Lauber, C., Fierer, N., Bradford, M.A. Soil microbes and biogeography: Are communities from differing environments functionally equivalent? Paper presented at: 92nd Ecological Society of America Annual Meeting, San Jose, CA, USA, 2007.

Strickland, M.S., Davies, C., Lauber, C., Fierer, N., Bradford, M.A. Fungal-to-bacterial ratios: When microbes behave badly. Paper presented at: Graduate Student Symposium, Athens, Georgia, USA, 2007.

Strickland, M.S., Fierer, N., Bradford, M.A. Microbial succession during litter decomposition: was Beijerinck right? Paper presented at: Graduate Student Symposium, Athens, Georgia, USA, 2006.

Strickland, M.S., Klawinski, P. Invasional meltdown: bottom-up facilitation of an introduced predator caused by an introduced nitrogen-fixing tree. Paper presented at: 90th Ecological Society of America Annual Meeting, Montreal, Quebec, Canada, 2005.

Klawinski, P., **Strickland, M.S.** Effect of detrital functional groups on the decomposition rates of three leaf species. Paper presented at: 90th Ecological Society of America Annual Meeting, Montreal, Quebec, Canada, 2005.

Invited presentations

Strickland, M.S. Ecosystem processes in the age of antibiotics. Presented at: Washington State University – Department of Entomology, Pullman, WA, USA, 2018.

Strickland, M.S. Ecosystem processes in the age of antibiotics. Presented at: University of Florida – Department of Agronomy, Gainesville, FL, USA, 2018.

Strickland, M.S. Microbial communities and ecosystem function: From forest restoration to antibiotic effects. Presented at: University of Idaho – Department of Soil & Water Systems, Moscow, ID, USA, 2017.

Strickland, M.S. Rhizospheric C-cycling: Implications of soil microarthropods. Presented at: 25th International Congress of Entomology, Orlando, FL, USA, 2016.

Ulyshen, M., Seibold, S., **Strickland, M.S.**, Stoklosa, A., Horn, S. Patterns and implications of insect-accelerated wood loss in southeastern U.S. forests. Presented at: 25th International Congress of Entomology, Orlando, FL, USA, 2016.

Strickland, M.S. Ecosystem processes in the age of antibiotics. Presented at: 101st Ecological Society of America Annual Meeting, Ft. Lauderdale, FL, USA, 2016.

Strickland, M.S. Exploring the relationship between microbial communities and ecosystem processes. Presented at: Colorado State University – Department of Ecosystem Science and Sustainability, Fort Collins, CO, USA, 2016.

Strickland, M.S., Knowlton, K.F., Badgley, B., Barrett, J.E., Wepking, C., Minick, K. Interactions between antibiotic resistance, soil microbial communities, and coupled elemental cycles. Presented at: USDA Project Director's Meeting, Greensboro, NC, USA, 2015.

Strickland, M.S. Soil communities and processes. Presented at: Virginia Farm to Table Conference, Weyers Cave, VA, USA, 2015.

Strickland, M.S. From the role of historical contingencies in leaf litter decomposition to ecosystem processes in the age of antibiotic resistance. Presented at: Wake Forest University – Biology Department, Winston-Salem, NC, USA, 2015.

Strickland, M.S., Links between soil microbial communities, environmental change, and... human health. Presented at: Odum School of Ecology, Athens, GA, 2015. ***Keynote for the Graduate Student Symposium

Strickland, M.S., Knowlton, K.F., Badgley, B., Barrett, J.E., Interactions between antibiotic resistance, soil microbial communities, and coupled elemental cycles. Presented at: USDA Project Director's Meeting, Arlington, VA, USA, 2014.

Strickland, M.S., Rhizospheric carbon cycling: The implications of community structure. Presented at: 99th Ecological Society of America Annual Meeting, Sacramento, CA, USA, 2014.

Strickland, M.S., Hawlena, D., Bradford, M.A., Schmitz, O.J., Trophic cascade alters ecosystem carbon exchange in an old field. Presented at: ASA, CSSA, & SSSA International Annual Meeting, Tampa, FL, USA, 2013.

Strickland, M.S. Microbial communities and the terrestrial carbon cycle: What are the connections? Presented at: The Department of Biology, James Madison University, Harrisonburg, VA, USA, 2013.

Strickland, M.S. Microbial community dynamics in changing forests. Presented at: The Department of Forest Resources and Environmental Conservation, Virginia Tech, Blacksburg, VA, USA, 2013.

