

**DIANA HARRISON WALL****University Distinguished Professor and Director, School of Global Environmental Sustainability**

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<http://www.biology.colostate.edu/faculty/dwall>email: [diana.wall@colostate.edu](mailto:diana.wall@colostate.edu)**EDUCATION**

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

**PROFESSIONAL EMPLOYMENT**

2008- present Founding Director, School of Global Environmental Sustainability, Colorado State University (CSU), Fort Collins, CO  
 2006- present Professor, Department of Biology, CSU  
 1993-2006 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**

2017 **Eminent Ecologist**, Ecological Society of America  
 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 **38<sup>th</sup> 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  
**American Academy of Arts and Sciences, Elected Member**  
**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  
**CSU Office of International Programs Distinguished Service Award**  
 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.  
**Charles Jenner Memorial Lecture**, University of North Carolina.  
 2012 **Fellow**, Ecological Society of America  
**Mines Medal**, South Dakota School of Mines & Technology  
**President's Medal for Excellence in Antarctic Research**, Scientific Committee on Antarctic Research (SCAR)

- 2011-2013 **Member**, U. S. Antarctic Program Blue Ribbon Panel  
**2012 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, MCMLTER Soil Ecology team, McMurdo Station Helicopter Operations (07-08 season), Antarctica
- 2007 **Distinguished Ecologist lecture**, 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 Award  
**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

- 2011- present **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
- 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 - 2019 Co-Investigator, NSF OPP. 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. (9/1/16-8/31/19)
- 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). NSF1456631, \$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.
- 2012-2015 Co-Investigator, NSF ANT 1241487. *A planning workshop for a McMurdo Dry Valleys Terrestrial Observation Network*. PI, Byron J. Adams, (Brigham Young University) - 38,217. Co-PIs, DH Wall (CSU), JE Barrett (VA. Tech), A. Fountain (Portland State).
- 2011- 2013 Principal Investigator, Winslow Foundation. *Surveying unexplored soil biodiversity in Sub-Saharan Africa to enhance agricultural productivity* . Co-PI, Noah Fierer (Univ. Colorado). CSU. \$150,000.
- 2009 -2014 Co- Investigator, NSF Ecosystems. *A Novel Experimental and Modeling Study of C and N Dynamics between Litter, Soil and the Atmosphere as Affected by Soil Fauna and Litter Quality*. PI: M. F. Cotrufo, Co-PI, W. J. Parton (Colorado State University). CSU. \$858,675.

### LEADERSHIP/SERVICE

#### International

- 2017 **Review Editor**, Frontiers in Ecology and Evolution, Special Section on Biogeography and Macroecology.
- 2016 **International Advisor**, African Soil Microbiology USAID-DHET Project, Don Cowan, Univ. Pretoria, South Africa.  
**Member**, Advisory Board, Center for Microbial Ecology and Genomics, University of Pretoria, South Africa.  
**Advisor**, European COST Action: Soil Fauna: Key to Soil Organic Matter Dynamics and Modeling.  
**Member**, International Science Advisory Committee, ISRIC World Soil Information.
- 2013- present **Member**, International Science Panel, New Zealand Antarctic Research Institute
- 2013-2016 **Member**, Development Council, Scientific Committee on Antarctic Research (SCAR)  
**Member**, International Advisory Board, Ecosystem Health and Sustainability. A joint journal of the Ecological Society of America (ESA) and the Ecological Society of China
- 2014-2015 **Member**, Advisory Board, EcoFINDERS (Ecological Function and Biodiversity Indicators in European Soils). European Science Project, European Commission
- 2013-2014 **Member**, Strategic Cooperation Board, Cooperation between EU & US Research Infrastructure, COOPEUS.
- 2014 **Co-Chair**, AAAS Panel on 'What we Know' Climate Change Initiative Committee
- 2012- present **Member**, Scientific Committee, First Wageningen Conference on Applied Soil Science, The Netherlands.  
**Member**, Scientific Committee on Antarctic Research (SCAR) Antarctic Ecosystem Thresholds and Resilience (AntETR), Life Sciences Programme.
- 2012-2014 **Member**, Advisory Board, EcoFINDERS (Ecological Function and

- Biodiversity Indicators in European Soils). European Science Project, European Commission
- 2012- present **Member**, Wageningen University Review Committee of the Graduate School for Production Ecology and Resource Conservation, Wageningen, The Netherlands, June.
- 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
- 2004-2005 **Member**, International Board, *Frontiers in Ecology and the Environment*, journal of the Ecological Society of America
- 2003-present **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

