

DIANA HARRISON WALL

**University Distinguished Professor, Director, School of Global Environmental Sustainability and
Professor, Department of Biology**

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EDUCATION

Ph.D. Plant Pathology. University of Kentucky, Lexington.
B.A. Biology. University of Kentucky, Lexington.

PROFESSIONAL EMPLOYMENT

2008- present Inaugural Director, School of Global Environmental Sustainability, Colorado State University (CSU), Fort Collins, CO
2006- present Professor, Department of Biology, CSU
1993-present Senior Research Scientist, Natural Resource Ecology Laboratory, CSU
1993-2006 Professor, Forest, Rangeland, and Watershed Stewardship Department, CSU
1993-2005 Director, Natural Resource Ecology Laboratory, CSU
2001 Interim Dean, College of Natural Resources, CSU
1993-2000 Associate Dean for Research, College of Natural Resources, CSU
1993 Professor, Dept. Nematology, University of California (UC), Riverside
1990-1993 Associate Professor and Associate Nematologist, Dept. Nematology, UC Riverside
1982-1990 Associate Research Nematologist, Dept. Nematology, UC Riverside
1988-1989 Associate Program Director, Ecology Program, National Science Foundation (NSF), Washington, DC
1986-1988 Associate Director, Drylands Research Institute, UC Riverside
1976-1982 Assistant Research Nematologist, Dept. Nematology, UC Riverside
1975-1976 Lecturer, Dept. Plant Science, California State University, Fresno, CA
1972-1975 Postgraduate Research Nematologist, Dept. Nematology, UC Riverside
1971-1972 Biology Teacher, Julius T. Wright School for Girls, Mobile, AL
1970-1971 Director, Biology Laboratories, Mobile College, Mobile, AL

HONORS

2019 **2019 President's Medal**, British Ecological Society
Eminent Ecologist, Kellogg Biological Station, Michigan State University
2018 **Elected member**, National Academy of Sciences
2017 **Eminent Ecologist**, Ecological Society of America
Fellow, California Academy of Sciences
2016 **Honorary Member**, British Ecological Society
Awardee, Zonta Club, Women's Legacy of Fort Collins
Roscoe Ellis, Jr. Lecturer, Department of Agronomy, Kansas State University
2015 **38th T.B. Macaulay Lecturer**, The James Hutton Institute, Edinburgh, Scotland
Ulysses Medal, University College Dublin
Montgomery Fellow, Dartmouth College, NH
2014 **Storer Life Sciences Endowment Lecturer**, UC Davis, CA
Elected Member, American Academy of Arts and Sciences
Member, Colorado Women's Hall of Fame
William E. Larson and Raymond R. Allmaras Lecturer, Emerging Issues in Soil and Water, Department of Soil, Water and Climate, University of Minnesota
Distinguished Service Award, CSU Office of International Programs
2013 **Tyler Prize for Environmental Achievement**
Soil Science Society of America Presidential Award
Shell Distinguished Woman in Science Lecturer, Women in Math and Sciences, The Ohio State University
Brown & Williamson Speaker, University of Louisville.

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- 2012 **Charles Jenner Memorial Lecture**, University of North Carolina.
Medal for Excellence in Antarctic Research, Scientific Committee on Antarctic Research (SCAR)
- 2011-2013 **Fellow**, Ecological Society of America
- 2012 **Mines Medal**, South Dakota School of Mines & Technology
President's Member, U. S. Antarctic Program Blue Ribbon Panel
Tansley Lecturer, British Ecological Society
- 2010 **2010 Resident Distinguished Ecologist lecture**, CSU Graduate Degree Program in Ecology
- 2009 **University Distinguished Professor**, Colorado State University
Unduloribates diana (Behan-Pelletier et Walter, 2009) (Acari: Oribatida) described
- 2008 **Golden Beaker Award** for Outstanding Performance, MCM LTER Soil Ecology team, McMurdo Station Helicopter Operations (07-08 season), Antarctica
- 2007 **Distinguished Ecologist**, Program in Ecology, University of Wyoming
- 2006 **Honorary Doctorate**, Utrecht University, The Netherlands
- 2005-2011 **At Large Individual Member**, United States National Commission, United Nations Educational, Scientific, and Cultural Organization (UNESCO)
- 2005-2007 **Member**, International Ecology Institute
- 2005 **Wall Valley, Antarctica**, named in 2004 by the U.S. and New Zealand Advisory Committees on Antarctic Names in honor of research in soil biology conducted in the McMurdo Dry Valleys starting in 1989. Location: 77°29'S, 160°51' E (Designated by the USGS and ICSU Scientific Committee on Antarctic Research)
- 2003-2006 **Co-chair**, Aldo Leopold Leadership Program
- 2003 **Edwin Way Teale Lecturer**, University of Connecticut
- 2003 **Soil Ecology Society Professional Achievement Award**
- 2002 **Ton Damman Distinguished Lecturer in Ecology**, Department of Biology, Kansas State University
- 2001 **National Associate**, of the National Academy of Sciences
- 1999 **Awardee**, CSU Academic Faculty & Administrative Professional Women's Caucus
Fellow, Aldo Leopold Leadership Program
- 1998 **Fellow**, American Association for the Advancement of Science
- 1998 **Distinguished Research Professor**, Univ. California, Davis, Bodega Marine Laboratory
- 1995 **Fellow**, Society of Nematology
- 1990 **United States Antarctic Service Medal**
- 1975-1976 **Faculty Fellow**, California State University, Fresno

OFFICES HELD

- 2004 **President**, Association of Ecosystem Research Centers
- 2003 **Chair**, Council of Scientific Society Presidents
- 1999-2000 **President**, Ecological Society of America
- 1993 **President**, American Institute of Biological Sciences
- 1984-1985 **President**, Intersociety Consortium for Plant Protection
- 1983-1984 **President**, Society of Nematologists
- 1983-1985 **President**, Sigma XI, University of California, Riverside

BOARDS AND FOUNDATIONS

- 2020- present **Chair**, NAS Polar Research Board, Washington, DC.
Member, Restor Foundation Council, Zurich, Switzerland.
- 2019-present **Member, Science Advisory Board**, German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig.
Member, External Advisory Board, Institute on the Environment, Univ. Minnesota.
- 2018-present **Member**, International Science Advisory Board, Revitalization of Informal Settlements and their Environments (RISE), Monash University, Melbourne, AUS
- 2011- present **Science Chair**, Scientific Advisory Committee, Global Soil Biodiversity Initiative
- 2011- 2012 **Member**, South Dakota School of Mines, University Advisory Board
- 2006- 2014 **Member**, World Resources Institute, Board of Directors
- 2007- 2013 **Member**, Advisory Board, Aldo Leopold Leadership Program, Stanford University

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- 2001-2013 **Member**, Island Press Board of Directors
 2006-2011 **Member**, UNESCO International Hydrological Program US National Committee
 2006-2008 **Member**, Scientific Advisory Committee, Institute of Arctic & Alpine Research, Univ. Colorado
 2005-2008 **Member**, Polar Research Board, National Research Council
 2005-2006 **Member**, AAAS Advisory Committee on International Science
 2005-2008 **Member**, Scientific Advisory Board, United Kingdom Population Biology Network (PopNet)
Member, Programme Advisory Committee, Conservation & Sustainable Management of Belowground Biodiversity Project, Tropical Soil Biology and Fertility Inst. of CIAT, Nairobi

RESEARCH GRANT EXPERIENCE (2014-Present)

