

*Curriculum Vitae***Kelly S. Ramirez-Donders, Ph.D**

Postdoctoral Scholar
 Netherlands Institute of Ecology (NIOO)
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 6708 PB Wageningen, The Netherlands

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EDUCATION

Ph.D. Ecology and Evolutionary Biology,
 University of Colorado, Boulder, 2007-2012
 B.S. Biology, Washington State University, Pullman, 2007

PROFESSIONAL EMPLOYMENT

Nov 2016 – Present Co-founder 500 Women Scientists
 May 2014 – Present: Postdoctoral Scholar, Netherlands Institute of Ecology (NIOO),
 Wageningen, The Netherlands
 Jan. 2014 – April 2014: Postdoctoral Fellow, Synthesis Centre of Biodiversity
 Sciences (sDIV), Leipzig, Germany
 May 2012- Jan. 2014: Executive Director, Global Soil Biodiversity Initiative (GSBI)
 Postdoctoral Scholar, Colorado State University, Fort Collins, USA

RESEARCH INTERESTS - Microbial ecology, plant-soil interactions, climate change, drought, global change, biogeography, biogeochemical cycles, high-throughput sequencing, biodiversity data synthesis

PUBLICATIONS (*Refereed*)

- K.S. Ramirez**, LB Snoek, S. Geisen, E. Morrien, and WH van der Putten (2018). Advances in above-ground ecology, from individuals to ecosystems. *Trends in Plant Sciences*. doi.org/10.1016/j.tplants.2018.06.009
- K.S. Ramirez**, K. Koorem, O. Kostenko, LB Snoek, C. Weser, RA Wilschut, WH van der Putten. (*In review*). The microbiome of climate change induced range-expanding plants. *Nature EcoEvo*. Bach, E.M., T.D. Fraser, **K.S. Ramirez**, & D.H. Wall (*In review*). Soil biodiversity integrates solutions for a sustainable future. *Frontiers in Ecology and the Environment*.
- Keil, Petr, A.A.M. MacDonald, J.M. Bennett, **K.S. Ramirez**, B. Bourgeois, G.E. Garcia-Pena, B. Yguel, C. Meyer. (2018) Ecological and evolutionary patterns emerge in the universe of GNU/Linux operating systems. *Ecography*.
- Ramirez, K.S.**, C.G. Knight et al. and F.T. de Vries (2017). Detecting macroecological patterns in bacterial communities across independent studies of global soils. *Nature Microbiology*.
- Koorem, K, O Kostenko, LB Snoek, C. Weser, **K.S. Ramirez**, RA Wilschut, WH van der Putten. (2017). Relatedness with plant species in native community influences ecological consequences of range expansions. *Oikos*. doi:10.1111/oik.04817.
- Ramirez, K.S.**, M. Döring, N. Eisenhauer, C. Gardi, J. Ladau, J.W. Leff, G. Lentendu, Z. Lindo, M.C. Rillig, D. Russell, S. Scheu, M.G. St. John, F.T. de Vries, T. Wubet, W.H. van der Putten, D.H. Wall, (2015). Towards a global platform for linking soil biodiversity data. *Frontiers in Ecology and Evolutionary Biology* 3(91). doi: 10.3389/fevo.2015.00091
- Tedersoo, L., **K.S. Ramirez**, R.H. Nilsson, A., Kaljuvee, U. Kõljalg, K. Abarenkov. (2015) Standardizing metadata and taxonomic identification in metabarcoding studies. *GigaScience* 4:34. doi: 10.1186/s13742-015-0074-5
- García-Palacios, P., M. Vandegehuchte, E.A. Shaw, M. Dam, K. Post, **K.S. Ramirez**, Z. Sylvain, C. de Tomasel, D.H. Wall. (2014). Are there links between responses of soil microbes and ecosystem functioning to elevated CO₂, N deposition and warming? A global perspective. *Global Change Biology*. 21(4):1590-1600. doi: 10.1111/gcb.12788
- Ramirez, K.S.**, J.W. Leff, A. Barberán, S.T. Bates, J. Betley, T.W. Crowther, E.F. Kelly, E.E. Oldfield,

- E.A. Shaw, C. Steenbock, M.A. Bradford, D.H. Wall, N. Fierer. (2014). Biogeographic patterns in belowground diversity in New York City's Central Park are similar to those observed globally. *Proceeding of the Royal Society B*. 281(1795). doi: 10.1098/rspb.2014.1988
- Barberán, A., **K.S. Ramirez**, J.W. Leff, M.A. Bradford, D.H. Wall, N. Fierer. (2014). Why are some microbes more ubiquitous than others? Predicting the habitat breadth of soil bacteria. *Ecology Letters*, 17(7):794-802.
- Lauber, C.L., **K.S. Ramirez**, Z. Aanderud, J. Lennon, N. Fierer. (2013). Temporal variability in soil microbial communities across land-use types. *ISME Journal*, 7(8):1641-50.
- Ramirez, K.S.**, J.M. Craine, N. Fierer. (2012). Consistent effects of nitrogen amendments on soil microbial communities and processes across biomes. *Global Change Biology*. 18(6):1918-1927.
- Fierer, N., C.L. Lauber, **K.S. Ramirez**, J. Zaneveld, M.A. Bradford, R. Knight. (2012). Comparative metagenomic, phylogenetic, and physiological analyses of soil microbial communities across nitrogen gradients. *ISME Journal*. 6(5):1007-1017.
- Ramirez, K.S.**, C.L. Lauber, M. Bradford, R. Knight, N. Fierer. (2010). Consistent effects of nitrogen fertilization on soil bacterial communities in contrasting systems. *Ecology*. 91(12):3463-3470.
- Ramirez, K.S.**, J.M. Craine, N. Fierer. (2010). Nitrogen fertilization inhibits soil microbial respiration regardless of the form of nitrogen applied. *Soil Biology & Biochemistry*. 42:2336-2338.
- Ramirez, K.S.**, C.L. Lauber, N. Fierer. (2010). Microbial consumption and production of volatile organic compounds at the soil-litter interface. *Biogeochemistry*. 99:97-107.
- Strickland, M.S., M.A. Callahan, C.A. Davies, C.L. Lauber, **K.S. Ramirez**, D.D. Richter, N. Fierer, M.A. Bradford. (2010). Rates of in situ carbon mineralization in relation to land-use, microbial community and edaphic characteristics. *Soil Biology & Biochemistry*. 42:260-269.
- Non-Refereed*
- 2018 **Ramirez, K.S.**, Jane Zelikova & Jewel Lipps. "Harassment Charges: Enough Himpathy". *Science*. Vol. 361, Issue 6403, pp. 655. DOI: 10.1126/science.aau6858.
- 2018 *Report*. Contributing author. "Soils at Risk". European Academies Science Advisory Council.
- 2017 **Ramirez, K.S.**, et al. 2017. "The Future of Ecology Is Collaborative, Inclusive and Deconstructs Biases." *Nature Ecology & Evolution*. doi:10.1038/s41559-017-0445-7.
- Article*. Contributing author. "It's time for science and academia to address sexual misconduct". *Scientific American*.
- Article*. Contributing author. "We are never just scientists". *Scientific American*.
- 2016 *Article*. "An open letter from and to female scientists". *Scientific American*.
- Book*. Contributing author. "Global Atlas of Soil Biodiversity". European Commission-JRC.

AWARDS

2018. Nomination for AAAS Early Career Award for Public Engagement with Sci. Application
2018. Nomination for Nature Innovating Science
2018. SLOAN Scholars Mentoring Network Grant.
2014. Postdoc Fellowship and Workshop Grant. *Synthesis Centre of Biodiversity Sciences (sDIV), Leipzig, Germany*
2012. Global Sustainability Leadership Fellowship. *Colorado State University*
2011. Graduate Student Conference Travel Grant. *American Geophysical Union*
- Parkinson Conference Travel Grant. *Soil Ecology Society*
2009. 3-year Graduate Research Fellow Participant. *National Science Foundation Research Grant*, EBIO Graduate Student Grant, *University of Colorado*
2008. United Government of Graduate Students Travel Grant. *University of Colorado*
- Beverly Sears Graduate Student Research Grant. *University of Colorado*
- EBIO Graduate Student Research Grant, *University of Colorado*
- SLOAN Fellowship, *University of Colorado*
2007. Alliances for Graduate Education and Professoriate Fellowship, *National Science Foundation*

PRESENTATIONS

Invited

2018. Ramirez, K.S. “Transforming scientific institutions through crowdsourcing and gritty determination” *Gender Equality Workshop*. NTNU Trondheim, NO.

