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Education and Training

2022	University of Zürich, Plant Sciences, Dr. Sc. Nat. (PhD) *defended Sept. 2022* "Resource Exchange and Partner Choice in the Plant–AMF Symbiosis"
2017	University of California, Riverside, Plant Biology, M.S. *defended June 2017*
2014	University of Central Florida, Biology *summa cum laude*, B.S.

Research and Professional Experience

2022-Present	Postdoctoral Research Associate, PI: Dr. Iversen, Oak Ridge National Laboratory
2018-2022	Doctoral Candidate, Niklaus Lab, University of Zürich
2017-2018	Laboratory Manager, Spasojevic Lab, University of California, Riverside
2014-2017	Master's Student, Diez & Allen Labs, University of California, Riverside
2011-2014	Undergraduate Student Researcher, Von Holle Lab, University of Central Florida

Awards

1. "Terrestrial Ecosystem Science - Scientific Focus Area". Earth and Environmental Systems Sciences Program, Biological and Environmental Research, Office of Science, US DOE. 2023. USD 41.5 million. PI: Dr.s Paul J. Hanson and Daniel M. Ricciuto. *1 of 23 contributors*.
2. "The elusive structure and function of peatland fine roots". Environmental Transformations and Interactions, Environmental Molecular Sciences Laboratory (Pacific Northwest National Laboratory). User Facility Exploratory Research Call. 2023. PI: Dr. Avni Malhotra. Participants: **Dr. Sören Weber**, Dr. Bram WG Stone.
3. "Trade dynamics in the symbiosis between plants and arbuscular mycorrhizal fungi". Forschungskredit Candoc, University of Zürich. CHF 28,773. 2021. PI: **Sören Eliot Weber**, Pascal A. Niklaus.

Publications

Lead Author

1. Plant choice between arbuscular mycorrhizal fungal species results in increased plant P acquisition. **Sören Eliot Weber**, Jordi Bascompte, Ansgar Kahmen, Pascal A. Niklaus. PLoS ONE 19(1): e0292811. 2024. https://doi.org/10.1371/journal.pone.0292811
2. How deep should we go to understand roots at the top of the world? **Weber SE**, Iversen CM. New Phytologist 240: *457-460*, 2023. https://doi.org/10.1111/nph.19220
3. Responses of arbuscular mycorrhizal fungi to multiple coinciding global change drivers. **Weber, Sören Eliot,** Jeffrey M Diez, Lela V Andrews, Michael L Goulden, Emma L Aronson, Michael F Allen, Fungal Ecology, 40, *62—71*, 2019

Co-Authored

1. Plant functional traits are dynamic predictors of ecosystem functioning in variable environments. Huxley, Jared D., Caitlin T. White, Hope C. Humphries, **Sören E. Weber**, Marko J. Spasojevic. Journal of Ecology. 111: *2597-2613*, 2023 https://doi.org/10.1111/1365-2745.14197
2. Variation in $\delta^{13}C$ and $\delta^{15}N$ within and among plant species in the alpine tundra. Spasojevic, Marko J. & **Sören Weber**. Arctic, Antarctic, and Alpine Research, 53:1, *340-351*, 2021
3. Belowground impacts of alpine woody encroachment are determined by plant traits, local climate, and soil conditions. Collins, Courtney G., Marko J. Spasojevic, Concepción L. Alados, Emma L. Aronson, Juan C. Benavides, Nicoletta Cannone, Chatrina Caviezel, Oriol Grau, Hui Guo, Gaku Kudo, Nikolas J. Kuhn, Jana Müllerová, Michala L. Phillips, Nuttapon Pombubpa, Frédérique Reverchon, Hannah B. Shulman, Jason E. Stajich, Alexia Stokes, **Sören E. Weber**, Jeffrey M. Diez. Global Change Biology, 26:12, *7112—7127*, 2020

4. Plant biomass, not plant economics traits, determines responses of soil CO2 efflux to precipitation in the C4 grass Panicum virgatum. Heckman, Robert W, Albina R Khasanova, Nicholas S Johnson, **Sören Weber**, Jason E Bonnette, Michael J Aspinwall, Lara G Reichmann, Thomas E Juenger, Philip A Fay, Christine V Hawkes. Journal of Ecology, 108:5, *2095—2106*, 2020
5. The influence of warming and biotic interactions on the potential for range expansion of native and nonnative species. Von Holle, Betsy, **Sören E Weber**, David M Nickerson, AoB Plants,12:5, *plaa040*, 2020
6. Fungal community assembly in soils and roots under plant invasion and nitrogen deposition. Phillips, Michala L, **Sören E Weber**, Lela V Andrews, Emma L Aronson, Michael F Allen, Edith B Allen, Fungal Ecology, 40, *107—117*, 2019
7. Shrub range expansion alters diversity and distribution of soil fungal communities across an alpine elevation gradient. Collins, Courtney G, Jason E Stajich, **Sören E Weber**, Nuttapon Pombubpa, Jeffrey M Diez, Molecular Ecology, 27, 10, *2461—2476*, 2018

Presentations

1. Plant roots in boreal peatlands under whole-ecosystem warming and elevated CO2 track nutrients, not water. **S.E. Weber**, J. Childs, J. Latimer, C.M. Iversen. Talk. Annual Meeting of the Ecological Society of America. Portland, OR USA Aug 2023
2. Plant Roots in Boreal Peatlands Under Whole-Ecosystem Warming and Elevated CO2 Track Nutrients, Not Water. Poster and flash talk (contributed poster, invited talk). **S.E. Weber**, J. Childs, J. Latimer, C.M. Iversen. Environmental System Science Program (DOE) Principal Investigator Meeting. Bethesda, MD USA May 2023
3. Rooting depth and productivity responses to SPRUCE treatments. Talk. **S.E. Weber**, J. Childs, J. Latimer, C.M. Iversen. SPRUCE Project Annual All Hands Meeting. Minneapolis, MN USA May 2023
4. Belowground Fine-Root Responses to Warming at SPRUCE: Past, Present, and Future Observations. Talk. C.M. Iversen, J. Childs, J. Latimer, A. Malhotra, C. Defrenne, **S.E. Weber***, P. Hanson et al. SPRUCE Project Annual All Hands Meeting. Minneapolis, MN USA May 2023
**answered questions, did not present*
5. Mycorrhizal Mutualisms. Outreach style talk and Q&A. **S.E. Weber**. South Carolina Governors School for Science & Math, Hartsville SC USA March 2023
6. Chthonic Connections: Plant Roots, Mycorrhizal Fungi & Ecosystem Processes. Invited Talk. **S.E. Weber**. University of Georgia, Plant Biology Seminar. Athens, GA USA February 2023
7. How does the plant-AMF mutualism scale from pairwise interactions to complex networks? Talk. **Weber, Sören**, Pascal Niklaus, Jordi Bascompte, Ansgar Kahmen, Marcel van der Heijden. Plant Science Center – Syngenta Symposium. Stein AG, CH. November 2021.
8. Partner choice and biodiversity-ecosystem functioning in the arbuscular mycorrhizal symbiosis. Talk. **Weber, Sören**, Pascal Niklaus, Jordi Bascompte, Ansgar Kahmen, Marcel van der Heijden. Plant Science Center – Syngenta Symposium. Stein AG, CH. November 2020.
9. Partner diversity & resource trade in arbuscular mycorrhizae. Talk. **Weber, Sören**, Pascal Niklaus, Jordi Bascompte, Ansgar Kahmen, Marcel van der Heijden. Plant Science Center – Syngenta Symposium. Stein AG, CH. March 2019.
10. Dirty Relationships with Fungi: The Arbuscular Mycorrhizal Symbiosis. Invited talk. **Weber, Sören**. Zürich Interaction Seminar UZH-ETH. Zürich ZH, CH. April 2019.
11. Diversity and trade in the arbuscular mycorrhizal symbiosis. Invited talk. **Weber, Sören**. University of Basel. April 2019.
12. AMF compositional and functional responses to global change. Talk. **Weber, Sören,** Michael Goulden, Jeffrey Diez, Michael Allen. Ecological Society of America. Portland OR, USA. August 2017.