- 2016 - 2020 Co-PI, NSF Polar Programs. Collaborative Research: *The role of glacial history on the structure and functioning of ecological communities in the Shackleton Glacier region of the Transantarctic Mountains*. Lead PI, B. J. Adams, BYU, Co-PIs, I. Hogg, Univ. Waikato, Noah Fierer, CU, W.B. Lyons, Ohio State Univ. CSU \$114,864. NSF OPP 1341648 (9/1/16-8/31/19)
 2017 - 2019 Principal Investigator, CSU VPR. Developing a CSU-Brazil collaboration to explore the soil biodiversity-one health interface and land -use change in Amazonia. Co-PIs, Bruno Sobral, CSU One Health Institute: Andre Franco, Biology.
 2015-2018 Principal Investigator, NSF Geo: *Collaborative Research: Development of the US Hub of the Future Earth Secretariat*. Co-PI and LEAD, Dennis Ojima, CSU. NSF 1450657. \$377,993.
 2015-2018 Principal Investigator, NSF DEB Ecosystems. *Collaborative Proposal: Water availability controls on above-ground productivity partitioning: Herbivory versus plant response*. PI Osvaldo Sala (Arizona State University). NSF1 456631, \$160,481.
 2011-2017 Co-Investigator, NSF DEB Long Term Ecological Research (LTER). *Increased connectivity in a Polar desert resulting from climate warming: McMurdo Dry Valley LTER Program*. PI, Diane McKnight, (University of Colorado.), 5,640,000. CSU for Wall (Biology) and Howkins (History). 427,026.

LEADERSHIP/SERVICE

International

- 2020 - **Member**, Editorial Board, *Soil Organisms*
Reviewer, African Women in Agricultural Research and Development (AWARD), One Planet Fellowships.
 2019-2020 **Member**, Editorial Board, FAO Report, *State of Knowledge of Soil Biodiversity: Status, Challenges and Potentialities*, FAO, Rome
 2019-2021 **Member**, Scientific Committee, FAO Global Symposium on Soil Biodiversity
 2019-present **Member**, Leadership team, Global Initiative of Crop Microbiome and Sustainable Agriculture
 2019-present **Co-chair**, Soil Biodiversity Observation Network, (Soil BON), thematic program of GEO BON
 2019 **Chair**, NAS-EURASC Workshop Planning Committee, Understanding and Responding to Global Health Security Risks from Microbial Threats in the Arctic, National Academy of Sciences and European Academy of Sciences
 2018-2019 **Review participant**, *Frontiers in Microbiology*, section Terrestrial Microbiology, Research Topic: The soil microbiome and multitrophic interactions that regulate soil carbon and nutrient flux.
 2017-2020 **Member**, International Soil Modeling Consortium Advisory Board.
 2016- **Member**, Scientific Advisory Panel, Centre for Microbiology and Genomics, University of Pretoria, South Africa
 2016-2019 **Member**, African Soil Microbiology USAID-DHET Project, PI, Don Cowan, Univ. Pretoria, South Africa.

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- 2015-2019 **Advisor**, European COST Action: Soil Fauna: Key to Soil Organic Matter Dynamics and Modeling.
- 2014-present **Member**, International Science Advisory Committee, ISRIC World Soil Information.
- 2014-2019 **Member**, Strategic Cooperation Board, Cooperation between EU & US Research Infrastructure, COOPEUS.
- 2014-2016 **Advisor**, XVII International Colloquium on Soil Zoology.
- 2012-2020 **Member**, Steering Committee, Scientific Committee on Antarctic Research (SCAR) Antarctic Thresholds – Ecosystem Resilience and Adaptation (AnT-ERA), Life Sciences Programme.
- 2012-2018 **Member**, International Science Panel, New Zealand Antarctic Research Institute
- 2012-2015 **Member**, Advisory Board, EcoFINDERS (Ecological Function and Biodiversity Indicators in European Soils). European Science Project, European Commission
- 2011-2018 **Member**, Scientific Committee on Antarctic Research (SCAR), USA Standing Committee on Life Sciences
- 2011-2013 **Member**, Scientific Committee, First Wageningen Conference on Applied Soil Science, The Netherlands.
- 2009 **Selection Jury Member**, ECI prize in Terrestrial Ecology.
Expert Panel Member on Soil, Working Group on the Environment, Roundtable on Sustainable Biofuels, Switzerland.
External Reviewer, Ecological Reviews Series, Cambridge University Press and British Ecological Society.
Lecturer, International Ph.D. course on Soil Ecology: crossing the frontier between below and above ground. Wageningen, The Netherlands, February.
- 2008 **Member**, Appointments and Promotions Board, Swedish University of Agricultural Sciences, Department of Forest Vegetation Ecology, Umeå, Sweden
- 2006 **Overseas Co-Organizer**, Integrative Approaches for the Investigation of Root Herbivory in Agricultural and Natural Systems International Workshop. Prof. P. Gregory, Univ. Reading, UK, Organizer. October. UK Biotechnology and Biological Sciences Research Council
- 2004-2008 **Member**, International Board, Frontiers in Ecology and the Environment, journal of the Ecological Society of America
- 2003-2007 **Co-Lead Author and Co-chair**, Implications for Achieving the Millennium Development Goals, Chapter Committee of the Millennium Ecosystem Assessment
- 2003-2005 **Chair**, DIVERSITAS International Biodiversity Observation Year (IBOY) - Global Litter Invertebrate Decomposition Experiment (GLIDE)
- 2000-2006 **Chair**, DIVERSITAS International Biodiversity Observation Year
- 1999-2002 **Member**, International Advisory Panel for 2001 Meeting on Detecting Climate Change, London
- 1999-2001 **Member**, Steering Committee, Biological Investigations of Terrestrial Antarctic Systems of the Scientific Committee on Antarctic Research (SCAR)
- 1998 **Member and SCOPE Representative** to DIVERSITAS Scientific Steering Committee
- 1996-2001 **Chair**, International Planning Committee for the “Functional Role of Soils Biota under Global Change: An Ecosystem-level Perspective.”
- 1996-1997 **Chair**, SCOPE Committee on Biodiversity and Ecosystem Functioning in Soils and Sediments
- United States**
- 2019-present **Member**, Advisory Board Member, Salazar Center for North American Conservation
Member, Steering Committee, CSU Data Science Research Institute
- 2019 **Member**, CSU Women in Science Mentoring and Networking Group.
- 2019-present **Member**, CSU ONE-Health Advisory Committee.
Member, Search Advisory Committee for the Hire of the CSU President
- 2010-2011 **Member**, NRC Committee on *Future Science Opportunities in Antarctica and the Southern Ocean*. (published September 2011).

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- Member**, PCAST Working Group on Biodiversity Preservation and Ecosystem Sustainability: Report to President's Council of Advisors on Science and Technology (PCAST), Washington, DC. *Sustaining Environmental Capital: Protecting Society and the Economy* (release date August 2011)
- 2009-2011 **Investigator**, Kellogg Biological Station LTER (1996 -)
- Member**, McMurdo Area Users Committee, Raytheon Polar and NSF
- Member**, Soil Ecology Society Professional Achievement Award Selection Committee
- Member**, NEON Domain 10 Science and Education Coordination Committee
- Member**, Committee for Proposal Review, Institute of Environment, Univ Minn.
- 2008-2010 **Member**, McMurdo LTER Executive Committee
- 2008 **Participating Scientist**, NEON Domain 10 Central Grasslands
- Member**, Ecological Society of America Nominating Committee

Editorial Boards and/ or associate/ review editor: *Soil Organisms* (Board Member, 2020), *SOIL* (2016-2018), *Frontiers in Ecology and Evolution* (Review Editor, 2017- 2018, Associate Editor, 2015-2016), *Environmental Research Letters* (2013-2016), *Global Soil Biodiversity Atlas* (2013-2015), *Encyclopedia of Biodiversity* (2005-2015) *Environmental Development* (2011- 2013) *Oecologia* (1997-1999), *Ecosystems* (1997-1998), *The International Journal of Meiofaunal Zoology* (1995-1998) Editorial Advisory Board, *Applied Soil Ecology* (1993-1998)

