Danielle A. Way

Appointments

2013-2014	Visiting Fellow, Hawkesbury Institute for the Environment, University of Western Sydney, Australia
July 2012-current	Assistant Professor, Department of Biology, Western University
July 2012-current	Adjunct Assistant Professor, Environmental Sciences and Policy Division,
	Nicholas School of the Environment, Duke University

Work Experience and Education

2011-2012	Research Associate, Environmental Sciences and Policy Division, Nicholas School of the Environment, Duke University
2008-2011	Post-doctoral fellow, Department of Biology, Duke University
2008	PhD, Department of Botany, University of Toronto
2002	Honors Bachelor of Science, University of Toronto (Ecology Specialist)

Publications in Peer-reviewed Journals (students and post-docs underlined)

- 32. Creed IF, Lutz B, Hwang T and **Way DA**. (Conditional acceptance) Climate warming causes intensification of the hydrological cycle in northern forests. Hydrological Processes.
- 31. **Way DA** and Montgomery R. (In press) Photoperiod constraints on tree migration in a warmer world. Plant, Cell & Environment. DOI: 10.1111/pce.12431
- 30. Moshelion M, Halperin O, Wallach R, Oren R and **Way DA**. (In press) The role of aquaporins in determining transpiration and photosynthesis in water-stressed plants: crop water-use efficiency, growth and yield. Plant, Cell & Environment. DOI: 10.1111/pce.12410
- Way DA, Katul GG, <u>Manzoni S</u> and Vico G. (2014) Increasing water use efficiency along the C3-to-C4 evolutionary pathway: A stomatal optimization perspective. Journal of Experimental Botany 65: 3683-3693.
- 28. <u>Stinziano J</u> and **Way DA**. (2014) Combined effects of rising CO₂ and temperature on boreal forests: growth, physiology and limitations. Botany **92**: 425-436. *Invited review*.
- 27. Yamori W, Hikosaka K and **Way DA**. (2014) Temperature response of photosynthesis in C3, C4 and CAM plants: acclimation and adaptation. Photosynthesis Research **119**: 101-117. *Invited review.*
- 26. **Way DA** and Yamori W. (2014) Thermal acclimation of photosynthesis: on the importance of adjusting definitions and accounting for thermal acclimation of respiration. Photosynthesis Research **119**: 89-100. *Invited review.*
- 25. **Way DA**, <u>Crawley C</u> and Sage RF. (2013) A hot and dry future: warming effects on boreal tree drought tolerance. Tree Physiology **33**: 1003-1005.
- 24. **Way DA***, Ghirardo A*, Kanavati B, Esperschütz J, Monson RK, Jackson RB, Schmitt-Kopplin P and Schnitzler J-P. (2013) Increasing atmospheric CO₂ reduces metabolic and physiological differences

between isoprene and non-isoprene-emitting poplars. (*contributed equally). New Phytologist **200**:534-546.

- 23. **Way DA.** (2013) Will rising CO₂ and temperatures exacerbate the vulnerability of trees to drought? Tree Physiology **33**:775-778.
- Way DA, Domec J-C and Jackson RB. (2013) Elevated growth temperatures alter hydraulic characteristics in trembling aspen (*Populus tremuloides*) seedlings: implications for tree drought tolerance. Plant, Cell & Environment 36:103-115.
- Bauerle WL, Oren R, Way DA, Qian SS, Stoy, PC, Thornton PE, Bowden JD, Hoffman FM and Reynolds RF. (2012) Photoperiodic regulation of the seasonal pattern of photosynthetic capacity and the implications for carbon cycling. Proceedings of the National Academy of Sciences of the United States of America 109:8612-8617.
- 20. Fay PA, Jin VL, **Way DA**, Potter KN, Gill RA, Jackson RB and Polley HW. (2012) Soil-mediated effects of subambient to elevated CO₂ on grassland productivity. Nature Climate Change **2**:742-746.
- 19. Way DA and Pearcy RW. (2012) Sunflecks in trees and forests: from photosynthetic physiology to global change biology. Tree Physiology **32**:1066-1081.
- 18. Pearcy RW and **Way DA** (2012) Two decades of sunfleck research: Looking back to move forward. Tree Physiology **32**:1059-1061.
- 17. **Way DA.** What lies between: the evolution of stomatal traits on the road to C₄ photosynthesis. (2012) New Phytologist **193**:291-293.
- Trowbridge AM, Asensio D, Eller ASD, Way DA, Wilkinson MJ, Schnitzler J-P, Jackson RB and Monson RK. (2012) Contribution of various carbon sources toward isoprene biosynthesis in poplar leaves mediated by altered atmospheric CO₂ concentrations. PLoS ONE 7(2): e32387. doi:10.1371/journal.pone.0032387.
- Way DA, Oren R, Kim H-S and Katul GG. (2011) How well do stomatal conductance models perform on closing plant carbon budgets? A test using seedlings grown under current and elevated air temperatures. 16 pgs. Journal of Geophysical Research – Biogeosciences doi:10.1029/2011JG001808.
- 14. Ghannoum O and **Way DA.** (2011) On the role of ecological adaptation and geographic distribution in the response of trees to climate change. Tree Physiology **31**:1273-1276.
- 13. Millard P and **Way DA.** (2011) Tree competition and defense against herbivores: currency matters when counting the cost. Tree Physiology **31**:579-581.
- 12. **Way DA.** (2011) Tree phenology responses to warming: spring forward, fall back? Tree Physiology, **31**:469-471.
- Way DA*, Schnitzler J-P*, Monson RK and Jackson RB. (2011) Enhanced isoprene-related tolerance of heat- and light-stressed photosynthesis at low, but not high, CO₂ concentrations. Oecologia 166: 273-282. (*contributed equally)
- 10. **Way DA.** (2011) The bigger they are, the harder they fall: CO₂ concentration and tree size affect drought tolerance. Tree Physiology **31**:115-116.
- 9. Way DA. (2011) Parasitic plants and forests: a climate change perspective. Tree Physiology 31:1-2.

- Way DA and Oren R. (2010) Differential responses to increased growth temperatures between trees from different functional groups and biomes: A review and synthesis of data. Tree Physiology 30: 669-688.
- Way DA, LaDeau SL, McCarthy HR, Clark JS, Oren R, Finzi AC and Jackson RB. (2010) Greater seed production in elevated CO₂ is not accompanied by reduced seed quality in *Pinus taeda* L. Global Change Biology 16:1046-1056.
- Sage RF, Coiner HA, Way DA, Runion GB, Prior SA, Torbert HA, