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Education

- 2004 PhD, Biology, Northern Arizona University, Arizona, USA
1995 BA, Biological Science, Smith College, Massachusetts, USA

Appointments

- 2020- Director, University of Michigan Biological Station
Professor, Ecology & Evolutionary Biology, University of Michigan
- 2018-2020 Professor, Rubenstein School, University of Vermont, USA
Director, George D. Aiken Forestry Sciences Laboratory, University of Vermont, USA
Fellow, Gund Institute for Environment, University of Vermont, USA
Adjunct Professor, Department of Biology, University of Vermont, USA
- 2016-now Adjunct Professor, Victoria University of Wellington, New Zealand
- 2014-2020 Faculty, Center for Macroecology, Evolution and Climate, University of Copenhagen, Denmark
- 2017-2018 Interim Natural Resources Program Director, Rubenstein School, University of Vermont, USA
Associate Professor, Rubenstein School, University of Vermont, USA
- 2014-2018 Associate Professor, Natural History Museum, University of Copenhagen, Denmark
- 2015-2018 Adjunct Associate Professor, University of Tennessee, USA
- 2012-2015 Associate Professor, Department of Ecology and Evolutionary Biology, University of Tennessee, USA
- 2008-2012 Assistant Professor, Department of Ecology and Evolutionary Biology, University of Tennessee, USA
- 2005-2008 Staff Scientist, Oak Ridge National Laboratory, Tennessee, USA
- 2005 Postdoctoral Fellow, Oak Ridge National Laboratory, Tennessee, USA

Editorial, Non-profit board, Scientific advisory appointments

- 2018-now The Royal Netherlands Academy of Arts and Sciences, International science advisory board, Netherlands Institute of Ecology (NIOO-KNAW)
- 2016-now Editor-in-Chief, *Ecological Monographs*
Board of Trustees, Rocky Mountain Biological Laboratory, Colorado, USA
- 2011-now Editorial board *Ecology & Ecological Monographs*
- 2017-2018 Guest Editor for a Special Issue, *Functional Ecology*
- 2012-2016 Associate Editor-in-Chief, *Ecological Monographs*
Editorial Board, *Ecology Letters*

2014-2016 Associate Editor, *Journal of Plant Ecology*
2012 Guest Editor, *Ecosphere*

Other appointments

2017-now Affiliated Faculty, Quantitative and Evolutionary STEM Training (QuEST) Program, University of Vermont, USA
2017-now Affiliated Faculty, Food Systems Graduate Program, University of Vermont, USA
2014-2015 Visiting Associate Professor, Hawkesbury Institute for the Environment, University of Western Sydney, Australia
2011-2014 Faculty, Initiative for Quaternary Paleoclimate Research, University of Tennessee, USA
2011-2013 Faculty, Bredesen Center for Interdisciplinary Research and Graduate Education, University of Tennessee, USA
2009-2010 Visiting Assistant Professor, Department of Biology, University of Copenhagen, Denmark
2005-2008 Research Assistant Professor, University of Tennessee, USA
2003-2004 American Association of University Women (AAUW) American Fellow
1995-1999 Middle school science teacher (in CA & MA) and laboratory technician (Stanford University & University of CA, Berkeley)

Leave

Parental leave: Harry 2004 (5/04-1/05) & Finn 2007 (12/07-7/08)

Peer-reviewed publications

*undergraduate student, **graduate student, +postdoctoral fellow

note: in ecology, last author (and occasionally second) denotes papers coming from your lab group where you made a significant contribution

in press Brunbherg AK**, Bruun HH, Darby L, Classen AT, Fløgaard C, Frøslev TG, Hansen OLP, Høye T, Moeslund JE, Svenning JC, Ejrnæs R (2020) Multi-taxon inventory reveals highly consistent biodiversity responses to ecospace variation. **OIKOS** 10.1111/oik.07145
Shen C, Gunina A, Luo Y, Wang J, He JZ, Kuzyakov Y, Hemp A, Classen AT, Ge Y (2020) Contrasting patterns and drivers of bacterial and fungal diversity across a mountain gradient. **Environmental Microbiology**
Jing X+, Prager CM+, Classen AT, Maestre FT, He JS, Sanders NJ (2020) Variation in the methods leads to variation in the interpretation of biodiversity-ecosystem multifunctionality relationships. **Journal of Plant Ecology**
2020 Bennett AE and Classen AT (2020) Climate change influences mycorrhizal fungal-plant interactions, but conclusions are limited by geographical study bias. **Ecology** 101(4): e202978.
Giejsztowt J**, Classen AT, Deslippe JR (2020) Climate change and invasion may synergistically affect native plant reproduction. **Ecology** 101(1): e02913.

Moore JAM**, Sulman BN+, Mayes MA, Patterson CM, Classen AT (2020) Plant roots stimulate the decomposition of complex, but not simple, soil carbon. **Functional Ecology** 34(4): 899-910.

Rewcastle KE*, Moore JAM**, Henning JA**, Mayes MA, Patterson CM, Wang G, Metcalfe DB, Classen AT (2019) Investigating drivers of microbial activity and respiration in a forested bog. **Pedosphere** 30(1):135-145.

Sundqvist MK, Sanders NJ, Dorrepaal E, Linden E, Metcalfe DB, Newman G, Olofsson J, Wardle DA, Classen AT (2020) Responses of tundra plant community carbon flux to experimental warming, dominant species removal and elevation. **Functional Ecology** doi.org/10.1111/1365-2435.13567

Wang H, Liu H, Cao G, Ma Z, Li Y, Zhang F, Zhao X, Zhao X, Jiang L, Sanders NJ, Classen AT, He JS (2020) Alpine grassland plants grow earlier and faster but biomass remains unchanged over 35 years of climate change. **Ecology Letters** 23(4): 701-710.

2019

Bennett AE, Preedy K, Golubski A, Umbanhower J, Borrett SR, Byrne L, Apostel K, Bever JD, Biederman L, Classen AT, Cuddington K, de Graaff MA, Garrett K, Gross L, Hastings AM, Hoeksema JD, Hrynkiv V, Karst J, Kummel M, Lee CT, Liang C, Liao W, Mack K, Miller L, Owsley B, Rojas C, Simms EL, Walsh VK, Warren M, Zhu J (2019) Beyond the black box: promoting mathematical collaborations for elucidating interactions in soil ecology. **Ecosphere** 10(7):Article e02799.

Brunbherg AK**, Bruun HH, Brødum, L, Classen AT, Darby L, Fog K, Frøslev TG, Goldberg I, Johannes Hansen A, Hansen MDD, Høye TT, Illum AA, Læssøe T, Newman GS, Skipper L, Søchting U, Ejrnæs R (2019) A systematic survey of regional multitaxon biodiversity: evaluating strategies and coverage. **BMC Ecology** 19:43. DOI:/10.1186/s12898-019-0260-x

Cameron EK+, Sundqvist MK+, Keith SA, CaraDonna P**, Mousing EA**, Nilsson K, Metcalfe DB, Classen AT (2019) Uneven global distribution of food web studies under climate change. **Ecosphere** 10(3):e02645. 10.1002/ecs2.2645

Cavicchioli R, Ripple WJ, Timmis KN, Adam F, Bakken LR, Bayliss M, Behrenfeld MJ, Boetius A, Boyd PW, Classen AT, Crowther T, Danovaro R, Foreman C, Huisman Jef, Hutchins DA, Jansson JK, Karl DM, Koskella B, Martiny J, Moran MA, Orphan V, Raey D, Remais JV, Rich V, Singh BK, Stein L, Stewart FJ, Sullivan MB, van Oppen MJH, Weaver SC, Webb EA, Webster N, Mark Welch DB (2019) Scientists' Warning to Humanity: microorganisms and climate change. **Nature Reviews Microbiology** 17: 569–586. DOI 10.1038/s41579-019-0222-5

Henning JA**, Read QD**, Sanders NJ, Classen AT (2019) Plant soil feedbacks resistant to nitrogen addition and resilient to dominant species losses. **Ecosphere** 10(3)e02640.

Henning JA**, Weston DJ, Pelletier DA, Timm CM, Jawdy SS, Classen AT (2019) Relatively rare root endophytic bacteria drive plant resource allocation patterns and tissue nutrient concentrations in unpredictable ways. **American Journal of Botany** 106(11): 1–12.

Hovenden MJ, Leuzinger S, Newton PCD, Fletcher A, Fatichi S, Lücher A, Reich PB, Anderson LC, Beier C, Blumenthal DM, Chiariello NR, Dukes JS, Kellner J, Hofmockel K, Nikklaus PA, Song J, Wan S, Classen AT, Langley JA (2019) Rainfall

seasonality explains the response of temperate grassland biomass to elevated CO₂. **Nature Plants** 5:167-173.

Meineke EK⁺, Classen AT, Sanders NJ, Davies TJ (2019) Herbarium specimens reveal increasing herbivory over the past century. **Journal of Ecology** 107:105-117.

Song J, Wan S, Piao S, Knapp A, Classen AT, Vicca S, Ciais P, Hovenden M, Leuzinger S, Beier C, Kardol P, Xia J, Liu Q, Ru J, Zhou Z, Luo Y, Guo D, Langley JA, Zscheischler J, Dukes JS, Tang J, Chen J, Hofmockel KS, Kueppers LM, Rustad L, Liu L, Smith MD, Templer PH, Thomas RQ, Norby RJ, Phillips RP, Niu S, Fatichi S, Wang Y, Wang D, Lingjie L, Wang J, Li X, Zhang Q, Han H, Shao P, Li X, Su F, Liu B, Yang F, Ma G, Li G, Liu Y, Liu Y, Yang Z, Zhang K, Miao Y, Hu M, Yan C, Zhang A, Zhong M, Hui Y, Li Y, Zheng M (2019) A meta-analysis of 1119 manipulative experiments on terrestrial carbon cycling responses to global change. **Nature Ecology and Evolution** DOI: 10.1038/s41559-019-0958-3.

Sørensen MV^{**}, Strimbeck R, Classen AT, Enquist BJ, Nystuen KO, Graae BJ (2019) Drivers of C cycling in three arctic-alpine plant communities. **Arctic, Antarctic, and Alpine Research** 51(1):e1592649

Stuble KL, Ma S, Liang J, Luo Y, Classen AT, Souza L (2019) Long-term impacts of warming accumulate to impact decomposition and accelerate the turnover of labile, not recalcitrant, carbon in prairie soils. **Ecosphere** 10(5):202715.

Suonan J^{**}, Classen AT, Sanders NJ, He JS (2019) Plant phenological sensitivity to climate change on the Tibetan Plateau and relative to other areas of the world. **Ecosphere** 10(1):e02543. 10.1002/ecs2.2543

Zak DR, Pellitier PT, Argiroff WA, Castillo B, James TY, Nave LE, Averill C, Beidler K, Talbot J, Blesh J, Classen AT, Craig M, Fernandez C, Gunderson P, Johansen R, Koide R, Lileskov E, Lindell B, Nadelhoffer K, Phillips R, Tunlid A (2019) Exploring the function of ectomycorrhizal fungi in soil organic matter dynamics. **New Phytologist** 223:33-39.

Zhao C, Zhao J, Wu J, Classen AT, Li Y, Lou Y, Zhang W, Jing X, Shao Y, Fu S (2019) Bamboo forest management leads to a shift in the soil energy channel. **Geoderma** 353(1):201-203.

2018

Blume-Werry G^{**}, Lindén E, Andresen L, Classen AT, Sanders NJ, von Oppen J, Sundqvist MK (2018) Proportion of fine roots, but not plant biomass allocation below ground, increases with elevation in arctic tundra. **Journal of Vegetation Science** 29(2):226-235.

Koltz AM⁺, Classen AT, Wright JP (2018) Warming reverses top-down effects of arctic predators on belowground ecosystem function. **Proceedings of the National Academies of the Sciences** 115(32):E7541-E7549.

Liu H, Zhaorong M, Lin L, Wang Y, Zhang Z, Zhang F, Wang H, Liu L, Zhu B, Cao G, Zhao X, Sanders NJ, Classen AT, Reich PB, He JS (2018) Shifting plant species composition in response to climate change stabilizes grassland primary production. **Proceedings of the National Academy of Sciences** 115(16):4051-4056.

Metcalfe DB, Hermans TDG, Ahlstrand J, Becker M, Berggren M, Björk RG, Björkman M, Blok D, Chaudhary N, Chisholm C, Classen AT, Hasselquist NJ, Jonsson M, Kristensen JA, Kumordzi B, Lee H, Mayor J, Prevéy J, Pantazatou K, Rousk J, Sponseller R, Sundqvist M, Tang J, Uddling J, Wallin G, Wenxin Z,

Ahlström A, Abdi AM (2018) Patchy field sampling biases understanding of climate change impacts across the Arctic. **Nature Ecology & Evolution** 2(9):1443-1448.

Read QD**, Henning JA**, Classen AT, Sanders NJ (2018) Aboveground resilience to species loss but belowground resistance to nitrogen addition in montane plant communities. **Journal of Plant Ecology** 11(3):251-363.

Stuart-Haëntjens E**, De Boeck H, Lemoine N, Mänd P, Kröel-Dulay G, Schmidt IK, Jentsch A, Stampfli A, Anderegg W, Bahn M, Kreyling J, Wohligemuth T, Lloret F, Classen AT, Gough C, Smith MD (2018) Mean annual precipitation predicts primary production resistance and resilience to extreme drought. **Science of the Total Environment** 636:360-366.

Sulman BN+, Moore JAM**, Abramoff R+, Averill C+, Kivlin S+, Georgia K+, Sridhar B, Hartman MD+, Wang G, Wieder WR, Bradford MA, Lou Y, Mayes MA, Morrison E, Riley WJ, Salazar A, Schimel JP, Tang J, Classen AT (2018) Multiple models and experiments underscore large uncertainty in soil carbon dynamics. **Biogeochemistry** 141(2):109-123.

Zhao Q, Sundqvist MK, Newman GS, Classen AT (2018) Soils beneath arctic shrubs have contrasting responses to a natural gradient in temperature suggesting shifts in soil fertility islands over time. **Ecosphere** 9(6):e02290.

2017

Bradford MA, Veen GF, Bonis A, Bradford EM, Classen AT, Cornelissen JHC, Crowther TW, De Long JR, Kardol P, Manrubia-Freixa M, Freshet GT, Maynard DS, Newman G, van Logtestijn RSP, Viketoft M, Wardle DA, Wieder WR, Wood SA, van der Putten WH (2017) A test of the hierarchical model of litter decomposition. **Nature Ecology & Evolution** 1:1836-1845.

Hendershot JN*, Read QD**, Henning JA**, Sanders NJ, Classen AT (2017) Consistently inconsistent drivers of patterns of microbial diversity and abundance at macroecological scales. **Ecology** 98:1757-1763.

Jiang J+, Moore JAM**, Priyadarshi A+, Classen AT (2017) Plant-mycorrhizal interactions mediate plant community coexistence by altering resource demand. **Ecology** 98:187-197.

Mayor J+, Sanders NJ, Classen AT, Bardgett R, Clément JC, Farjado A, Lavorel S, Sundqvist MK, Bahn M, Chisholm C**, Cieraad E, Gedelof Z, Grigulis K, Kudo G, Oberski D, Wardle DA (2017) Elevation alters ecosystem properties across temperate treelines globally. **Nature** 542:91-95.

Moorhead LC**, Souza L+, Habeck C**, Lindroth RL, Classen AT (2017) Rodent activity slows ecosystem function in an oldfield ecosystem. **Ecosphere** 8(5):e01777.

Souza L+, Stuble KL, Genung MA, Classen AT (2017) Plant genotype identity and intra-specific diversity trump soil nutrient availability to shape old-field structure and function. **Functional Ecology** 31(4):965-974.

Suonan J**, Classen AT, Zhang Z, He JS (2017) Asymmetric winter warming advanced plant phenology to a greater extent than symmetric warming in an alpine meadow. **Functional Ecology** 31(11):2147-2156.

Zhao Q, Classen AT, Wang W, Zhao X, Mao B, Zeng D (2017) Asymmetric effects of litter removal and litter addition on the structure and function of soil microbial communities in a managed pine forest. **Plant and Soil** 414:81-93.

- 2016 Connell RK*, Pfennigwerth AA*, Classen AT, Kwit C (2016) Incorporating redispersal microsites into myrmecochory in eastern North American forests. **Ecosphere** 7:e01456.
- Crowther TW, Todd-Brown KEO, Rowe CW, Wieder WR, Carey JC, Machmuller MB, Snoek LB, Fang S, Zhou G, Allison SD, Blainr JM, Bridgeham SD, Burton AJ, Carrillo Y, Reich PB, Clark JS, Classen AT, Dijkstra FA, Elberling B, Emmett B, Estiarte M, Frey SD, Guo J, Harte J, Jiang L, Johnson BR, Kröel-Dulay G, Larsen KS, Laudon H, Lavalley JM, Luo Y, Lupascu M, Ma LN, Marhan S, Michelsen A, Mohan J, Niu S, Pendell E, Peñuelas J, Pfeifer-Meister L, Poll C, Reinsch S, Reynolds LL, Schmidt IK, Sistla S, Sokol NW, Templer PH, Treseder KK, Welker JM, Bradford MA (2016) Quantifying global soil carbon losses in response to warming. **Nature** 540:104-108.
- Henning JA**, Weston DJ, Pelletier DA, Timm CM, Jawdy SS, Classen AT (2016) Root bacterial endophytes alter plant phenotype, but not physiology. **PeerJ** 4:e2606
- Kuebbing SE**, Patterson C*, Classen AT, Simberloff D (2016) Co-occurring nonnative woody shrubs have additive and non-additive soil legacies. **Ecological Applications** 26:1896-1906.
- Niu S, Classen AT, Dukes JS, Kardol P, Liu L, Lou Y, Rustad L, Vicca S, Tang J, Templer P, Thomas R, Tian D, Wang YP, Xia J, Zaehle S (2016) Global patterns and fundamental mechanisms of the terrestrial nitrogen cycle. **Ecology Letters** 19:697–709.
- 2015 Classen AT, Sundqvist M+, Henning JA**, Newman GS, Moore JAM**, Cregger M, Moorhead LC**, Patterson CM (2015) ESA Centennial Paper: Direct and indirect effects of climate change on soil microbial and soil microbial-plant interactions: What lies ahead? **Ecosphere** 6(8):1-21.
- Jing X**, Sanders NJ, Shi Y, Chu H, Classen AT, Zhao K, Chen L, Jiang Y, He JS (2015) The links between ecosystem multifunctionality and above- and belowground biodiversity are mediated by climate. **Nature Communications** 6:8159.
- Kendrick J*, Ribbons RR**, Classen AT, Ellison AM (2015) Changes in canopy structure and ant assemblages affect soil ecosystem variables as a foundation species declines. **Ecosphere** 6:art77.
- Kuebbing SE**, Classen AT, Call J*, Henning J**, Simberloff D (2015) Plant soil interactions promote co-occurrence of three nonnative woody shrubs. **Ecology** 96:2289–2299.
- Kuebbing SE**, Classen AT, Sanders NJ, Simberloff D (2015) The effects of changes in biodiversity differ between phylogenetically paired native and nonnative plant communities. **New Phytologist** 208(3): 727-735.
- Moore JAM**, Jiang J+, Patterson CM, Mayes MA, Wang G, Classen AT (2015) Interactions among roots, mycorrhizas and free-living microbial communities differentially impact soil carbon processes. **Journal of Ecology** 103:1442-1453.
- Moore JAM**, Jiang J+, Post WM, Classen AT (2015) Decomposition by ectomycorrhizal fungi alters soil carbon storage in a simulation model. **Ecosphere** 6(3):29.

- 2014 Barrios-Garcia MN**, Classen AT, Simberloff D (2014) Disparate responses of above- and belowground properties to soil disturbance by an invasive mammal. **Ecosphere** 5:44.
- Cregger MA**, McDowell N, Pangle RE, Pockman W, Classen AT (2014) The impact of precipitation change on nitrogen cycling in a semi-arid ecosystem. **Functional Ecology** 28:1534-1544.
- Cregger MA**, Sanders NJ, Dunn RR, Classen AT (2014) Microbial communities respond to experimental warming, but location matters. **PeerJ** 2:e358.
- Fischer DG, Chapman SK, Classen AT, Gehring CA, Grady KC, Schweitzer JA, Whitham TG (2014) Marschner Review: Plant genetic effects on soils under climate change. **Plant and Soil** 37: 91-19.
- Kuebbing K**, Classen AT, Simberloff D (2014) Co-occurring invasive woody shrubs alter soil properties and promote exotic species richness. **Journal of Applied Ecology** 51:124-133.
- Wright P*, Cregger MA**, Souza L, Sanders NJ, Classen AT (2014) The effects of insects, nutrients, and plant invasion on community structure and function above- and belowground. **Ecology & Evolution** 4:732-742.
- 2013 Classen AT, Chapman SK, Whitham TG, Hart SC, Koch GW (2013) Long-term insect herbivory slows soil development in an arid ecosystem. **Ecosphere** 4:52.
- Kardol P+, Souza L+, Classen AT (2013) Resource availability mediates the importance of priority effects in plant community assembly and ecosystem function. **Oikos** 122:84-94.
- 2012 Breza L*, Souza L+, Sanders NJ, Classen AT (2012) Within and between population variation in plant traits predicts ecosystem functions associated with a dominant plant species. **Ecology & Evolution** 2:1151–1161.
- Castro HF+, Classen AT, Austin EE**, Crawford KM*, Schadt CW (2012) Development and validation of a citrate synthase directed quantitative PCR marker for soil bacterial communities. **Applied Soil Ecology** 61:69-75.
- Cregger MA**, Schadt CW, McDowell N, Pockman W, Classen AT (2012) Soil microbial community response to precipitation change in a semi-arid ecosystem. **Applied and Environmental Microbiology** 78:8587-8594.
- Hoeksema JD, Classen AT (2012) Is plant genetic control of ectomycorrhizal communities an untapped source of stable soil carbon in managed forests? **Plant and Soil** 359:197-204.
- 2011 Blue JD**, Souza L+, Classen AT, Schweitzer JA, Sanders NJ (2011) The variable effects of soil nitrogen availability and insect herbivory on aboveground and belowground plant biomass in an old-field ecosystem. **Oecologia** 167:771-780.
- Brosi GB**, McCulley RL, Bush LP, Nelson JA, Classen AT, Norby RJ (2011) Effects of multiple climate change factors on the tall fescue-fungal endophyte symbiosis: infection frequency and tissue chemistry. **New Phytologist** 189:797-805.
- Chen X, Post WM, Norby RJ, Classen AT (2011) Modeling soil respiration and variation in source components using a multi-factor global climate change experiment. **Climatic Change** 107:459-480.

de Graaff MA⁺, Schadt CW, Rula K^{*}, Six J, Schweitzer JA, Classen AT (2011) Elevated [CO₂] and plant species diversity interact to slow root decomposition. **Soil Biology & Biochemistry** 43:2347-2354.

Garten Jr. CT, Wulschleger SD, Classen AT (2011) Review and model-based analysis of factors influencing soil carbon sequestration under hybrid poplar. **Biomass and Bioenergy** 35(1):214-226.

Gray SB^{*}, Classen AT, Kardol P, Yermakov Z, Miller MA (2011) Multiple climate change factors interact to alter soil microbial community structure in an old-field ecosystem. **Soil Science Society of America** 75(6):2217-2226.

Iversen CM^{**}, Hooker TD^{**}, Classen AT, Norby RJ (2011) Net mineralization of N at deeper soil depths as a potential mechanism for sustained forest production under elevated [CO₂]. **Global Change Biology** 17(2):1130-1139.

Kardol P⁺, Renolds WN^{**}, Norby RJ, Classen AT (2011) Climate change effects on soil microarthropod abundance and community structure. **Applied Soil Ecology** 47:37-44.

Luo Y, Melillo JM, Niu S, Beier C, Clark JS, Classen AT, Davidson E, Dukes JS, Evans RD, Field CB, Czimczik CI, Keller M, Kimball BA, Kueppers L, Norby RJ, Pelini SL, Pendall E, Rastetter E, Six J, Smith M, Tjoelker M, Torn M (2011) Coordinated approaches to quantify long-term ecosystem dynamics in response to global change. **Global Change Biology** 17:843-854.

Souza L⁺, Weston DJ, Sanders NJ, Karve A, Crutsinger GM, Classen AT (2011) Variation from individuals to ecosystems in the response to climatic warming: a test with *Solidago altissima*. **Ecosphere** 2:1-14.

2010

Castro HF⁺, Classen AT, Austin EE^{*}, Norby RJ, Schadt CW (2010) Soil microbial community responses to multiple experimental climate change drivers. **Applied and Environmental Microbiology** 76:999-1007.

Classen AT, Norby RJ, Company CE, Sides KE^{*}, Weltzin JF (2010) Climate change alters seedling emergence and establishment in an old-field ecosystem. **PLoS ONE** 5:e13476

de Graaff MA⁺, Classen AT, Castro H⁺, Schadt CW (2010) Labile soil carbon inputs mediate the soil microbial community composition and plant residue decomposition rates. **New Phytologist** 188:1055-1064.

Kardol P⁺, Company CE, Souza L, Norby RJ, Weltzin JF, Classen AT (2010) Climate change effects on plant biomass alter dominance patterns and community evenness in an experimental old-field ecosystem. **Global Change Biology** 16:2676-2687.

Kardol P⁺, Cregger MA^{**}, Company CE, Classen AT (2010) Soil ecosystem functioning under climate change: plant species and community effects. **Ecology** 91:767-781.

Sackett T, Classen AT, Sanders NJ (2010) Linking soil food web structure to above- and below-ground ecosystem processes: a meta-analysis. **Oikos** 119:1984-1992. recommended by faculty of 1000: F1000.com/5617956

2009

Antoninka A^{**}, Wolf JE, Bowker M, Classen AT, Johnson NC (2009) Linking above and belowground responses to global change at community and ecosystem scales. **Global Change Biology** 15:914-929.

- Austin EE*, Castro HF+, Schadt CW, Sides KT*, Classen AT (2009) Assessment of 10 years of CO₂ fumigation on soil microbial communities and function in a sweetgum plantation. **Soil Biology & Biochemistry** 41:514-520.
- Crutsinger GM**, Sanders NJ, Classen AT (2009) Comparing intra- and inter-specific effects on litter decomposition in an old-field ecosystem. **Basic and Applied Ecology** 10:535-543.
- Engel EC**, Weltzin JF, Norby RJ, Classen AT (2009) Responses of an old-field plant community to interacting factors of elevated [CO₂], warming, and soil moisture availability. **Journal of Plant Ecology** 2:1-11.
- Garten Jr. CT, Classen AT, Norby RJ (2009) Watering treatment surpasses elevated CO₂ and temperature in importance as a determinant of soil carbon dynamics in a multi-factor climate change experiment. **Plant and Soil** 319:85-94.
- 2008 Crutsinger GM**, Habenicht MN*, Classen AT, Schweitzer JA, Sanders NJ (2008) Gallling by *Rhopalomyia solidaginis* alters *Solidago altissima* architecture and litter nutrient dynamics in an old-field ecosystem. **Plant and Soil** 303:95-103.
- Crutsinger GM**, Reynolds WN**, Classen AT, Sanders NJ (2008) Disparate effects of plant genotypic diversity on foliage and litter arthropod communities. **Oecologia** 158:65-75.
- Garten Jr. CT, Classen AT, Norby RJ, Brice DJ, Weltzin JA, Souza L (2008) Role of N₂-fixation in constructed old-field communities under different regimes of [CO₂], temperature, and water availability. **Ecosystems** 11:125-137.
- Knapp AK, Beier C, Briske DD, Classen AT, Lou Y, Reichstein M, Smith MD, Smith SD, Bell JE, Fay PA, Heisler JL, Leavitt SW, Sherry R, Smith B, Weng E (2008) Consequences of more extreme precipitation regimes for terrestrial ecosystems. **BioScience** 58:811-821.
- 2007 Classen AT, Chapman SK, Whitham TG, Hart SC, Koch GW (2007) Genetic-based plant resistance and susceptibility traits to herbivory influence needle and root litter nutrient dynamics. **Journal of Ecology** 95:1181-1194.
- Classen AT, Overby ST, Hart SC, Koch GW, Whitham TG (2007) Season mediates herbivore effects on litter and soil microbial abundance and activity in a semi-arid woodland. **Plant and Soil** 295:217-227.
- Tyner ML*, Classen AT (2007) Climate change effects on species composition mediates decomposition in an old-field ecosystem. *U.S. Department of Energy Journal of Undergraduate Research* 7:110-114.
- 2006 Classen AT, DeMarco J*, Hart SC, Whitham TG, Cobb NS, Koch GW (2006) Impacts of herbivorous insects on decomposer communities during the early stages of primary succession in a semi-arid woodland. **Soil Biology & Biochemistry** 38:972-982.
- 2005 Classen AT, Hart SC, Whitham TG, Cobb NS, Koch GW (2005) Insect infestations linked to shifts in microclimate: important climate change implications. **Soil Science Society of America Journal** 69:2049-2057.
- Classen AT, Langley JA (2005) Data-model integration is not magic. **New Phytologist** 166:367-369.

Hart SC, Classen AT, Wright RJ (2005) Long-term interval burning alters fine root and mycorrhizal dynamics in a ponderosa pine forest. **Journal of Applied Ecology** 42:752-761.

2003 Classen AT, Boyle SI, Haskins KE, Overby ST, Hart SC (2003) Community-level physiological profiles of bacteria and fungi: plate type and incubation temperature influences on contrasting soils. **FEMS Microbiological Ecology** 44:319-328.

Hart SC, Classen AT (2003) Potential for assessing long-term dynamics in soil nitrogen availability from variations in $\delta^{15}\text{N}$ of tree rings. **Isotopes in Environmental and Health Studies** 39:15-28.

Other publications

2019 Classen AT, Inouye BD (2019) Editorial. *Ecological Monographs* 89 (1):1.

2018 Classen AT (2018) Taking on the intimidating task of mycorrhizal biogeography (Book Review: *Biogeography of Mycorrhizal Symbiosis* by Leho Tedersoo). *Frontiers of Biogeography* 10.1-2, e39077.

Classen AT, Inouye BD (2018) Editorial. *Ecological Monographs* 88(1):3.

Niu S, Classen AT, Luo Y (2018) Functional traits along a transect. *Functional Ecology* 32:4-9.

2017 Classen AT, Inouye BD (2017) Editorial. *Ecological Monographs* 87(1):3.

2016 Classen AT (2016) Editorial. *Ecological Monographs* 86(1):2-3.

2015 Ellison AM, Classen AT (2015) Editorial. *Ecological Monographs* 85(1):1-2.

2014 Dukes JS, Classen AT, Wan S, Langley JA (2014) Using results from global change experiments to inform land model development and calibration. *New Phytologist* 204:3.

Ellison AM, Classen AT, Baldwin JD (2014) Editorial. *Ecological Monographs* 84:1-2.

Schimel D, Strong DR, Ellison AM, Peters DPC, Silver S, Johnson EA, Belnap J, Classen AT, Essington TE, Finley AO, Inouye BD, Stanley EH (2014) Editors are editors, not oracles. *Bulletin of the Ecological Society of America* 95:342–346.

2011 Classen AT (2011) Aboveground-belowground interactions in a changing world (Book review: Aboveground-belowground linkages: biotic interactions, ecosystem processes, and global change). Richard D. Bardgett and David A. Wardle. *Ecology* 92:1189–1190.

2008 Hanson PJ, Classen AT, Kueppers L, Luo Y, McDowell NG, Morris J, Rogers A, Thorton P, Ceulemans R, Dukes J, Goulden M, Jackson R, Knapp A, Kirschbaum M, Lewin K, MacCracken M, Melillo J, Ringler T (2008) Ecosystem research: Understanding climate change impacts on ecosystems and feedbacks to the physical climate. Report of the workshop on “Exploring Science Needs for the Next Generation of Climate Change and Elevated CO₂ Experiments in Terrestrial Ecosystems” The Department of Energy.

2007 Schadt CW, Classen AT (2007) Book review: Soil Microbiology, Ecology, and Biochemistry. Eldor A. Paul, editor. *Soil Science Society of America Journal* 71:1420.

2006 Classen AT (2006) Will herbivore range expansions exacerbate the effects of global climate change on soil microclimate? *CSA News* 51:1.

contributed reports:

2014 Pett-Ridge et al. (2014) Research for Sustainable Bioenergy Workshop: Linking genomic and ecosystem sciences. Workshop report. The US Department of Energy.

Research funding

current funding

2020-2025 LTREB: Phenological responsiveness of plants and bees: consequences for species, interactions, community composition and biomass. The US National Science Foundation; 741,187 USD; Co-PI

2020–2021 Gund Institute Catalyst Award: Low cost & high frequency quantification of soil nutrients in ecosystems undergoing rapid global change; 50,000 USD; PI

2019-2023 RII Track-2 FEC: Leveraging Intelligent Informatics and Smart Data for Improved Understanding of Northern Forest Ecosystem Resiliency (INSPIRES); The US National Science Foundation; 6,000,000 USD; Co-PI

2019-2024 The State of Carbon in Northeast Forests – creating an Integrated Soil Carbon (iSoC) inventory to explore and understand what drives variation in soil carbon across scales and with management; McIntire-Stennis, University of Vermont; 512,352 USD; Co-PI

2020 Exploring soil organic matter dynamics in a warming world using an array of warming experiments and soil models; Environmental Molecular Science Laboratory (EMSL) Exploratory Research proposal; 52,834 USD; PI

2018-2020 Functional Ecology of Alpine Systems. Natural Environment Research Council (NERC) UK; a global network; 80,905 GBP; collaborative partner

prior funding

2019-2020 LTREB: Phenological responsiveness of plants and bees: consequences for species, interactions, community composition and productivity; The US National Science Foundation; 171,416 USD; Co-PI

2019 Acquisition of an ICP-OES for a multiuser facility; The United States Department of Agriculture; 49,975 USD; Co-PI

2017-2019 Gund Institute Catalyst Award: Catalyzing research, scholarship, and teaching in montane systems, Vermont, USA; 46,538 USD; Co-PI

2016-2018 The Future of Our Taonga Tipu. Ministry of Business Innovation and Employment's Te Pūnaha Hihiko Fund, New Zealand; 100,000 NZD; Co-PI

2013-2018 Incorporating rhizosphere interactions and soil physical properties into a soil carbon degradation model through experimenting across ecotypes. The Department of Energy Terrestrial Ecosystem Science Program; 988,039 USD; PI

2017 Automatic Detection of Arctic Microarthropods (ADAM) Climate Impacts Research Centre (CIRC), Sweden; 50,000 SEK; Co-PI

2010-2017 Research Coordination Network: Integrated Network for Terrestrial Ecosystem Research on Feedbacks to the Atmosphere and Climate (INTERFACE). The US National Science Foundation; 500,000 USD; Co-PI

- 2015-2016 Bog extension: Incorporating rhizosphere interactions and soil physical properties into a soil carbon degradation model through experimenting across ecotypes. The Department of Energy Terrestrial Ecosystem Science Program; 23,105 USD; PI
- 2015 Request for a gas exchange cluster to explore climate change impacts on montane ecosystems around the world; Carlsberg Foundation; 360,000 DKK; PI
Alpine plant-fungal interactions under shrub encroachment and their role in ecosystem carbon turnover; IK lykkes fond Norway; 20,000 NOK; Co-PI
- 2014-2015 Hawkesbury Institute for the Environment Research Exchange Program (inbound). 9,964 AUD; PI
- 2013-2015 Applying methods for the study of plant-microbe interactions. Oak Ridge National Laboratory; 44,475 USD; PI
- 2013-2014 Initiative for Quaternary Paleoclimate Research. The University of Tennessee; 40,000 USD; Co-PI
- 2013 Incorporating rhizosphere interactions and soil physical properties into a soil carbon degradation model. Joint Directive Research and Development. 55,000 USD; PI
Technology to improve ecology labs and curriculum at UT. 85,000 USD; Co-PI
- 2012-2013 Initiative for Quaternary Paleoclimate Research. The University of Tennessee; 55,000 USD; Co-PI
Incorporating microbial dynamics that alter soil carbon fluxes into terrestrial carbon cycle models. Joint Directive Research and Development. 47,846 USD; PI
- 2011-2012 Assessment of microbial communities associated with wood decomposition. Oak Ridge National Laboratory. 192,298 USD; PI
Initiative for Quaternary Paleoclimate Research. The University of Tennessee; 51,600 USD; Co-PI
- 2011 Understanding the links among microbial community composition and function and soil processes. Microbiology across Campuses Educational and Research Venture; 10,000 USD; PI
- 2010 Combining molecular biology with ecology to determine the genetic and environmental constraints to primary productivity. Joint Directive Research and Development; 64,940 USD; PI
Bridging the gaps in soil carbon and nitrogen cycling: microbes as predictors of global climate change? Microbiology across Campuses Educational and Research Venture; 21,315 USD; PI
Assessment of microbial communities associated with *Populus*. Oak Ridge National Laboratory; 56,113 USD; PI
- 2009 Developing a systems biology approach for linking genetic and environmental constraints to primary productivity – can patterns scale to the field? Joint Directive Research and Development; 63,000 USD; PI
- 2006-2009 Community and ecosystem response to global change: interactive effects of atmospheric carbon dioxide, surface temperatures, and soil moisture. The Department of Energy, Program for Ecosystem Research; 1,700,000 USD; PI
- 2006-2008 Disentangling soil respiration using genomic techniques. Oak Ridge National Laboratory LDRD; 655,000 USD; PI

- 2008-2009 Carbon drivers of the microbe-switchgrass rhizosphere interface. Oak Ridge National Laboratory LDRD; 750,000 USD; Co-PI
- 2007-2009 Implications of enhanced fine-root production in the Oak Ridge FACE experiment. The Department of Energy Terrestrial Carbon Program; 1,200,000 USD; Co-PI
- 2006 Does genetic diversity within species influence ecosystem nutrient cycling? Oak Ridge National Laboratory SEED; 20,000 USD; PI
- 2005-2006 Responses to elevated CO₂ in a closed canopy deciduous forest. The Department of Energy Terrestrial Carbon Program; 597,444 USD; Co-PI

Teaching

Frequently taught

- 2020 Junior/ Senior seminar (BA/BS)
- 2019-now Ecosystem Ecology (BA/BS/MS/PhD)
- 2019-now Research in Ecology (BA/BS)
- 2017-now Ecology, Ecosystems, and Environment (BA/BS)
- 2015-2016 Climate change and biodiversity (co-taught, MS/BS)
Climate change (co-taught, MS)
- 2014-2015 Plant-herbivore interactions (co-taught, MS)
Nature management (co-taught, MS)
- 2010-2014 Ecosystem ecology laboratory (BS)
- 2009-2014 General ecology (BS)
- 2008-2014 Ecosystem ecology (BS)
Ecology & global change seminar (BS)
- 2010-2013 Advanced ecology (co-taught, MS/PhD)
- 2005-2014 Ecology & evolutionary biology seminar (MS/PhD)

International & external PhD courses

- 2019 Microbiomes and Global Change. University of California, Irvine USA (PhD, postdoc)
- 2016 Climate Change Impacts Adaptation and Mitigation, University of Copenhagen (co-taught, MS, online course)
Soil Ecology and Planetary Boundaries, Wageningen University (PhD)
- 2015 Science writing and editing, Aarhus University (MS/PhD)
Science writing and speaking, Estonian University of Life Sciences (MS/PhD)
- 2014 Science writing and speaking, Hunan, China (MS/PhD)
- 2013 Global change and biogeography, Peking University, China (MS/PhD)
Coupled natural and human systems in a changing world, Costa Rica (Honors, BA)

Additional courses

- 2013 Mycorrhizal ecology (BS)
Graduate seminar on writing (MS/PhD)

- 2011 Advanced ecosystem ecology (BS)
- 2008-2014 Graduate Independent study (MS/PhD)
- Undergraduate research (BS)
- 2008-2014 Undergraduate independent study (BS)
- 2009-2010 Science Education, Reading & Discussion seminar (PhD)
- 2008-2009 Introduction to faculty research (MS/PhD)

Selected awards

- 2020 Fellow, Ecological Society of America
- 2015 Association for Women Soil Scientists Mentoring Award to recognize individuals (male or female) who have made significant contributions to the education, professional growth, & achievement of females in soil science
- 2014 Promising young scholar, The US National Academy of Sciences, Frontiers in Science
- 2013 UT Chancellor's Excellence in Teaching Award Nomination & Finalist
- 2012 UT College of Arts and Sciences Research and Creative Achievement Award
- Pi Beta Phi teaching award
- 2011 UT Chancellor's Excellence in Teaching Award Nomination & Finalist
- UT Chancellor's Excellence in Graduate Advising and Mentoring Award Nomination
- 2010 UT College of Arts and Sciences Faculty Research Award Nomination
- 2007 Promising young scholar, The US National Academy of Sciences Frontiers in Science
- Kavli Foundation Science Fellow
- Best paper, Soil Science Society of America S-7
- 2006 US Department of Energy Outstanding Mentor Award
- 2002-2003 Merriam-Powell Center for Environmental Research Graduate Fellow
- 2003 Best student presentation, honorable mention, Soil Ecology Society Meetings
- 2002 Best paper, Soil Science Society of America S-7
- 1995 Sigma Xi
- Smith College Brown Botany Prize
- 1991-1993 NCAA All-American (swimming)

Selected invited seminars

- 2020 American Society for Microbiology (ASM, *plenary speaker*), USA (postponed)
- Jack and Pat Bryan Distinguished Lecture keynote, Syracuse University, USA (postponed)
- University of Houston, USA (postponed)
- Cornell University, USA (postponed)
- 2019 University of Michigan, EEB, USA

University of Michigan, SEAS, USA
 Texas Tech University, USA
 University of Lincoln, Lincoln, UK
 Holden Arboretum, Cleveland, USA
 McGill University, Montreal, Canada
 2018
 Concordia University, Canada
 American Society for Microbiology (ASM, *plenary speaker*), USA
 Harvard Forest, Harvard University, USA
 The University of Vermont, Department of Biology, USA
 The University of Michigan, USA
 2017
 INIBIOMA, CONICET, Universidad Nacional del Comahue, Argentina
 The Vermont Agency of Natural Resources, USA
 Smith College, USA
 The 2nd Global Soil Biodiversity Conference (*keynote*), China
 The University of New Hampshire, USA
 The University of Minnesota, USA
 The US Department of Energy TES/SBR meeting (*keynote*) USA
 Swedish University of Agricultural Sciences (SLU), Uppsala, Sweden
 The University of Vermont, Plant and Soil Sciences Department, USA
 Doñana Biological Station, Sevilla, Spain
 The Gund Institute, The University of Vermont, USA
 The University of Vermont, Plant Biology Department, USA
 The University of Massachusetts, Department of Microbiology, USA
 2016
 The University of Vermont, Rubinstein School of the Environment, USA
 New Mexico State University, Department of Plant Sciences, USA
 Jornada Long Term Ecological Research Station (ARS), USA
 German Centre for Integrative Biodiversity Research (iDiv), Germany
 2015
 University of Notre Dame, Department of Biology, USA
 Natural History Museum of Denmark “Science Gala, Vin & Videnskab”, Denmark
 Dartmouth College, Department of Biology, USA
 The Villum Foundation, Denmark
 Estonian University of Life Sciences, Estonia
 Danish Oikos meetings (*keynote*), Denmark
 Ecological Society of America meeting Organized Oral Session, USA
 Global Network of Long-term Observatories on Mountain Social-Ecological Systems, USA

2014 Henan University, China
University of Copenhagen, Terrestrial Ecology, Denmark
Rocky Mountain Biological Laboratory, USA
“Geek Week” Crested Butte Colorado Science Festival, USA
Rocky Mountain Biological Laboratory science series, USA
Ecological Society of America Meetings Organized Oral Session, USA
Natural History Museum of Denmark, Evolutionary Genomics Section, Denmark
Center for Macroecology, Evolution and Climate (CMEC), Denmark
British Ecological Society (*keynote*) Conference on Carbon, UK
Lund University, Sweden

2013 Institute of Botany, Chinese Academy of Sciences, China
Institute of Geographic Sciences & Natural Resources Research, CAS, China
German Academic Exchange Service & the Alexander von Humboldt Foundation
webinar, Germany
Umeå University, Department of Biology, Sweden
University of Alberta, Canada
German Centre for Integrative Biodiversity Research (iDiv), Germany

2012 American Geophysical Union Symposia, USA
Indiana University, USA
Peking University, China
Swedish University of Agricultural Sciences (SLU), Umeå, Sweden
Boise State University, Department of Biology, USA
University of New Mexico, Department of Biology, USA
University of British Columbia, Canada
“Geek Week”, Crested Butte Colorado Science Festival, USA

2011 Imperial College London, Silwood Park, UK
University of College London, UK
Developing International Geoarchaeology Conference, Tennessee, USA
The Ecological Society of America, Symposia, USA
University of Kentucky, USA
Scottish Crop Research Institute (SCRI), Scotland

2010 The Ecological Society of America meeting, Organized Oral Session, USA
University of Copenhagen, Department of Biology, Denmark
Netherlands Instituut voor Ecologie (NIOO-KNAW), The Netherlands
University of Copenhagen, Ecology & Evolutionary Biology, Denmark
The Naturalist Club of Tennessee, USA

- 2009 Department of Energy, Program for Ecosystem Research, USA
 Maryland American Association of University Women Conference, USA
 University of North Carolina, Asheville, USA
 Center for Macroecology and Evolution, Denmark
 Alabama A&M University, USA
 League of Women Voters Knoxville, Tennessee, USA
- 2006-2008 Cornell University, USA
 Department of Energy, Biological & Environmental Research, Global Change Education, USA
 University of Tennessee, Knoxville, USA
 Appalachian State University, USA
 Ecological Society of America symposia, USA
 Department of Energy, Program for Ecosystem Research, USA
 EPRECOT workshop on precipitation, Denmark
 Harvard Forest, Harvard University, USA
- 2002-2004 University of Notre Dame, USA
 Oak Ridge National Laboratory, USA
 Humboldt State University, USA
 Redwood Sciences Laboratory, US Forest Service, USA

Selected invited or organized workshops

- 2020 Tipping the Scales: Strategy And Tactics For Successful Manuscript Submissions, ESA Annual Meeting, USA co-organizer with Nicolas Gotelli
 Creating a framework to interpret and model plant and mycorrhizal fungal traits at the global scale, NIMBioS, University of Tennessee, USA
- 2019 The Living Earth Collaborative Parasite workgroup, Washington University, Missouri, USA
- 2018 The Living Earth Collaborative workgroup, Washington University, Missouri, USA
 WaRM Warming and species Removals in Mountains workshop, Vermont, USA
 Enhancing Long-Term Soil Carbon Sequestration by Ectomycorrhizal Fungi, University of Michigan, Michigan, USA
- 2017 INTERFACE Microbial Carbon Cycling workshop, Vermont, USA
- 2016 WaRM Warming and species Removals in Mountains workshop, Denmark
 INTERFACE-Climani workshop on tipping points, Italy
 ClimFun Fungal Communities under global change symposia, Denmark
 Frontiers in terrestrial climate feedbacks workshop, INTERFACE, USA
- 2015 Climate models revisited — mycorrhizal dynamics, Royal Netherlands Academy, The Netherlands

- Tropical Plant Collections: Legacies from the past?, Royal Danish Academy of Sciences, Denmark
- Ecological Society of America Organized Oral Session, USA
- American Geophysical Union, Symposia on data-model fusion, USA
- Global Network of Long-term Observatories on Mountain Social Ecological Systems, USA
- 2014 Using results from global change experiments to inform land model development, China
- The National Academy of Sciences Frontiers of Science and Engineering program, Brazil
- Biodiversity and forest management workshop, University of Copenhagen, Denmark
- 2013 The Department of Energy's workshop on Research for Sustainable Bioenergy, USA
- Scaling across space and time, Czech Republic
- 2012 Understanding Biodiversity and Climate Change, German Academic Exchange Service, Germany
- National Socio-Environmental Synthesis Center (SESYNC), workshop, University of Michigan, USA
- 2011 Nutrient constraints on the net carbon balance, Iceland
- How Do We Improve Earth System Models?, USA
- National Institute for Mathematical and Biological Synthesis – linking plants and soil, USA
- 2010 Oak Ridge National Laboratory, Laboratory Directed Research and Development Initiative, USA
- 2009 Department of Energy & National Science Foundation, long-term global change experiments, USA
- Optimizing soil process representations in climate models. Oak Ridge, Tennessee, USA
- 2008 Department of Energy, The Next Generation of Climatic Change Experiments, USA
- NSF ADVANCE, Women Evolving Biological Sciences (WEBS), USA
- 2006 National Academy of Science, Kavli Frontiers of Science, USA
- Ecological Society of America Symposia, data-model integration, USA
- Effects of precipitation change on terrestrial ecosystems, Denmark
- How to succeed in ecology, Ecological Society of America, USA
- 2005 Terrestrial Ecosystem Response to Atmosphere and Climate Change, USA
- European Geophysical Union, symposia on neutrons in science, Austria

Selected national/international grants & awards to advisees

- 2020 US National Science Foundation GRFP fellowship (E. O'Brien, PhD)
- 2018 Gund Postdoctoral Fellowship (E. Meineke, declined)

- 2017 US National Science Foundation GRFP fellowship (K. Rewcastle, BS)
 US National Science Foundation GRFP fellowship (K. Connell, BS)
 US NSF post-doctoral fellowship (E. Meineke)
- 2016 Marie Currie Postdoctoral grant (D. Hewins, declined)
 Fulbright scholar (K. Rewcastle, BS)
 Yates Fellowship (J. Moore, PhD)
- 2015 US National Science Foundation GRFP fellowship (A. Pheningworth, BS)
 Fulbright scholar honorable mention (K. Rewcastle, BS)
- 2014 US National Science Foundation GROW fellowship (L. Moorhead, PhD)
 US National Science Foundation EAPSI fellowship (J. Henning, PhD)
 Sigma Xi grant in aid of research (K. Rewcastle, BS)
- 2013 Sigma Xi grant in aid of research (S. Wood, BS)
 US National Science Foundation GRFP fellowship (L. Breza, BS)
- 2012 Department of Energy Marvin L. Wesely Award (M. Cregger, PhD)
 US National Science Foundation GRFP fellowship (L. Moorhead, PhD)
- 2011 American Association of University Women American fellow (L. Souza, post-doc)
 US National Science Foundation GRFP honorable mention (J. Moore, PhD)
- 2010 US National Science Foundation GRFP honorable mention (J. Moore, PhD)
- 2008 US Department of Defense SMART fellowship (M. Cregger, PhD, declined)
 Department of Energy Marvin L. Wesely Award (C. Iversen, PhD)
 US Department of Energy GREF fellowship (M. Cregger, PhD)
- 2007 US National Science Foundation Dissertation Improvement Grant (C. Iversen, PhD)
 US National Science Foundation GRFP fellowship (E. Austin, PhD)
- 2006 US Department of Energy GREF fellowship (C. Iversen, PhD)
 US National Science Foundation GRFP honorable mention (E. Austin, BS)

Prior graduate students (& where they are now)

- 2019 Justyna Giejstowt, PhD Victoria University of Wellington, co-advised with Julie Deslippe: Post doc, University of Bayreuth, Germany
- 2018 Emily Piche, MS UVM: PhD student at the University of New Hampshire, USA
- 2017 Ji “Sonamkyi” Suonan, PhD Peking University, China, co-advised with Jin-Sheng He: Associate Professor, Qinghai Normal University, China
- 2017 Jeremiah Henning, PhD UTK: Assistant Professor, University of South Alabama, USA
- 2017 Leigh Moorhead, PhD UTK: post-doc, Environmental Protection Agency (EPA), USA
- 2017 Elizabeth Dent, MS CPH: University of Copenhagen, Denmark
- 2016 Jessica Moore, PhD UTK: post-doc, Oak Ridge National Laboratory, USA

- 2015 Aurelija Petkevičienė, MS CPH: The State Plant Service, Ministry of Agriculture, Lithuania
- 2013 Emily Austin, PhD UTK: post-doc, University of New Hampshire, USA
- 2012 Melissa Cregger, PhD UTK: Staff Scientist, Oak Ridge National Lab, USA
- 2008 Colleen Iversen, PhD UTK (co-advised with Richard Norby): Senior Staff Scientist, Oak Ridge National Lab, USA

Current graduate students

- 2020- Elizabeth (Libby) O'Brien, PhD
- 2020- Gavin Briske, PhD UVM, USA; co-advised with Carol Adair & Tony D'Amato
- 2020- Paulina Murray, PhD UVM, USA; co-advised with Carol Adair & Tony D'Amato
- 2017- Kenna Rewcastle, PhD UVM, USA; co-advised with Nate Sanders

External examiner, external committee member & student lab rotations

- 2019-now Evan Perkowski, PhD Texas Tech University, USA
- 2018-2020 Fiona Jevon, PhD Dartmouth College, USA
- 2020 Julia Kempainen, PhD University of Helsinki, Finland
- 2017 Pernilla Borgström, PhD Swedish University of Agricultural Sciences, Sweden
- 2017 Kirk Barnett, PhD Western Sydney University, Australia
- 2016 Gesche Blume-Werry, PhD Umeå University, Sweden
Nathaly Guerrero Ramirez, PhD iDiv, Germany
- 2014 Anna Stern Gren, PhD Lund University, Sweden
- 2013 Erin Cameron, PhD University of Alberta, Canada
- 2009 Christopher Habeck, PhD University of Wisconsin, USA
- 2008 Shannon Pelini, PhD Notre Dame, USA

Service on graduate student committees (current or year graduated)

- 2019-now Natalia Aristizabal, PhD UVM Rubenstein; Rosaura Chapina, PhD UVM Rubenstein
- 2018-now Amanda Northrop, PhD UVM BIO, committee chair; Lindsey Pett, PhD UVM BIO
- 2016 Carla Brenda Maldonado Goyzueta, PhD CPH; Quentin Read, PhD UTK
- 2015 Lacy Chick, PhD UTK
- 2014 Sara Kuebbing, PhD UTK; Rafael Zenni, PhD UTK; Jeremy Chandler, PhD MICRO UTK
- 2013 Melissa Burt, MS UTK; Denise Kendall, PhD UTK
- 2012 Katie Stuble, PhD UTK; Noelia Barrios, PhD UTK; Amanda Alison, MS UTK; Keith Post, PhD UTK; Emmi Felker-Quinn, PhD UTK; Joe Huges, PhD UTK
- 2010 Jarrod Blue, MS UTK
- 2009 Greg Crutsinger, PhD UTK
- 2008 Lara Souza, PhD UTK; Windy Bunn, MS UTK; Martin Nuñez, PhD UTK

Previous postdoctoral fellows (& where they are now)

2017-2019	Xin Jing, Post-doc in Belgium
2014-2019	Annelein Meisner, Scientist MicrobiomeSupport, Netherlands
2017-2018	Emily Meineke, Assistant Professor, University of California, Davis USA
2015-2018	Erin Cameron, Assistant Professor, Saint Mary's University, Nova Scotia, Canada
2015-2018	Daan Blok, Policy Officer, Netherlands Polar Research Program, Organization for Scientific Research, Netherlands
2014-2017	Maja Sundqvist, Assistant Professor, Umeå University, Sweden
2012-2015	Jiang Jiang, Assistant Professor, Nanjing Forestry University, China
2010-2012	Emily Moran, Assistant Professor, University of California, Merced, USA
2009-2012	Lara Souza, Associate Professor, University of Oklahoma, USA
2008-2010	Marie-Anne de Graaff, Associate Professor, Boise State University, USA
2007-2009	Paul Kardol, Associate Professor, SLU, Sweden
2006-2008	Hector Castro, Research Scientist, University of Tennessee, USA

Postdoctoral fellows & Assistant professors

2017-2020	Case Prager
2020-now	Maja Sundqvist

Visiting post-docs, faculty & teachers

2020	Ji "Sonamkyi" Suonan, Associate Professor, Qinghai Normal University
2018-2019	Cancan Zhao, Lecture of Ecology, Henan University, China
2018	M. Noelia Barrios Garcia Moar, Fulbright Fellow, Investigadora Asistente, Conicet, Argentina
2018	Mariano Rodriguez-Cabal, Fulbright Fellow, Investigadora, Conicet, Argentina
2018	Wenting Feng, Scientist, Chinese Academy of Agricultural Sciences, Beijing, China
2016, 2017	Xin Jing, post-doc, Peking University, China
2016	Laura Steffy, Primary School Teacher, Texas, USA
2015-2016	Katarzyna Koszela, post-doc, University of Silesia, Poland
2015	Qiong Zhao, Associate Professor, Institute of Applied Ecology at the Chinese Academy of Sciences, China
2012-2013	Leslie Smith, Your Ocean Consulting, LLC, USA
2007-2008	George Byrd, Associate Professor, Ferrum College, USA
2007	Xiongwen Chen, Associate Professor, Alabama A&M University, USA

Undergraduate advising & mentoring

Undergraduate honors thesis

2020-2021	Olivia Vought (Rubenstein, UVM)
2019-2020	Laura Pinover (Rubenstein, UVM)

2019-2020 Gordon Coates (Rubenstein, UVM)
2018-2019 Julia Pupko (Rubenstein, UVM)
2018 Colleen Yancey (Chair, Biology, UVM)

Undergraduate academic advisees (University of Vermont)

2020 Spring 32 Environmental Science/Parks, Recreation & Tourism/Natural Resources majors
2019 Fall 37 Environmental Science/Parks, Recreation & Tourism/Natural Resources majors
2018 Fall 20 Environmental Science/Parks, Recreation & Tourism/Natural Resources majors
2018 Spring 26 Environmental Science/Parks, Recreation & Tourism/Natural Resources majors
2017 Fall 27 Environmental Science/Parks, Recreation & Tourism/Natural Resources majors
2017 Spring 3 Environmental Science/Parks, Recreation & Tourism/Natural Resources majors
2016 Fall 3 Environmental Science/Parks, Recreation & Tourism/Natural Resources majors

Undergraduate academic advisees University of TN (year graduated)

2016 Peter Meidl
2015 Kenna Rewcastle
2013 Courtney Thomas; Casey Blanks; Sarah Wood; Bruce Williams; Christopher Murphy;
Callie Grabstein; Byanca Moreno; John Carney; Cody Whitt; Meredith Hayes;
Sabrina Rhodes
2012 Laura Barlow; Kelsey Richesin; Alix Pfennigwerth; Melanie Sullivan
2011 Matt Olive; Callie Caponet
2010 Georgia Bragg; Phoebe Wright

Undergraduate researchers, honors students, & high school interns

2018-2020 Rowan Pannier (UVM); Finn Quan-Shau (UVM); Olivia Vought (UVM); Carri Finkelstein (UVM); Allyssa McCutcheon (UVM); Gordon Coates (UVM); Laura Pinover (UVM)
2017-2020 Joscie Norris (UVM)
2019 Nichole Crothers (UVM); Karin Rand (UVM, BIO); Carrie Finkelstein (UVM); Natalie Elizabeth Bingham (UVM)
2019 Zoe Albion, Allie Pankoff, Calla Sopko, Maya Dizack, Anna Malvin (UVM, NR206)
2018 Tom DeMouth (UVM)
2017-2018 Caitlin Gosciminski (UVM)
2017 Rowan Pannier (Crested Butte High School CO/RMBL)
2016, 2017 Raina Fitzpatrick (Haverford College/RMBL)
2016-2017 Ben Miller (UT)
2015-2017 Brennan Flanagan (UT); Silvia Iradukunda (UT); Sarah Ottinger (UT); Helen Law (UT)
2016 Wyatt Arnold (University of Chicago/RMBL)
2014-2016 Magnus Heide Andreasen (KU)
2015 Peter Meidl (UT/RMBL); Monique Garrett (Humboldt State/RMBL)
2014-2015 Kenna Rewcastle (UT/KU/RMBL); Sara La Haie (UT)

2012-2015 Sneha Patel (UT); Kent Cornell (UT)

2013-2014 Nick Hendershot (UT/RMBL)

2012-2014 Brandy Pieper (UT); Nora Dunkirk (UT)

2012-2013 Jaime Call (UT); Su'ad Yoon (UT/RMBL); Raina Fitzpatrick (West High School TN)

2010-2013 Sarah Wood (UT/RMBL)

2012 Kelsey Richesin (UT); Kelly Giro (UT); Alaina Marinello (UT); Corinne Calhoun (Pomona College/RMBL); Courtney Patterson (UT)

2011-2012 Matthew Floyd (UT)

2010-2012 Katie Sloop (UT)

2009-2012 Heather Tran (UT)

2011 Amanda Oaks (UT); Katie Park (Maryville University/RMBL); Minh Tran (Emory); M Stephanie Jensen (UT)

2010-2011 Gordon Robinson (UT); Danny Lusk (UT); Matt Olive (UT)