INVITED TALKS AND SEMINARS (2015-Present)

- 2020 *The Release of the FAO Global Soil Biodiversity Report and the Global Soil Biodiversity Initiative*. FAO North America World Soil Day, webinar panelist, Washington, DC, December.
- Soil Biodiversity and the Sustainable Development Goals*. World Soil Day 2020: Keep soil alive, protect soil biodiversity, webinar panelist, FAO of the United Nations New York, December.
- Global Soil Biodiversity Status and Needs*. AGU Town Hall, Soils in the Anthropocene: The Global Soil Biodiversity Initiative – Paving the way towards a Soil Biodiversity Observation Network. Panelist for webinar. December.
- Lessons from an Antarctic desert: documenting climate change and measuring its impact on soil life*. Experiment Interaction Group, German Centre for Integrative Biodiversity Research Halle-Jena-Leipzig, December.
- Soil Biodiversity and Human Health: an emerging research priority*. 21st European Molecular Biology Laboratory (EMBL), Science & Society Conference, Our House is Burning : Scientific & Societal Responses to Mass Extinction, Heidelberg, November.
- Soil Life and Climate Change: Lessons from cold Antarctic to hot deserts*. Department of Ecology. Swedish University of Agricultural Sciences, Uppsala, November.
- 2019 *Bridging soil biodiversity, ecosystem services, and global policy*. Soil Security Programme, London, England, December.
- The case for global soil biodiversity collaboration*. Wepking, C and D. Wall. Soil Science Society of America, San Antonio, TX, November.
- Greenhouse gases*. The Society of Environmental Journalists, Fort Collins, CO, October.
- The importance of global soil biodiversity*. Invited plenary. The Society of Environmental Journalists, Fort Collins, CO, October.
- Soil life and climate change: Lessons from cold Antarctic to hot deserts*. Program in Ecology Invited Speaker, University of Wyoming, Laramie, WY, September.
- Soil biodiversity on the global stage: Identifying priorities, opportunities, and challenges*. Wepking, C. and D. Wall. Ecological Society of America, Louisville, KY, August.
- Soil life moves the world stage*. Eminent Ecologist Lecture, W. K. Kellogg Biological Station, Michigan State University, June.
- Soil life and climate change: Lessons from cold Antarctic to hot deserts*. Eminent Ecologist Lecture, W. K. Kellogg Biological Station, Michigan State University, June.
- Bridging soil biodiversity science and global policy*. Soil Ecology Society Meeting, Toledo, OH, May.
- Soil Biodiversity and Global Environmental Challenges*. Department of Nematology, University of California Riverside, Riverside, CA, February.
- Bridging soil biodiversity science and global policy action*. Soil Science Society of America, San Diego, CA, January.

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- 2018 *The Case for a Global Soil Biodiversity Initiative: A scientific agenda*. Bach, E. and D. Wall. sDIV Workshop, Leipzig, Germany, September.
Soil Biodiversity and Global Change. Invited lecturer in AnT-ERA/SCAR Summer Course, Buenos Aires, Argentina, September.
Soils and soil biodiversity: Providing global scale benefits. Invited keynote. Bach, E. and D. Wall. World Congress on Soil Science, Rio de Janeiro, Brazil, August.
Soil biodiversity, human health and climate change. World Congress on Soil Science, Rio de Janeiro, Brazil, August.
The Case for a Global Soil Biodiversity Assessment: Gaps, priorities and significance. Wall, D. and E. Bach. Ecological Society of America, New Orleans, August.
Paving the Way: Advancing nematology. Plenary address, Society of Nematologists Meeting: Symposium on Women in Nematology: A tribute to Virginia Ferris, Albuquerque, NM, July.
Fostering creative, interdisciplinary approaches to sustainability grand challenges. Empraba, Belem, Brazil, June.
Fostering creative, interdisciplinary approaches to sustainability grand challenges. Instituto Tecnológico Vale, Belem, Brazil, March
- 2017 *Common Ground: Soil biodiversity and DNA barcoding*. Keynote lecture. 7th International Barcode of Life Conference, Kruger National Park, Skukuza, South Africa, November.
Global Soil Biodiversity: a common ground for sustaining soils. Plenary address, Elizabeth M. Bach, co-author. 2nd Global Soil Biodiversity Conference, Nanjing, China, October.
Sustaining Soils: the critical role of soil biodiversity. Plenary lecture, the 3rd International Symposium on Nematodes. Association of Applied Biologists, Institute of Technology, Carlow, Ireland, June.
Life in Extreme Ecosystems. Keynote address, Expanding Your Horizons (STEM program for young girls). Colorado State University, Fort Collins, CO, April.
Soil Biodiversity, human health and politics. Master class and Symposium on Frontiers in Ecology: the soil-plant interface, Wageningen University, The Netherlands, March.
Lessons from an Antarctic cold desert: response of soil life to climate change. Utah State University, Logan, UT, March.
Common Ground: Soil biodiversity and sustainability. Utah State University, Logan, UT, March.
- 2016 *Soil biodiversity: necessary for life*. UNCBD GSBI Side Event to Launch the Global Soil Biodiversity Atlas, Cancun, Mexico, December.
Common Ground: soil biodiversity for humanity and ecosystems. NRC Board on International Scientific Organizations Symposium on Soils: The Foundation of Life. National Academy of Sciences, Washington, DC, December.
Common Ground: Soil biodiversity and sustainability. California Academy of Sciences, keynote lecture at the Annual Fellows Gathering, San Francisco, November.
The Global Microbiology Scene, First Field planning meeting for the African Soil Microbiology Project (USAID-DHET), University of Pretoria, South Africa, October.
Meeting global challenges through soil ecology. EU COST Action First Training School, ‘Soil Fauna – key to soil organic matter dynamics and modeling’, Coimbra, Portugal, October.
Ecological responses of an experimental manipulation in a McMurdo Dry Valley (MCM) Soil Ecosystem. Meeting of Scientific Committee on Antarctic Research, Malaysia, August.
Soil Nematology: bringing a wealth of knowledge to sustainability. Society of Nematologists – Organization of Tropical American Nematologists, Quebec City, July.
Our Common Ground: soil biodiversity and sustainability. UN Environmental Assembly, Green Room Event, Symposium to Launch the Global Soil Biodiversity Atlas, Nairobi, Kenya, May
Common Ground: Soil biodiversity and sustainability. Roscoe Ellis, Jr. Lecture, Dept. Agronomy, Kansas State University, April.
Soil biodiversity: ecosystem assets of tropic interactions. International Soil Modelling Consortium, Austin, TX April.
Soils, biodiversity and climate change: lessons from an Antarctic desert ecosystem. University of Oklahoma, March.
Tiny but mighty: the importance of soil biodiversity. Sutton Lecture, University of Oklahoma, March.
Common Ground: soil biodiversity and sustainability. Cohen Center for the Study of Technological Humanism, James Madison University, February.