Strickland, M.S., Hawlena, D., Schmitz, O.J., Bradford, M.A. Fear of predation alters the

decomposition of leaf litter via inputs of grasshopper carcasses. Presented at: 50th Entomological Society of America Annual Meeting, Knoxville, TN, USA, 2012.

Strickland, M.S. The interaction between climate and microbial communities determines litter decomposition. Presented at: 97th Ecological Society of America Annual Meeting, Portland, OR, USA, 2012.

Strickland, M.S. Resource history shapes the relationship between microbial communities and ecosystem processes. Presented at: Texas A&M University, College Station, TX, USA, 2012.

Strickland, M.S. Resource history shapes the relationship between microbial communities and ecosystem processes. Presented at: Mississippi State University, Starkville, MS, USA, 2012.

Strickland, M.S. Resource history shapes the relationship between microbial communities and ecosystem processes. Presented at: Virginia Tech University, Blacksburg, VA, USA, 2012.

Strickland, M.S. Through the lens of microbial communities – Root exudates as drivers of ecosystem processes. Presented at: Washington University, St. Louis, MO, USA, 2011.

Strickland, M.S. Resource history shapes the relationship between microbial communities and ecosystem processes. Presented at: Washington University, St. Louis, MO, USA, 2011.

Strickland, M.S. Interactions between plant litter decomposition and microbial communities: aboveground and belowground effects. Presented at: 3rd Annual Argonne Soil Metagenomics Workshop, Chicago, IL, USA, 2011.

Strickland, M.S. Linking microbial community structure to ecosystem processes. Presented at: Oregon State University, Corvallis, OR, USA, 2011

Strickland, M.S., Fierer, N., Bradford, M.S. Seasonal variation in fungal:bacterial dominance and its relationship to environmental factors and ecosystem processes. Presented at: 96th Ecological Society of America Annual Meeting, Austin, TX, USA, 2011.

Strickland, M.S. Linkages between microbial community structure and ecosystem processes. Presented at: Georgia Southern University, Statesboro, GA, USA, 2011.

Strickland, M.S. The effect of simulated root exudates on microbial community function. Presented at: Rhizosphere and microbial acclimation summit, Boston University, Boston, MA, USA, 2011.

Strickland, M.S. Linking structure to function in soil microbial communities. Distinguished Speaker at: Yale Microbial Diversity Institute Symposium, New Haven, CT, USA, 2010.

Strickland, M.S. Exploring the relationship between soil microbial communities, home-field advantage, and carbon cycling. Presented at: Duke Workshop on Soil Change, Durham, NC, USA, 2009.

Additional Scholarly & Service Activities

Chair of the Ecological Society of America's Microbial Ecology section (2014-2015)

Vice-Chair of the Ecological Society of America's Microbial Ecology section (2013-2014)

Secretary of the Ecological Society of America's Microbial Ecology section (2012-2013)

Review editor for *Frontiers in Terrestrial Microbiology*.

Regular reviewer for the National Science Foundation (2009-Present)

External reviewer for the Icelandic Research Fund (2012)

External reviewer for the US-Israel Binational Science Foundation (2013)

External reviewer for the Czech Science Foundation (2013)

Referee for: *Applied Soil Ecology* (2010-present), *Biogeochemistry* (2012-present), *Biology Letters* (2017-present), *Biotropica* (2014-present), *Ecology* (2013-present), *Ecology Letters* (2012-present), *Ecosphere* (2011-present), *Ecosystems* (2010-present), *Environmental Microbiology* (2012-present), *Environmental Science & Technology* (2017-present), *FEMS Microbiology Ecology* (2010-present), *Forest Ecology and Management* (2014-present), *Frontiers in Terrestrial Microbiology* (2011-present), *Functional Ecology* (2011-present), *Geoderma* (2010-present), *Global Change Biology* (2009-present), *International Journal of Legal Medicine* (2012-present), *ISME Journal* (2013-present), *Journal of Applied Ecology* (2012-present), *Journal of Ecology* (2012-present), *Microbial Ecology* (2012-present), *Molecular Ecology* (2012-Present), *Oecologia* (2012-present), *Oikos* (2008-present), *PLoS ONE* (2012-present), *Proceedings of the Royal Society B* (2016-present), *Scientific Reports* (2017-present), *Soil Biology & Biochemistry* (2010-present)

Professional society memberships

International Society for Microbial Ecology (ISME)

Soil Science Society of America (SSSA)

Ecological Society of America (ESA)

Sections: *Biogeochemistry*, *Microbial Ecology*, *Soil Ecology*