- 2010-2011 **Member**, NRC Committee on *Future Science Opportunities in Antarctica and the Southern Ocean*. (release date Sept 9, 2011).  
**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)  
**Investigator**, Kellogg Biological Station LTER (1996 - )
- 2009-2011 **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* (2016- ), *Frontiers in Ecology and Evolution* (Review Editor, 2017- present, 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 (2013-Present)**

- 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.
- Assessing global soil biodiversity for the Sustainable Development Goals*. Soil Science Society of America, Phoenix, 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.
- Soil Biodiversity: key to sustainability*. AAAS Symposium - Global Soil Biodiversity: a common ground for sustaining our soils. American Association for the Advancement of Science. February,
- 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*. 38<sup>th</sup> 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 (2012-Present)**

- 2016 Participant, *White House Office and Science and Technology Policy (OSTP)*, workshop “Gaining ground – Soil as a Renewable Resource:.”  
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 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.
- 2014 XXXIII SCAR Biennial Meetings and Open Science Meeting (Scientific Committee on Antarctic Research (SCAR)). Auckland, NZ. US Scientific Steering Committee, August. EcoFinders Advisory Board and Participant – EU-meeting. Manchester, UK, February.
- 2012 Panelist, *World Day to Combat Desertification Global Observance Event*. Securing healthy soil sand stopping land degradation: the Global Soil Partnership -Outcomes for Rio+20. Rio de Janeiro, Brazil, June..

#### MEETING CHAIR or CONVENOR (2012-Present)

- 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 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
- 2014 **Co-organizer**, with T. Fraser (CSU), Philippe Lemanceau and ECOFinders, *First Global Soil Biodiversity Conference*, Dijon, France, December. (700+ attendees).  
**Co-organizer**, with K. Ramirez (PI - CSU), *SDiv-Workshop- Leipzig*. Global Soil Biodiversity Assessment Workshop, Leipzig, Germany.  
**Co-organizer**, with M. Knox (CSU), *Antarctic Lecture Series*, Fort Collins Library, January – June and September-December
- 2013 **Co-organizer**, with K. Ramirez (CSU), *Global Soil Biodiversity Assessment Workshop*. February, Fort Collins.  
**Co-organizer**, with K. Ramirez (CSU), Symposium: *Integrating soil biodiversity into discussions on sustainability: the time is now*. Ecological Society of America, Minneapolis, Minnesota, August.  
**Co-organizer**, with S. Kanatous (Biology), J. Collinson (Ohio State Univ, Retired) and M. Vandegehuchte and Z. Sylvain (Biology), *Antarctic Lecture Series*, Fort Collins Library, January – June and September-December.
- 2012 **Organizer**, with R. Bardgett (UK), W. Van der Putten (Netherlands), J. Six (Switzerland) and L. Monaterella (EU-JRC), *Open Meeting Global Soil Biodiversity Initiative*, London, March  
**Co-organizer**, with S. Kanatous (Biology), J. Collinson (Ohio State Univ, Retired) and M. Vandegehuchte and Z. Sylvain (Biology), *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, European Science*

Foundation  
**Proposal:** 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

### **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 120.

#### **CSU Honors Program**

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**

Deanna Cox, CSU, (with Ashley Shaw and Cecilia Tomasel), 2012-2014  
 Kyrie Ivanovich, CSU, (with Ashley Shaw and Cecilia Tomasel), 2009-2011.  
 John Chaston, Brigham Young University, MOU internship, Antarctic Field Season, 2004-2005  
 Claire Ojima, Middlebury College, Undergraduate 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**

##### **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 Economies (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*

Andre Franco, Ph.D. University of Sao Paulo (2015-present)  
Elizabeth Bach, PhD. Iowa State University (2016- present)  
Walter Andriuzzi, Ph.D. Wageningen University (2015-present)  
Tandra Fraser, Ph.D. University of Guelph (2014- 2016)  
Matthew Knox, Ph.D. Univ. Waikato (2013-2015)  
Kelly S Ramirez, Ph.D. Univ. Colorado (2012-2014)  
Pablo Garcia-Palacios, Ph.D. (Fulbright Fellow) Spain (2012-2013)  
Martijn Vandegechuchte, Ph.D. Belgium (2011- 2013)  
Uffe Nielsen, Ph.D., Maculay Institute and Univ. Aberdeen (2008-2011)  
Breana Simmons, Ph.D., University of Georgia, (2005- 2009)  
Edward Ayres, Ph.D., Lancaster University, UK (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. Univ. Florida, 1993-1998  
Andreas O. Overhoff, Ph.D. Germany, 1991-1992

### **Graduate Students**

#### *Current*

Kaytee Ankrom, PhD, 2016- present, Biology.  
Elizabeth A. Shaw. Ph.D. 2013-present, Graduate Degree Program in Ecology.  
Karen Seaver, M.Sc., 2007-terminated no degree. Biology.  
Rosemary Townsend, Ph.D., 2009. Hiatus - Biology.

#### *Degrees Completed*

Keith Post, M.Sc. 2015. Graduate Degree Program in Ecology. Thesis – The effects of grasshoppers on soil animal communities in the shortgrass steppe in Northern Colorado.  
Elizabeth A. Shaw, M.Sc. 2013. Graduate Degree Program in Ecology. Thesis – Fire management effects on carbon flow from root litter to the soil community in a tallgrass prairie.  
Zachary Sylvain, Ph.D. 2013. Graduate Degree Program in Ecology. 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, Graduate Degree Program in Ecology. Thesis - Soil mite biodiversity: Its relationship to grass species and influence on decomposition in the Konza Tallgrass Prairie  
Ana Child, M.Sc. 2002. Graduate Degree Program in Ecology. Thesis - Soil nematodes of the Short Grass Step region: From trophic to molecular diversity  
Nicole DeCrappeo, M.Sc. 2002. Graduate Degree Program in Ecology. Thesis - Influence of biotic and abiotic factors on the distribution of entomopathogenic nematodes in tallgrass prairie  
Best Poster Award, Soil Ecology Section, Ecological Society of America, DeCrappeo, N.M. and D.H. **Wall**. 2000. Abiotic and biotic controls on the abundance and distribution of entomopathogenic



nematodes in tallgrass prairie.

- Amy Treonis, Ph.D. 1999. Graduate Degree Program in Ecology. Thesis - Environmental controls of the diversity, activity and function of soil nematodes in the McMurdo Dry Valleys of Antarctica  
 Ericha Courtright, M.Sc. 1996. Graduate Degree Program in Ecology. Thesis- Soil nematode distribution and genetic diversity in the Dry Valleys of Antarctica  
 Sarah Spaulding, Ph.D. 1996. Graduate Degree Program in Ecology. Thesis - Algal investigations at varying temporal scales in an extreme environment: McMurdo Dry Valley Lakes, Antarctica

#### **Graduate Committees**

- Elly Morrien, Wageningen University, Wageningen, The Netherlands, 2011, Ph.D. (outside Ph.D. member)  
 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**

- 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.

#### **Informal Teaching:**

- Winter 1994- Took a high school student and teacher to Antarctica to participate in my NSF Antarctic  
 1995 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 SEPARATELY 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, AL, MA. Knox, WS Andriuzzi, CM de Tomasel, OE Sala and DH Wall. Nematode exclusion and recolonization in experimental soil microcosms. *Soil Biology and Biochemistry*
- Andres, P., JC Moore, F Cotrufo, K Deneff, ML Haddix, R Molowny-Horas, M Riba, and DH Wall. Grazing and edaphic properties mediate soil biotic response to altered precipitation patterns in a semiarid prairie. *Soil Biology and Biochemistry*.
- Andriuzzi, WS and DH Wall. Responses of belowground communities to large aboveground herbivores: meta-analysis reveals biome-dependent patterns and critical research gaps. *Global Change Biology*. (in press)
- Bach, E. and DH Wall. Trends in biodiversity: Soil organisms. In *Encyclopedia of the Anthropocene*, Simon Levin, editor. Elsevier Publishers.

#### SUBMITTED PUBLICATIONS

- Gooseff, M.N., J.E. Barrett, Byron J. Adams, P. T. Doran, A. G. Fountain, W. B. Lyons, D.M. McKnight, J. C. Priscu, E. R. Sokol, C. Takacs-Vesbach, M. L. Vandegehuchte, R. A. Virginia, and D.H. Wall. Recent climate shift produces a state change in an Antarctic terrestrial ecosystem. *Nature*.
- Wall, DH and RA Virginia. The world beneath us: Making soil biodiversity and ecosystem functioning central to environmental policy. In: *Unsolved Problems in Ecology*, D. Tilman, Robert Holt and A. Dobson, eds. Princeton Univ. Press.

#### REFEREED JOURNAL PUBLICATIONS

- Lyons, WB, K. Deuerling, KAWelch, SA Welch, G Michalski, WW Walters, U Nielsen, DH Wall, I Hogg, and BJ Adams. 2016. The soil geochemistry in the Beardmore Glacier Region, Antarctica: Implications for terrestrial ecosystem history. *Scientific Reports (Nature)* **6**.  
DOI:10.1038/srep26189
- Shaw, E.A., K. Deneff, C. Milano de Tomasel, M F. Cotrufo, D. H Wall. 2016. Fire affects root decomposition, soil food web structure, and carbon flow in tallgrass prairie. *SOIL* 2:199-210  
doi:10.5194/soil-2-199-2016
- Filser, J., JH Faber, AV Tiunov, L Brussaard J Frouz, G De Deyn, AV Ulvarov, MP Berg, P Lavelle, M Loureau, DH Wall, P Querner, H Eijsackers, and JJ Jimenez. 2016. Soil fauna: key to new carbon models. *SOIL* 2:565-582. doi:10.5194/soil-2-565-2016
- Soong, J. L., M. L. Vandegehuchte, A. J. Horton, U. N. Nielsen, K. Deneff, E. A. Shaw, C. M. de Tomasel, W. Parton, D. H. Wall, and M. F. Cotrufo. 2016. Soil microarthropods support ecosystem productivity and soil C accrual: Evidence from a litter decomposition study in the tallgrass prairie. *Soil Biology & Biochemistry* 92:230-238 doi: 10.1016/j.soilbio.2015.10.014
- Soong, J.L., M. Dam, D.H. Wall and M.F. Cotrufo. 2016. Below-ground biological responses to pyrogenic organic matter and litter inputs in grasslands. *Functional Ecology*, DOI: 10.1111/1365-2435.12693
- García-Palacios, P., EA Shaw, DH Wall, S Hättenschwiler. 2016. Contrasting mass-ratio vs. niche complementarity effects on litter C and N loss during decomposition along a regional climatic gradient. *Journal of Ecology*
- Garcia-Palacios, P., E.A. Shaw, D.H. Wall, and S. Hattenschwiler. 2016. Temporal dynamics of biotic and abiotic drivers of litter decomposition. *Ecology Letters* **19**:554-563.
- Andres, P., J. C. Moore, R. T. Simpson, G. Selby, F. Cotrufo, K. Deneff, M. L. Haddix, E. A. Shaw, C. M. de Tomasel, R. Molowny-Horas, and D. H. Wall. 2016. Soil food web stability in response to grazing in a semi-arid prairie: The importance of soil textural heterogeneity. *Soil Biology & Biochemistry* **97**:131-143. doi:10.1016/j.soilbio.2016.02.014
- Mueller, K. E., D. M. Blumenthal, Y. Carrillo, S. Cesarz, M. Ciobanu, J. Hines, S. Pabst, E. Pendall, C. M. de Tomasel, D. H. Wall, and N. Eisenhauer. 2016. Elevated CO<sub>2</sub> and warming shift the

- functional composition of soil nematode communities in a semiarid grassland. *Soil Biology & Biochemistry* 103:46-51.
- Knox, M. A., D. H. **Wall**, R. A. Virginia, M. L. Vandegehuchte, I. S. Gil, and B. J. Adams. 2016. Impact of diurnal freeze-thaw cycles on the soil nematode *Scottinema lindsayae* in Taylor Valley, Antarctica. *Polar Biology* 39:583-592.
- Beet, C. R., I. D. Hogg, G. E. Collins, D. A. Cowan, D. H. **Wall**, and B. J. Adams. 2016. Genetic diversity among populations of Antarctic springtails (Collembola) within the Mackay Glacier ecotone. *Genome* 59:762-770.
- Pearce, D. A., I. A. Alekhina, A. Terauds, A. Wilmotte, A. Quesada, A. Edwards, A. Dommergue, B. Sattler, B. J. Adams, C. Magalhaes, W. L. Chu, M. C. Y. Lau, C. Cary, D. J. Smith, D. H. **Wall**, G. Eguren, G. Matcher, J. A. Bradley, J. P. de Vera, J. Elster, K. A. Hughes, L. Cuthbertson, L. G. Benning, N. Gunde-Cimerman, P. Convey, S. G. Hong, S. B. Pointing, V. H. Pellizari, and W. F. Vincent. 2016. Aerobiology Over Antarctica - A New Initiative for Atmospheric Ecology. *Frontiers in Microbiology* 7.
- Franco, A. L. C., M. L. C. Bartz, M. R. Cherubin, D. Baretta, C. E. P. Cerri, B. J. Feigl, D. H. **Wall**, C. A. Davies, and C. C. Cerri. 2016. Loss of soil (macro)fauna due to the expansion of Brazilian sugarcane acreage. *Science of the Total Environment* 563:160-168.
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- Cotrufo, M.F., J.L. Soong, A.J. Horton, E.E. Campbell, M.L. Haddix, D.H. **Wall** and W.J. Parton. 2015. Soil organic matter formation from biochemical and physical pathways of litter mass loss. *Nature Geoscience* 8:776-779 doi:10.1038/ngeo2520
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- Nielsen, U.N., E. Ayres, D.H. **Wall**, G. Li, R.D. Bardgett, T. Wu and J.R. Garey. 2014. Global scale patterns of soil nematode community structure in relation to climate and ecosystem properties. *Global Ecology and Biogeography*. doi: 10.1111/geb.12177
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