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- 2015 *The Global Soil Biodiversity Initiative*. Urban Ecology Symposium, SSSA-Entomological Society Joint Meeting, Minneapolis, November.
Soil Biodiversity: critical forces for a common ground. Garden Club of Denver, November.
The McMurdo Dry Valleys and climate change: interdisciplinary science forges new understanding. Symposium honoring the diverse career of W. Berry Lyons: Geochemistry from polar deserts to tropical watersheds. Geological Society of America, Baltimore, October.
Global soil biodiversity: establishing common ground for sustainability. 38th T.B. Macaulay Lecture, The James Hutton Institute, Edinburgh, Scotland, October.
Long-term ecological research: A perspective from the top of the food chain at the bottom of the world. LTER All Scientist Meeting, Estes Park, CO, August.
Ecology of the underworld and why it matters for human health. Ecological Society of America, Baltimore MD, August.
Response of life in arid terrestrial ecosystems to change. SCAR Cross Program Workshop, Barcelona, Spain, September.
Ecology of the underworld and why it matters for human health. D. Wall and J. Six. Ecological Society of America, Baltimore, MD, August.
Biodiversidad en el suelo. Keynote lecture. Costa Rica National Soil Congress, March.
Soil biodiversity in the cold: life in the Antarctic Dry Valleys. Montgomery Fellow Lecture, Dartmouth College, NH, March.

INVITED PARTICIPANT (2015-Present)

- 2020 Invited panelist, AGU Town Hall panel. *Soils in the Anthropocene: The Global Soil Biodiversity Initiative: Paving the Way toward a Soil Biodiversity Observation Network (Soil BON)*. American Geophysical Meeting. December.
 Annual Advisory Board meeting, *Centre for Microbial Ecology and Genomics*, University of Pretoria, South Africa. November.
 Invited participant, *ANGLES* (A Network for Graduate Education and Leadership in Sustainability) workshop, SESYNC, Annapolis, MD, February.
- 2019 Panelist, *Future of Ecosystem Research*, Ecosystem Science in the Anthropocene Symposium, Fort Collins, CO, October
 Invited participant, *International Symposium on Conservation Impact*, Salazar Center for North American Conservation, Denver, CO, October.
 Invited participant, *Co-production of Sustainability Science Workshop*, Raleigh, NC, Duke University, September.
 Invited participant, *Tyler Prize Award*, San Francisco, CA, May.
 Invited participant, *Future Earth and National Academy of Sciences Sustainability Meeting*, Denver, CO, May
 Invited participant, *Soil Unit of the European Union Joint Research Center Soil BON meeting*, Ispra, Italy, May.
 Board meeting, *Revitalising Informal Settlements and Environments Program*, Makassar, Indonesia, March.
- 2018 Invited participant, *ANGLES Workshop and Leopold Leadership Panel*, Minneapolis, MN, May.
- 2016 Participant. *White House Office and Science and Technology Policy (OSTP)*, workshop “Gaining ground – Soil as a Renewable Resource”. June.
 Panelist, Speaker, *Soils. Spring Meeting of the NRC Board on Earth Sciences and Resources*, National Academy of Sciences, Washington, DC. April.
 Participant, *The Fan: Environment, Society and Economics on the brink*, Crans Montana, Switzerland. April.
- 2015 Invited Participant. 2015 SCAR Cross Disciplinary Workshop “Interactions between biological and climate processes in the Antarctic”. Barcelona, Spain. September.
 Panelist, *The Crisis and Creativity Symposium at Colorado State University: Collaboration of the Arts, Humanities, Social Sciences, and Sciences*. Organized by Montfort Professor Dan Beachy-Quick, CSU, July.

MEETING CHAIR or CONVENOR (2015-Present)

- 2018 **Co-organizer**, with E. Bach (CSU), Session: *Integrating disciplines to assess global soil biodiversity*. Ecological Society of America, New Orleans, LA, August.
- 2017 **Science chair**, 2nd Global Soil Biodiversity Conference, Nanjing, China, October

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- Co-organizer**, with E. Bach (CSU), Session: *From microbes to moles: Diversity in soils support resilience in ecosystem services*, Ecological Society of America, Portland, Oregon, August.
- 2016 **Co-organizer**, with E. Bach (CSU), Session: *Mainstreaming soil biodiversity into global biodiversity*, UN Convention on Biological Diversity, Cancún, Mexico, December.
- Co-organizer**, with A. Franco (CSU), Session: *Unearthing the role of global soil biodiversity in ecosystems*, Soil Science Society of America, Phoenix, Arizona, November.
- Co-organizer**, with W. Andriuzzi (CSU), *Antarctic Lecture Series*, Fort Collins Library, January – June and September-December.
- 2015 **Co-organizer**, with T. Fraser (CSU), Session: *Weaving the soil biodiversity food web: advancements in understanding on a global scale*. Ecological Society of America, Baltimore, Maryland, August.
- Co-organizer**, with M. Knox and W. Andriuzzi (CSU), *Antarctic Lecture Series*, Fort Collins Library, January – June and September-December

REVIEWER

- Journals:** American Naturalist, American Midland Naturalist, Applied Soil Ecology, Arctic, Antarctic and Alpine Biology, Biology and Fertility of Soils, BioScience, Ecology, Ecology Letters, Ecological Monographs, Ecosystems, Geoderma, Global Change Biology, Great Basin Naturalist, Holarctic Ecology, Journal of Environmental Quality, Journal of Nematology, Oecologia, OIKOS, Nematologica, Nematropica, Pedobiologia, Polar Biology, Soil Biology and Biochemistry, Science, Nature,
- Proposals:** NSF Divisions of: Ecology, Systematic Biology, Ecosystems, Population Biology, Physiological Ecology, Polar Programs, International Programs, Visiting Professorships for Women, Research Facilities. EU, NZ, & other countries. US Environmental Protection Agency, USDA Competitive Grants, US Department of Energy, Sigma Delta Epsilon. National Research Council Board on Science and Technology for International Development. NERC- UK, Women's International Science Collaborative Program. American Association for the Advancement of Science, European Science Foundation

MEMBERSHIPS

American Association for the Advancement of Science, American Geophysical Union, American Institute of Biological Sciences, American Phytopathological Society, American Women in Science, British Ecological Society, Ecological Society of America, European Society of Nematologists, Gamma Sigma Delta, International Society of Soil Zoology, International Association for Ecology, Organization of Tropical American Nematologists, Sigma Xi, Society of Nematologists, Soil Ecology Society, Soil Science Society of America.

EDUCATION/TEACHING ACTIVITIES

COLORADO STATE UNIVERSITY

Sustainability Leadership Fellows Program, School of Global Environmental Sustainability

2011- present, 20 Ph.D./ Post Docs selected annually for 2 semester training. See <http://sustainability.colostate.edu/slf-program>, total trained 160.

CSU Honors Program

- 2018-present Nisha Gull (with Dr. Andre Franco, Cecilia Tomasel)
 2017-2018 Abigail Jackson (with Dr. Andre Franco, Cecilia Tomasel)
 2012-2014 Deanna Cox (with Ashley Shaw and Cecilia Tomasel)
 2010-2011 Kyrie Ivanovich (with Uffe Nielsen, Ashley Shaw and Cecilia Tomasel)
 2007-2008 Sarah Atherton

NSF Research Experience for Undergraduates Award MCM LTER

- 2006- 2007 Sarah Atherton, NSF MCM LTER REU
 2004 John Tipton, NSF MCM LTER REU

Undergraduate Student Mentoring

- Abigail Jackson, CSU (with Dr. Andre Franco, post doc), 2017- 2018
 Deanna Cox, CSU, (by Ashley Shaw and Cecilia Tomasel), 2012-2014
 Cox, D. J. (2014). *The effect of freezing on survival of Antarctic nematode genera Eudorylaimus, Plectus, and Scottinema*. Honors Undergraduate Thesis, Colorado State University, Fort Collins, CO.
 Kyrie Ivanovich, CSU, (with Ashley Shaw and Cecilia Tomasel), 2009-2011.
 John Chaston, Brigham Young University, MOU internship, Antarctic Field Season, 2004-2005
 Kate Norvell, Soil Science Department, Colorado State University
 Adler Dilman, Brigham Young University, MOU internship, Antarctic Field Season, 2005-2006