Open

2017. Ramirez, K.S. et al. “Detecting ecological patterns in microbial communities using novel machine learning approach”. Gent, Belgium.
2017. Ramirez, K.S. et al. “Interacting effects of drought and range on climate change induced plant range expansion”, *Ecological Society of America*. Portland, USA
2017. Ramirez, K.S. et al. The role of the belowground plant microbiome in climate change induced range shifts. *Soil Ecology Society*. Fort Collins, USA
2017. Ramirez, K.S., Putten, W.v.d et al. “The role of belowground plant-microbe interactions in climate change induced range shifts“, *European Geophysical Union*. Vienna, AUS
2017. Ramirez, K.S, et al. “The role of the belowground plant microbiome in climate change induced range shifts“, *NERN*. Netherlands
2016. Ramirez, K.S., F. de Vries. “Mega-meta: synthesizing microbial sequencing data” *British Ecological Society-Plant, Soil Ecosystems*. London, UK
2015. Ramirez, K.S., Putten, W.v.d. “Reorganization of microbial communities under range-shifting plants” *British Ecological Society*. Edinburgh, Scotland
2015. Ramirez, K.S. “A platform for soil biodiversity data synthesis”, *Ecological Society of America Centennial Conference*. Baltimore, MD.
2015. Ramirez, K.S., Leff, J., Fierer, N. and Wall, D.H. “An unexplored urban jungle: Assessing total soil biodiversity in Central Park, NYC”, *NERN*. Netherlands
2014. Ramirez, K.S., Putten, W.v.d. and Wall, D.H. “A road map to a global soil biodiversity database” *British Ecological Society*. Lille, France
2014. Ramirez, K.S., Putten, W.v.d. and Wall, D.H. “Beneath our feet: a framework to synthesize global soil biodiversity data”, *First Global Soil Biodiversity Conference*. Dijon, France
2013. Ramirez, K.S. Leff, J., Fierer, N. and Wall, D.H. “An unexplored urban jungle: Assessing total soil biodiversity in Central Park, NYC”, *Soil Ecology Society*. Camden, NJ.
2012. Ramirez, K.S. and Fierer, N. “Modeling the effects of increasing anthropogenic nitrogen on soil microbial decomposition”, *Ecological Society of America*. Portland, OR.
2011. Ramirez, K.S., Craine, J.M., and Fierer, N. “Patterns of soil respiration, microbial biomass, and bacterial responses across ecosystems under N amendments”, *Soil Ecology Society*. Kelowna, BC, Canada.
2010. Ramirez, K.S., Craine, J.M., Foster, B., and Fierer, N. “Ecology of bacterial communities under N amendments”, *Ecological Society of America*. Pittsburg, PA.
2009. Ramirez, K.S., Lauber, C.L., and Fierer, N. “The responses of soil microbial communities to long-term anthropogenic nitrogen addition”, *Ecological Society of America*. Albuquerque, NM.
2008. Ramirez, K.S. and Fierer, N. “Microbial production and consumption of volatile organic compounds”, *Guild of Rocky Mnt Ecologists and Evolutionary Biologist (GREEBs)*. Boulder, CO.

MEETINGS and WORKSHOPS

- 2018 *Co-Organizer* 500 Women Scientists Advisory Board meeting, Atlanta, GA
- 2017 *Invited participant*. “A global soil biodiversity database and its application to data synthesis and theory development”. sDiv, Leipzig, Germany
- 2017 *Co-Organizer* 500 Women Scientists Advisory Board meeting, Washington DC
- 2017 *Co-Organizer* 500 Women Scientists Advisory Board meeting, Boulder, CO
- 2017 *Invited participant*. “Assembling data and metadata”, *Cost Action KEYSOM*. Bucharest, Romania
- 2017 *Convener*. Session “Pressures of changing environments on plant-soil-microbe interactions“, *European Geophysical Union*. Vienna, Austria

- 2016 *Lead organizer*. “Welcome to the Twitterverse” *Social Media Workshop*, NIOO, NL
- 2016 *Co-organizer*. Workshop. EASAC “Soils at Risk”. KNAW, Amsterdam, NL
- 2016 *Invited participant*. CESAB Postdocs Synthesis Workshop. Aix en Provence, France
2015. *Co-organizer and moderator*. IGNITE Session. *Ecological Society of America*. Baltimore, USA
2015. *Co-organizer*. Workshop. “Sequencing meta-analysis workshop” Manchester University, Manchester, UK
2014. *Lead organizer*. Workshop. “Establishing a framework to link soil biodiversity data globally”, EcoFinders and the GSBI, Dijon, France.
Participant. EcoFINDERS. Manchester, UK
Participant. Biodiversity Information Standards. TDWG. Jönköping, Sweden
2014. *Lead organizer*. Workshop “soILDIV: a framework to improve our understanding of the distribution of global soil biodiversity”, iDIV, Leipzig Germany.
Invited participant. Authors meeting to finalize the Global Soil Biodiversity Atlas, Global Soil Biodiversity Initiative. Ispra, Italy.
2013. *Organizer and Moderator*. Symposium “Integrating Soil Biodiversity into Discussions of Global Sustainability: The Time Is Now” Ecological Society of America. Minneapolis, MN, USA
Organizer and Participant, Workshop to plan for a Global Soil Biodiversity Assessment, Global Soil Biodiversity Initiative. Colorado State University, CO, USA
Participant. British Ecological Society. INTECOL. London, UK
Invited Participant. Communicating with Corporations; an invitation from the Ecological Society of America. Pricewaterhouse Coopers, London, UK
2012. *Participant*. Global Soil Week. Berlin, Germany
Invited Participant. EcoFINDERS. Wageningen University, The Netherlands
Invited Participant. Open Meeting for the Global Soil Biodiversity Initiative. London, UK.
Participant. Planet Under Pressure. London, UK
Participant. UN Conference on Sustainable Development, Rio+20. Rio de Janeiro, Brazil
2010. *Participant*. Bodega Bay Phylogenetic Workshop. University of Davis.