2009-2011 Phoebe Wright (UT); Lauren Breza (UT)

2010 Jackie Aareson (UT); Tander Simberloff (Smith College); Alix Pfennigwerth (UT)

2009 Laura Marsh (UT); Tander Simberloff (West High School TN); Anna Proffitt (UT)

2008 John Bevans (University of Tampa); Kelly Rula (Bowdoin College); Elizabeth Ferguson (UT)

2007-2008 Gloria Jimenez (Carleton College)

2007 Vanessa Garcia (Cal State, Fresno); Caitlin Guthrie (Pomona College); Jennifer Burks (Earlham College)

2006-2008 Emily Austin (Hampshire College)

2006-2007 Emmi Felker-Quinn (Smith College); Melissa Habenicht (UT); Zach Kiershmann (UT); Sarah Kortebein (Farragut High School TN); Onike Mnzawa (UT)

2006 Sharon Gray (U of Illinois); Emily Mitchell (Oak Ridge High School TN); Rebecca Roha (Gettysburg College); Marlene Tyner (U of Michigan); Luke Zachmann (U of Minnesota, Morris)

2005-2007 Katherine Sides (Northern Arizona University)

2005-2006 Katrina Cox (Pellissippi Community College); Kerri Crawford (UT)

2005 Caroline DeVan (UT); Sam Freyaldenhoven (Hendrix College)

2011-2015 Undergraduate research & REU mentor, Rocky Mountain Biological Laboratory

Professional service & outreach to enhance diversity

2019 Chair, Diversity Committee, Rocky Mountains Biological Laboratory

2019 Women in Soil Science Panelist, The University of Vermont

2015 Women in Science Ethics Panelist, Rocky Mountain Biological Laboratory

2011-2014 Program for Excellence & Equity in Research (PEER) mentor, University of Tennessee

2011-2013 USA Science Festival Participant, Washington DC

2009-2010 Committee for women, University of Tennessee

- 2008 NSF ADVANCE workshop, Women Evolving Biological Sciences (WEBS), USA
- 2007 Historically Black Colleges & Universities & Minority Education Institutions Research Program
- 2006 Southeastern Consortium for Minorities in Engineering & Science; DOE Day of Science participant to attract minority students into scientific professions

University, Museum & Organization service

- 2020 Search committee for UVM's Vice President of Research
- 2019-now Co-chair, Graduate program review committee, Rubenstein School, University of Vermont
Faculty Standards Committee, Rubenstein School, University of Vermont
Chair, Diversity Committee, Rocky Mountains Biological Laboratory
Member, Research Evaluation Committee, Rocky Mountains Biological Laboratory
- 2017-now Strategic Planning committee, Rocky Mountain Biological Laboratory
- 2016-now Facilities committee, Rocky Mountain Biological Laboratory
Annual Evaluation of Executive Director and Board Self-Evaluation committee, Rocky Mountain Biological Laboratory
- 2017-2020 Graduate Standards committee, Rubenstein School, University of Vermont
- 2017-2019 Chair, Research Vision committee, Rocky Mountain Biological Laboratory
- 2017-2018 Chair, Committee on Academic Benchmarking for the Rubenstein School
- 2016-2017 Chair, Facilities committee, Rocky Mountain Biological Laboratory
Chair, Outreach committee, Center for Macroecology, Evolution, and Climate
- 2014-2016 Research committee, Rocky Mountain Biological Laboratory
- 2015 Chair, disease ecology search committee, University of Copenhagen
- 2012-2014 Chair, Undergraduate Affairs, University of Tennessee
Executive Committee, University of Tennessee
Natural Sciences Undergraduate Affairs Committee, University of Tennessee
- 2012-2013 Department head search committee, University of Tennessee
- 2012 Research Center Equipment Committee, Rocky Mountain Biological Laboratory
- 2011-2013 Douglas Distinguished Lectureship committee, Rocky Mountain Biological Laboratory
- 2011-2012 Arts and Sciences Dean's Advisory Council, University of Tennessee
- 2010-2011 Facilities Committee, Rocky Mountain Biological Laboratory
- 2009-2011 University-wide governors chair search committee, University of Tennessee
- 2008-2011 Undergraduate curriculum committee, University of Tennessee
- 2010 Ecology search committee, University of Tennessee
- 2006-2007 National Ecological Observatory Network (NEON) committee, University of Tennessee

Professional service & outreach

- 2020 Reviewer for Tenure and Promotion packet: 1× USA R1 academic institution; 1× International R1 academic institution
- 2019 Ecological Society of America webinar on Academic Publishing
- 2019 Reviewer for Tenure and Promotion packets: 1× International R1 academic institution; 3 USA R1 academic institutions; 1× USA research institution
- 2019 External reviewer of University of California, Davis program in Evolution, Ecology, & Biodiversity, College of Biological Sciences
- 2017-2018 NEON soil sensor technical working group
- 2018 Reviewer for Tenure and Promotion: 2× USA R1 academic institutions
- 2018 RMBL speaker “getting into graduate school”
- 2017 Reviewer for Tenure and Promotion: 2× USA R1 academic institutions
- 2015 Reviewer for Tenure and Promotion: USA R1 research institution

National agency review panels

- 2018 US Department of Energy
- 2015-2016 European Union BiodivERsA ERA-NET
- 2011 US National Science Foundation
- 2007 US National Ecological Observatory Network (NEON) site reviewer

Professional society service (in addition to editorial duties)

- 2012-2013 Ecological Society of America committee to envision the future of ESA journals

Steering committees

- 2018-2021 Functional Ecology of Alpine Systems Global network
- 2007-2010 Terrestrial Ecosystem Response to Atmospheric and Climatic Change

Outreach

- 2016 Museum Public Talk on soil biodiversity
- 2014 “Geek Week” Panelist, Crested Butte Colorado Science Festival
- 2013 US congressional visit by group members; Invasive weed outreach
- 2012 “Geek Week” Panelist, Crested Butte Colorado Science Festival; Invasive weed outreach; US congressional visit by group members; Citizen Scientist Symposium instructor, Rocky Mountain Biological Laboratory; Adult Science Leader, Rocky Mountain Biological Laboratory
- 2011 Invasive weed outreach

Reviewer for funding agencies & journals

- 2008-now Science Foundation Ireland; The US Department of Energy Science Focus Area program; European Union; The Royal Society PanAfrica Awards, UK; US National Science Foundation Ecology Panel; US National Science Foundation Ecosystems Panel; US National Science Foundation Long-Term Research in Environmental Biology; The Netherlands Organization for Scientific Research (NWO); Natural Sciences and Engineering Research Council of Canada; Academy of Sciences of

the Czech Republic; US Civilian Research & Development Foundation (CRDF); US Department of Energy Terrestrial Ecosystem Sciences Program; US Department of Energy Office of Science Graduate Fellowship (SCGF) Program; US Department of Energy NICCR program; US Department of Energy Program for Ecosystem Research; US Department of Energy SCGF Program; US Department of Energy Terrestrial Carbon Program

Reviewer for journals (selected)

2008-now *Australian Journal of Soil Research, BioScience, Biological Invasions, Canadian Journal of Forest Research, Conservation Biology, Ecological Applications, Ecological Monographs, Ecology, Ecology Letters, Ecosphere, Ecosystems, Functional Ecology, Global Change Biology, Isotopes in Health and Environmental Studies, Journal of Ecology, Nature Communications, New Phytologist, Oecologia, Plant and Soil, PLoS One, Polish Journal of Environmental Science, Science, Soil Science Society of America Journal, Soil Biology & Biochemistry*

Abstracts and contributed papers

2008-2018 Ecological Society of America (>53); American Society for Microbiology (>5); International Congress of Entomology (1); International Congress of Entomology (1); International Society for Microbiology: ISME (1); Botanical Society of America (1); Oikos meeting (1); American Geophysical Union (>5); Ecology of Microorganisms (2); European Geophysical Union (4); EUReCA, Undergraduate Research Fair (11); Soil Ecology (6); Soil Science Society of America (6); Association of Southeastern Biologists (4); Southwestern Association of Biologists (4); Mid-Atlantic States Mycology Conference (2); EuroSoils (1); Enzymes in the Environment (2); Southern Forest Tree Improvement Conference (1); Microbes as Important Drivers of Soil Processes meeting (1); Argonne National Laboratory Soils Workshop (2); Southern Appalachian Man and the Biosphere Conference (1); Dissertations Initiative for the Advancement of Climate Change Research Symposium (1); Women Evolving the Biological Sciences Symposia (1); Joint Meeting of the Society for Range Management and the American Forage and Grassland Council (1); South Eastern Population Ecology and Evolutionary Genetics (SEPEEG) Conference (1); International Association of Landscape Ecologists World Congress (1); American Association for the Advancement of Science (1); National Academies of Sciences Frontiers of Science Symposia (2)