Courses Taught

Fall 2017

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-GDPE 592 – Soil Ecology in the Anthropocene (co-taught with Dr. Walter Andriuzzi, Dr. Elizabeth Bach, Dr. Andre Franco, Graduate Program in Ecology)

Spring 2010

-EY 592/BZ 692 – Ecology of Extreme Environments (co-taught with Dr. Shane Kanatous, Dept. Biology)

Fall 2009

-BZ 692C (2 students) and BUS 690-003 (25 students): Global Change, Ecosystems and Sustainable Decisions. BUS taught in Global Social and Sustainable Enterprise Program, College of Business: BZ for Biology Graduate Students

Fall 2008

-BZ 692C (4 students) and BUS 690-003 (24 students): Global Change, Ecosystems and Sustainable Decisions. BUS taught in Global Social and Sustainable Enterprise Program, College of Business: BZ for Biology Graduate Students

Spring 2008

-EY 592/BZ 692 – Ecology of Extreme Environments (co-taught with Dr. Shane Kanatous, Dept. Biology)

Fall 2007

-BZ 690C and BUS 690-002 – Global Environmental Change: Challenges for Ecology and Economics (23 students: 2 BZ, 21 BUS) BUS taught for Global Social and Sustainable Enterprise Program, Business College: BZ for Biology Graduate Student

Spring 2007

-EY 592/BZ 692 – Ecology of Extreme Environments (co-taught with Dr. Shane Kanatous, Dept. Biology)

Fall 2002

-Seminar Series, Future Directions of Global Ecosystem Science (co-taught with Dr. Dave Theobald)
-Communicating Science. (co-taught with Dr. Dennis Ojima and Dr. Kathy Galvin)

Spring 1999

-EY 592 (Graduate Degree Program in Ecology) Methods in Ecosystem Science, 1 lecture, 1 lab

Fall 1996

-EY 592 (Graduate Degree Program in Ecology), Current Topics in Soil Ecology

Mentoring Young Scientists

Postdoctoral Scientists

Monica Farfan, Ph.D. University of Illinois-Chicago (2020-present)
Carl Wepking, Ph.D. Virginia Polytechnic Institute and State University (2018-2019)
Andre Franco, Ph.D. University of Sao Paulo (2015-2019)
Elizabeth Bach, PhD. The Nature Conservancy, Illinois (2016- 2018)
Walter Andriuzzi, Ph.D. Nature Communications (2015-2018)
Tandra Fraser, Ph.D. Agriculture and Agri-Food Canada (2014- 2016)
Matthew Knox, Ph.D. Univ. Waikato (2013-2015)
Kelly S Ramirez, Ph.D. NIOO, Wageningen, The Netherlands (2012-2014)
Pablo Garcia-Palacios, Ph.D. (Fulbright Fellow) Spain (2012-2013)
Martijn Vandegechuhte, Ph.D. Belgium (2011- 2013)
Uffe Nielsen, Ph.D., Western Sydney University, Australia (2008-2011)
Breana Simmons, Ph.D., University of Georgia, (2005- 2009)
Edward Ayres, Ph.D., NEON (2005- 2008)
Johnson Nkem, Ph.D., Univ. New England, NSW, Australia (2003-2005)
Emma Broos, Ph.D., Univ. Western Sydney, Australia (2003-2005)
Dorota Porazinska, Univ. Florida, 1999-2002 (promoted to Scientist, 2001)
Gina Adams, Ph.D., Sheffield University, 1999-2002
Andrew Parsons, Ph.D., Manchester University, 1997-2003 (promoted to Scientist, 2000)
Debbie Krumm, Ph.D., Univ. Colorado, 1999-2001
Robert K. Niles, Ph.D., Purdue University, 1993-2001
Laura E. Powers, Ph.D. USAID, Washington DC, 1993-1998
Andreas O. Overhoff, Ph.D. Germany, 1991-1992

Graduate Students

Current

Kaytee Ankrom, PhD, 2016- present, Biology.

Degrees Completed

Wall

- Elizabeth A. Shaw. Ph.D. 2018. Graduate Degree Program in Ecology (GDPE). Thesis- Trophic relationships in soil communities: how abiotic stress affects biotic interactions in the McMurdo Dry Valleys, Antarctica.
- Keith Post, M.Sc. 2015. GDPE. Thesis – The effects of grasshoppers on soil animal communities in the shortgrass steppe in Northern Colorado.
- Elizabeth A. Shaw, M.Sc. 2013. GDPE. Thesis – Fire management effects on carbon flow from root litter to the soil community in a tallgrass prairie.
- Zachary Sylvain, Ph.D. 2013. GDPE. Thesis – The influence of moisture availability on terrestrial ecosystems: Effects on soil animal communities along a regional/global scale climate gradient
- Tracy Smith, M.Sc., 2011. Biology. Thesis - The impacts of thawing permafrost on nematode populations and soil habitat characteristics in an Antarctic polar desert ecosystem
- Mark St. John, Ph.D. 2005, GDPE. Thesis - Soil mite biodiversity: Its relationship to grass species and influence on decomposition in the Konza Tallgrass Prairie
- Ana Child, M.Sc. 2002. GDPE. Thesis - Soil nematodes of the Short Grass Step region: From trophic to molecular diversity
- Nicole DeCrappeo, M.Sc. 2002. GDPE. Thesis - Influence of biotic and abiotic factors on the distribution of entomopathogenic nematodes in tallgrass prairie
- Amy Treonis, Ph.D. 1999. GDPE. Thesis - Environmental controls of the diversity, activity and function of soil nematodes in the McMurdo Dry Valleys of Antarctica
- Ericha Courtright, M.Sc. 1996. GDPE. Thesis- Soil nematode distribution and genetic diversity in the Dry Valleys of Antarctica
- Sarah Spaulding, Ph.D. 1996. GDPE. Thesis - Algal investigations at varying temporal scales in an extreme environment: McMurdo Dry Valley Lakes, Antarctica

Terminated: No degree

- Karen Seaver, M.Sc., 2007-terminated no degree. Biology.
- Rosemary Townsend, Ph.D., 2009. Hiatus - Biology.

Graduate Committees

- David Akins, 2018-2020. MSc. Student. Bioagricultural Sciences and Pest Management.
- Angela Oliverio, 2018-present. Ph.D. Student. University of Colorado Boulder, Ecology and Evolutionary Biology.
- Elly Morrien, Wageningen University, Wageningen, The Netherlands, 2011, Ph.D. (outside Ph.D. member)
- Natalie Banks, 2016. Ph.D. Murdoch University, Australia.
- Carolina Romano Rosa, 2009. M. B. A. Business College.
- Megan Steinweg, 2005-2007. M.Sc. Graduate Degree Program in Ecology
- Heather Blackburn, 2000-present. Ph.D. Graduate Degree Program in Ecology
- Cecilia de Tomasel, 1999. M.Sc. Plant Pathology
- Serita Frey, 1999. Ph.D. Graduate Degree Program in Ecology

Visiting Students

- Shuyan Cui, Ph.D., student from China (August 2017-April 2018)
- Ping Ting Guan, Ph.D. student from China (Jan 2017-Sept 2017)
- Andre Franco, Ph.D. student from Univ. Sao Paulo, Piracicaba, Brazil (June 2014-June 2015)
- Maria Blauuw, M.Sc. student from Wageningen University, The Netherlands (May 1999-August 1999)
- Pella Brinkman, M.Sc. student from Wageningen University, The Netherlands (March-July 1996)
- Christien E. Ettema. M.Sc. student from Wageningen University, The Netherlands (March-September).