TEACHING EXPERIENCE

- 2017/18 *Supervisor*. Bachelor Thesis. Dean de Haas. Netherlands Institute of Ecology
- 2017 *Supervisor*. Mini-projects for 4 Masters students, Wageningen University
- 2016/17 *Supervisor*. Bachelor Thesis. Alise Zvigel. Netherlands Institute of Ecology
- 2015 *Supervisor*. Bachelor Intern. Agata Tarasek. Netherlands Institute of Ecology
2015. *Guest Lecturer*, “Functional Implications of soil biodiversity”. Functional Ecology course, Wageningen University, the Netherlands
2014. *Guest Lecturer*, “Functional Implications of soil biodiversity”. Functional Ecology course, Wageningen University, the Netherlands
2014. *Guest Lecturer*, “Soil Biodiversity in Central Park”. University of North Carolina, NC
2014. *Guest Lecturer*, “Soil Biodiversity in Central Park”. Edward’s University, Austin, TX
2012. *Biodiversity Expert*, “Educurious”- High school outreach program, U of Washington
- 2008-2010. *Instructor*, Critical Thinking NIH-HHMI Seminar, University of Colorado
2008. *Teaching Assistant*, Microbiology Lab, University of Colorado
2007. *Teaching Assistant*, General Biology Lab, University of Colorado

SYNERGISTIC ACTIVITIES

- 2018 *Moderator* Banishing your inner imposter webinar. The Science Network of UCS.
- 2018 *Participant*, SciComm training, Atlanta, GA, USA
- 2016-Current. *Co-Founder, Non-Profit* - 500 Women Scientists.
- 2016 *Coordinator*, Terrestrial Ecology Department Strategic Day, NIOO, NL
- 2015-16 *Member*, Terrestrial Ecology Department Communications Committee, NIOO, NL
2015. *Presenter*, European IgNobel Awards, 24/7 Presentation on “Soil Biodiversity”, Amsterdam, NL

2015. *Participant*, Leadership in your Career Training, Netherlands Institute of Ecology
2015. *Author*, Global Soil Biodiversity Atlas. Colorado State University
2015. *Participant*, Center for Soil Ecology. Wageningen, NL
2014. *Member*, Science Committee of the First Global Soil Biodiversity Conference. Dijon, FR
2014. *Participant*, Science communications committee. Netherlands Institute of Ecology
2014. *Participant*, NIOO's Web and PR Editorial Board. Netherlands Institute of Ecology
2013. *Coordinator*, IGNITE Biodiversity Symposium. Colorado State University
2012. *Fellow*. School of Global Environmental Sustainability Fellow. Colorado State, USA
2012-2014. *Regular Contributor*, Early Career Ecologists Blog
2008-2011. *Graduate Advisor*, Summer Multicultural Access to Research Training (SMART), CU
2007-2012. *Participant*, Colorado Diversity Initiative, University of Colorado
2008- 2010. *Volunteer*, NIH-HHMI Scholars Program, University of Colorado
2008-2009. *Coordinator*, Evolution Outreach Committee. EBIO Department, University of Colorado

PRESS- *Selected interviews and articles*

2017. *Article. The Atlantic.* 'Women Are Invited to Give Fewer Talks Than Men at Top U.S. Universities'.
2016. *Article. Washington Post.* 'Scientists are really, really worried'.
2014. *Interview. NPR Morning Edition.* 'Soil Doctors Hit Pay Dirt in Manhattan's Central Park'
Article. The Scientist. 'Soil Microbiome of Central Park'

Reviewer - Nature Communications, Journal of Ecology, Global Change Biology, Ecology, ISME, New Phytologist, Soil Biology and Biochemistry, Journal of Biogeography, Oecologia, Frontiers in Ecology and Evolution, Science Reports, Ecology Letters

Memberships - Ecological Society of America; Soil Ecology Society; American Geophysical Union; British Ecological Society; European Geophysical Union.

REFERENCES

(Supervisors)

Wim van der Putten, Director and Professor
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Netherlands Institute of Ecology
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Noah Fierer, Associate Professor
Ecology and Evolutionary Biology &
Cooperative Institute for Research in
Environmental Sciences
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School of Global Environmental Sustainability
Colorado State University
Fort Collins, CO 80523-1036
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(Collaborators)

Jane Zelikova, Co-Founder 500 Women
Scientists & Research Scientist
Boulder, Colorado
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Franciska de Vries, Assistant Professor
School of Earth and Environmental Sciences
The University of Manchester
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