Sponsored Visiting Scientists

- Pilar Andres, Barcelona (2013-2015), Madame Curie Award (co-sponsored with John Moore)
- Marie Dam, Univ. Copenhagen (2012)
- Jihai Zhou, China (2009- 2011)
- Youngkee Lee. South Korean Ministry of the Environment, (2006-2008)

UNIVERSITY OF CALIFORNIA, RIVERSIDE

Teaching (only since tenure track in 1990 until 1993)

NSF Research Experience for Undergraduates Award

- | | |
|------|---|
| 1994 | Svetlana Fortner, NSF REU, U Calif, Riverside, CA |
| | Elizabeth Lynn, NSF REU, Dartmouth College. |
| 1991 | Michelle Rose. NSF REU, U Calif, Riverside, CA. |
| 1989 | Busan Ahn. NSF REU, U Calif, Riverside, CA. |

Wall

Informal Teaching:

- 1994-1995 Took a high school student and teacher to Antarctica to participate in my NSF Antarctic Research
- 1992 Nematology 250 (informal discussion). "NSF Proposals, Writing, Submission and Panel Reviews", with Dr. D. Cooksey. 5 students. February. Informal Nematology Lunch Discussion Group: (Winter 1992).

Courses Taught (formal courses were taught after tenure track appointment Fall 1990)

Soil Ecology (Nematology/Soil & Environmental Sciences 120) Upper Division/graduate, 13 students, 4 hr credit Spring Quarter, 1992 Co-Teacher: Dr. D. Crowley, S&ES Plant/Soil Interactions From an Ecological Perspective, Biotic Interactions Controlling Soil Fertility and Plant Growth.

Seminar (Nematology 250) Graduate seminar, 3 students, 1-2 hours credit Spring Quarter, 1991. Every quarter, 1976-78, co-taught, 5-9 students.

Directed Studies (Nematology 290) Ecology of Nematodes, Graduate seminar, 7 students, Winter Quarter, 1977.

Graduate Committees

D. N. Janes, Jr., 1991. Ph.D., Biology.

J. Nobbs, 1985. Ph.D.-Waite Agricultural Institute, Australia (External Advisor).

High School Participation

- 1992 J.W. North/UCR Mentorship Program. "Predator-Prey Interactions Under Steady State Nutrient Conditions." A science project by Jennifer J. Park, Senior, North High School, Riverside, CA, April-December.
- Expanding Horizons Secondary Enrichment Program, UCR. Participant, July.
- 1991 Total Immersion Science Program, Faculty Mentor. 1 Student, A. Scales, Maryland, July.
- Invited Lecturer, Honors Program, North High School, Riverside, CA, April.

CALIFORNIA STATE UNIVERSITY, FRESNO (1975-1976)

Plant Nematology (Lab). Upper Division/Graduate, 18 students, 4 hr credit *Plant Pathology* (Lab). Upper Division, 56 students, 4 hr credit. *Plant Quarantine*. Upper Division, 23 students, 3 hr credit. *Pest Management* (w Lab). Upper Division/Graduate, 19 students, 4 hr credit.

NOTE: PUBLICATIONS ARE DIVIDED INTO THE FOLLOWING HEADINGS:

Publications in Press, Submitted, Refereed Published Papers, Edited Books, Book Chapters, Reports, Articles not refereed and Abstracts

REFEREED PUBLICATIONS IN PRESS

- Franco, ALC, SJ Fonte and DH Wall. 2021. Managing Soil Biodiversity for Multiple Human Benefits, in R Lal, ed, *Advances in Soil Science, The Soil-Human Health -Nexus*. CRC Press, Boca Ratan, FL
- Guerra, C. A., R. D. Bardgett, L. Canon, T. W. Crowther, M. Delgado-Baquerizo, L. Montanarella, L. M. Navarro, A. Orgiazzi, B. K. Singh, L. Tedersoo, R. Vargas-Rojas, M. J. I. Briones, F. Buscot, E. K. Cameron, S. Cesarz, A. Chatzinotas, D. A. Cowan, I. Djukic, J. van der Hoogen, A. Lehmann, F. T. Maestre, C. Marin, T. Reitz, M. C. Rillig, L. C. Smith, F. T. de Vries, A. Weigelt, N. Eisenhauer and D. H. Wall. Soil conservation beyond food production: unearthing biodiversity observations for policy support. *Science*.

SUBMITTED PUBLICATIONS

- Motzer, N., A. R. Weller, K. Curran, S. Donner, R. J. Heustis, C. Jordan, M. Krebs, L. Olandar, K. Rowell, L. Silka, D. H. Wall, A. York. Integrating programmatic expertise from across the US and Canada to model and guide leadership training for graduate students in sustainability. *Sustainability*.
- Coleman, D. C., S. Geisen and D. H. Wall. Occurrence, Biodiversity and Roles in Ecosystem Function. In Eds, E. A. Paul and S. D. Frey, *Soil Microbiology, Ecology and Biochemistry*, 5th edition, Academic Press.
- Ankrom, KE, SE Fonte, ALC Franco, LA Gherardi, CM Tomasel, OE Sala and DH Wall. Ecological maturity and stability of nematode communities in response to precipitation manipulations in grasslands. *Applied Soil Ecology*.
- Lee, J.R, A. Terauds, J. Carwardine, J.D. Shaw, R. A. Fuller, H. P. Possingham, S. L Chown, P. Convey, N. Gilbert, K. A. Hughes, E. McIvor, S. A. Robinson, Y. Ropert-Coudert, D. M. Bergstrom, E. M. Biersma, C. Christian, D. A. Cowan Y. Frenot, S. Jenouvrier, L. Kelley, M. J. Lee, H. Lynch, B. Njastad, R. M. Roura, E. Ashley Shaw, D. Stanwell-Smith, M. Tsujimoto, A. Quesada, D. H. Wall, A. Wilmotte and I. Chades. Threat management priorities for conserving Antarctic biodiversity.

REFEREED JOURNAL PUBLICATIONS

- Dragone, N.B., M. A. Diaz, I. Hogg, W. B. Lyons, W. A. Jackson, D. H. Wall, B. J. Adams & N. Fierer. 2021. Exploring the boundaries of microbial habitability in soil. *Journal of Geophysical Research: Biogeosciences*. <https://doi.org/10.1029/2020JG006052>
- Phillips H. R. P., E. M. Bach, M. L. C. Bartz, J. M. Bennett, R. Beugnon, M. J. I. Briones, G. G. Brown, O. Ferlian, K. B. Gongalsky, C. A. Guerra, B. König-Ries, J. J. Krebs, A. Orgiazzi, K. S. Ramirez, D. J. Russell, B. Schwarz, D. H. Wall, U. Brose, T. Decaëns, P. Lavelle, M. Loreau, J. Mathieu, C. Mulder, W. H. van der Putten, M. C. Rillig, M. P. Thakur, F. T. de Vries, D. A. Wardle, C. Ammer, S. Ammer, M. Arai, F. O. Ayuke, G. H. Baker, D. Baretta, D. Barkusky, R. Beauséjour, J. C. Bedano, K. Birkhofer, E. Blanchart, B. Blossey, T. Bolger, R. L. Bradley, M. Brossard, J. C. Burtis, Y. Capowiez, T. R. Cavagnaro, A. Choi, J. Clause, D. Cluzeau, A. Coors, F. V. Crotty, J. M. Crumsey, A. Dávalos, D. J. Diaz Cosin, A. M. Dobson, A. Domínguez, A. E. Duhour, N. van Ekeren, C. Emmerling, L. B. Falco, R. Fernández, S. J. Fonte, C. Fragoso, A. L. C. Franco, A. Fusilero, A. P. Geraskina, S. Gholami, G. González, M. J. Gundale, M. Gutiérrez López, B. K. Hackenberger, D. K. Hackenberger, L. M. Hernández, J. R. Hirth, T. Hishi, A. R. Holdsworth, M. Holmstrup, K. N. Hopfensperger, E. Huerta Lwanga, V. Huhta, T. T. Hurisso, B. V. Iannone III, M. Iordache, U. Irmeler, M. Ivask, J. B. Jesús, J. L. Johnson-Maynard, M. Joschko, N. Kaneko, R. Kanianska, A. M. Keith, M. L. Kernecker, A. W. Koné, Y. Kooch, S. T. Kukkonen, H. Lalthanzara, D. R. Lammel, I. M. Lebedev, E. Le Cadre, N. K. Lincoln, D. López-Hernández, S. R. Loss, R. Marichal, R. Matula, Y. Minamiya, J. H. Moos, G. Moreno, A. Morón-Ríos, H. Motohiro, B. Muys, J. Neiryneck, L. Norgrove, M. Novo, V. Nuutinen, V. Nuzzo, P. M. Rahman, J. Pansu, S. Paudel, G. Pérès, L. Pérez-Camacho, J.-F. Ponge, J. Prietzel, I. B. Rapoport, M. I. Rashid, S. Rebollo, M. Á. Rodríguez, A. M. Roth, G. X. Rousseau, A. Rozen, E. Sayad, L. van Schaik, B. Scharenbroch, M. Schirrmann, O. Schmidt, B. Schröder, J. Seeber, M. P. Shashkov, J. Singh, S. M. Smith, M. Steinwandter, K. Szlavecz, J. A. Talavera, D. Trigo, J. Tsukamoto, S. Uribe-López, A. W. de Valença, I. Virto, A. A. Wackett, M. W. Warren, E. R. Webster, N. H. Wehr, J. K. Whalen, M. B.

- Wironen, V. Wolters, P. Wu, I. V. Zenkova, W. Zhang, E. K. Cameron & N. Eisenhauer. 2021. Global data on earthworm abundance, biomass, diversity and corresponding environmental properties. *Scientific Data* 8:136. <https://doi.org/10.1038/s41597-021-00912-z>
- Diaz, M.A., C. B. Gardner, S. A. Welch, W. A. Jackson, B. J. Adams, D. H. **Wall**, I. D. Hogg, N. Fierer, and W. B. Lyons. 2021. Geochemical zones and environmental gradients for soils from the central Transantarctic Mountains, Antarctica. *Biogeosciences* 18:1629-1644. <https://doi.org/10.5194/bg-18-1629-2021>
- Guerra, C. A. R. D. Bardgett, L. Caon, T. W. Crowther, M. Delgado-Baquerizo, L. Montanarella, L. M. Navarro, A. Orgiazzi, B. K. Singh, L. Tedersoo, R. Vargas-Rojas, M. J. I. Briones, F. Buscot, E. K. Cameron, S. Cesarz, A. Chatzinotas, D. A. Cowan, I. Djukic, J. van den Hoogen, A. Lehmann, F. T. Maestre, C. Marín, T. Reitz, M. C. Rillig, L. C. Smith, F. T. de Vries, A. Weigelt, D. H. **Wall**, N. Eisenhauer. 2021. Tracking, targeting, and conserving soil biodiversity. *Science* 371(6526):239-241. doi: 10.1126/science.abd7926
- Fenster, C. B., G. J. Anderson, M. R. Berenbaum, J. E. Burris, J. P. Collins, R. R. Colwell, J. Cracraft, A. P. Covich, R. R. Ehrlich, W. H. Eshbaugh, F. C. James, D. J. Futuyma, K. E. Holsinger, G. E. Likens, T. E. Lovejoy, H. A. Mooney, P. H. Raven, K. C. Smith, S. G. Stafford, B. R. Strain, J. Travis, M. H. Wake, D. H. **Wall**, and J. S. Weis. 2020. A call to action: Marshaling science for society. *BioScience* 71(1):7-8. <https://doi.org/10.1093/biosci/biaa138>
- Franco, A. L. C., M. R. Cherubin, C. E. P. Cerri, J. Six, D. H. **Wall**, and C. C. Cerri. 2020. Linking soil engineers, structural stability, and organic matter allocation to unravel soil carbon responses to land-use change. *Soil Biology and Biochemistry* 150:107998. doi.org/10.1016/j.soilbio.2020.107998
- Franco, A. L. C., L. A. Gherardi, C. M. de Tomasel, W. S. Andriuzzi, K. E. Ankrom, E. M. Bach, P. Guan, O. E. Sala and D. H. **Wall**. 2020. Root herbivory controls the effects of water availability on the partitioning between above-and below-ground grass biomass. *Functional Ecology* 34(11):2403-2410. <https://doi.org/10.1111/1365-2435.13661>
- Gutt, J., E. Isla, J. C. Xavier, B. J. Adams, I.-Y. Ahn, C.-H. C. Cheng, C. Colesie, V. J. Cummings, G. di Prisco, H. Griffiths, I. Hawes, I. Hogg, T. McIntyre, K. M. Meiners, D. A. Pearce, L. Peck, D. Piepenburg, R. R. Reisinger, G. K. Saba, I. R. Schloss, C. N. Signori, C. R. Smith, M. Vacchi, C. Verde, and D. H. **Wall**. 2020. Antarctic ecosystems in transition – life between stresses and opportunities. *Biological Reviews* 96(3):798-821. <https://doi.org/10.1111/brv.12679>
- Thakur, M., H. Phillips, U. Brose, F. de Vries, P. Lavelle, M. Loreau, J. Mathieu, C. Mulder, W. H. van der Putten, M. C. Rillig, D. A. Wardle, E. M. Bach, M. L. C. Bartz, J. M. Bennett, M. J. I. Briones, G. Brown, T. Decaens, N. Eisenhauer, O. Ferlian, C. A. Guerra, B. Koenig-Ries, A. Orgiazzi, K. S. Ramirez, D. J. Russell, M. Rutgers, D.H. **Wall** and E. K. Cameron. 2020. Towards an integrative understanding of soil biodiversity. *Biological Reviews* 95:350-364. <https://doi.org/10.1111/brv.12567>
- van den Hoogen, J., S. Geisen, D. H. **Wall**, D. A. Wardle, W. Traunspurger, R. G. M. de Goede, B. J. Adams, W. Ahmad, H. Ferris, R. D. Bardgett, M. Bonkowski, R. Campos-Herrera, J. E. Cares, T. Caruso, L. de Brito Caixeta, X. Chen, S. R. Costa, R. Creamer, J. M. da Cunha e Castro, M. Dam, D. Djigal, M. Escuer, B. S. Griffiths, C. Gutiérrez, K. Hohberg, D. Kalinkina, P. Kardol, A. Kergunteuil, G. Korthals, V. Krashevskaya, A. A. Kudrin, Q. Li, W. Liang, M. Magilton, M. Marais, J. A. R. Martín, E. Matveeva, E. H. Mayad, E. Mzough, C. Mulder, P. Mullin, R. Neilson, T. A. D. Nguyen, U. N. Nielsen, H. Okada, J. E. P. Rius, K. Pan, V. Peneva, L. Pellissier, J. C. P. da Silva, C. Pitteloud, T. O. Powers, K. Powers, C. W. Quist, S. Rasmann, S. S. Moreno, S. Scheu, H. Setälä, A. Sushchuk, A. V. Tiunov, J. Trap, M. Vestergård, C. Villenave, L. Waeyenberge, R. A. Wilschut, D. G. Wright, A. M. Keith, J.-i. Yang, O. Schmidt, R. Bouharroud, Z. Ferji, W. H. van der Putten, D. Routh, and T. W. Crowther. 2020. A global database of soil nematode abundance and functional group composition. *Scientific Data* 7:103.
- Guerra, C., A. Heintz-Buschart, J. Sikorski, A. Chatzinotas, N. Guerrero-Ramirez, S. Cesarz, L. Beaumelle, M. C. Rillig, F. T. Maestre, M. Delgado-Baquerizo, F. Buscot, J. Overmann, G. Patoine, H. R. P. Phillips, M. Winter, T. Wubet, K. Kusel, R. D. Bardgett, E. K. Cameron, D. Cowan, T. Grebenc, C. Marin, A. Orgiazzi, B. K. Singh, D. H. **Wall**, N. Eisenhauer. 2020. Blind spots in global soil biodiversity and ecosystem function research. *Nature Communications* 11, 3870. <https://doi.org/10.1038/s41467-020-17688-2>
- Collins, Gemma E., Ian D. Hogg, Peter Convey, Leopoldo G. Sancho, Don A. Cowan, W. Berry Lyons, Byron J. Adams, Diana H. **Wall**, T. G. Allan Green. 2020. Genetic diversity of soil invertebrates corroborates timing estimates for past collapses of the West Antarctic Ice Sheet. *Proceedings of the National Academy of Sciences*, 117 (36) 22293-22302 doi:10.1073/pnas.2007925117

- Ankrom, K.E., A.L.C. Franco, S. J. Fonte, L. A. Gherardi, C. Milano de Tomasel, W. S. Andriuzzi, E. A. Shaw, O. E. Sala and D. H. **Wall**. 2020. Ecto- and endoparasitic nematodes respond differently across sites to changes in precipitation. *Oecologia* 193, 761–771 <https://doi.org/10.1007/s00442-020-04708-7>
- Bach, E., K. Ramirez, T. Fraser, and D.H. **Wall**. 2020. Soil biodiversity integrates solutions for a sustainable future. *Sustainability* 12(7), 2662, doi.org/10.3390/su12072662.
- Diaz, M. A., J. Li, G. Michalski, T. H. Darrah, B. J. Adams, D. H. **Wall**, I. D. Hogg, N. Fierer, S. A. Welch, C. B. Gardner and W. B. Lyons. 2020. Stable isotopes of nitrate, sulfate, and carbonate in soils from the Transantarctic Mountains, Antarctica: A record of atmospheric deposition and chemical weathering *Frontiers in Earth Science* 8:341. <https://doi.org/10.3389/feart.2020.00341>
- Diaz, Melisa A., L. B. Corbett, P. R. Bierman, B. J. Adams, D. H. **Wall**, I. D. Hogg, N. Fierer and W. B. Lyons. 2020. Relative terrestrial exposure ages inferred from meteoric ¹⁰Be and NO₃ concentrations in soils along the Shackleton Glacier, Antarctica. *Earth System Dynamics Discussions* 1-35. doi.org/10.5194/esurf-2020-50
- Andriuzzi, W., A. L. C. Franco, K. Ankrom, S. Cui, C. Milano de Tomasel, P. Guan, L. Gherardi, O. Sala, D. **Wall**. 2020. Body size structure of soil fauna along geographic and temporal gradients of precipitation in grasslands. *Soil Biology and Biochemistry* 140: 107638. doi: <https://doi.org/10.1016/j.soilbio.2019.107638>
- Wlostowski, A. N., N. O. Schulte, B. J. Adams, B. A. Ball, R. M. M. Esposito, M. N. Gooseff, W. B. Lyons, U. N. Nielsen, R. A. Virginia, D. H. **Wall**, K. A. Welch and D. M. McKnight. 2019. The hydroecology of an ephemeral wetland in the McMurdo Dry Valleys, Antarctica. *Journal of Geophysical Research: Biogeosciences* 124: 3814-3830. doi: <https://doi.org/10.1029/2019JG005153>
- Phillips, H.R.P., C.A. Guerra, M.L.C. Bartz, M.J.I. Briones, G. Brown, T.W. Crowther, O. Ferlian, K.B. Gongalsky, J. van den Hoogen, J. Krebs, A. Orgiazzi, D. Routh, B. Schwarz, E.M. Bach, J. Bennett, U. Brose, T. Decaens, B. König-Ries, M. Loreau, J. Mathieu, C. Mulder, W.H. van der Putten, K.S. Ramirez, M.C. Rillig, D. Russell, M. Rutgers, M.P. Thakur, F.T. de Vries, D.H. **Wall**, D.A. Wardle, M. Arai, F.O. Ayuke, G.H. Baker, R. Beausejour, J.C. Bedano, K. Birkhofer, E. Blanchart, B. Blossey, T. Bolger, R.L. Bradley, M.A. Callahan, Y. Capowiez, M.E. Caulfield, A. Choi, F.V. Crotty, A. Davalos, D.J. Diaz Cosin, A. Dominguez, A.E. Duhour, N. van Eekeren, C. Emmerling, L.B. Falco, R. Fernandez, S.J. Fonte, C. Fragoso, A.L.C. Franco, M. Fugere, A.T. Fusilero, S. Gholami, M.J. Gundale, M.G. Lopez, D.K. Hackenberger, L.M. Hernandez, T. Hishi, A.R. Holdsworth, M. Holmstrup, K.N. Hopfensperger, E.H. Lwanga, V. Huhta, T.T. Hurisso, BV. Iannone III, M. Iordache, M. Joschko, N. Kaneko, R. Kanianska, A.M. Keith, C.A. Kelly, M.L. Kernecker, J. Klaminder, A.W. Kone, Y. Kooch, S.T. Kukkonen, H. Lalthanzara, D.R. Lammel, I.M. Lebedev, Y. Li, J.B.J. Lidon, N.K. Lincoln, S.R. Loss, R. Marichal, R. Matula, J.H. Moos, G. Moreno, A. Moron-Rios, B. Muys, J. Neirynck, L. Norgrove, M. Novo, V. Nuutinen, V. Nuzzo, M. Rahman, J. Pansu, S. Paudel, G. Peres, L. Perez-Camacho, R. Pineiro, J. Ponge, M.I. Rashid, S. Rebollo, J. Rodeiro-Iglesias, M.A. Rodriguez, A.M. Roth, G.X. Rousseau, A. rozen, E. Sayah, L. van Schaik, B.C. Scharenbroch, M. Schirrmann, O. Schmidt, B. Schroder, J. Seeber, M.P. Shashkov, J. Singh, S.M. Smith, M. Steinwandter, J.A. Talavera, D. Trigo, J. Tsukamoto, A.W. de Valenca, S.J. Vanek, I. Virto, A.A. Wackett, M.W. Warren, N.H. Wehr, J.K. Whalen, M.B. Wironen, V. Wolters, I.V. Zenkova, W. Zhang, E.K. Cameron, N. Eisenhauer. 2019. Global distribution of earthworm diversity. *Science* 366: 480-485. doi: 10.1126/science.aax4851
- Geisen, S., D.H. **Wall**, W.H. van der Putten. 2019. Challenges and opportunities for soil biodiversity in the Anthropocene. *Current Biology* 29: R1036-R1044. doi: <https://doi.org/10.1016/j.cub.2019.08.007>
- Shaw, E.A., and D.H. **Wall**. 2019. Biotic interactions in experimental Antarctic soil microcosms vary with abiotic stress. *Soil Systems* 3(3): 57. doi: <https://doi.org/10.3390/soilsystems3030057>
- Franco, A.L.C., L.A. Gherardi, C.M. de Tomasel, W.S. Andriuzzi, K.E. Ankrom, E.A. Shaw, E.M. Bach, O.E. Sala, and D.H. **Wall**. 2019. Drought suppresses soil predators and promotes root herbivores in mesic, but not in xeric grasslands. *PNAS* 11(26): 12883-12888. doi: <https://doi.org/10.1073/pnas.1900572116>
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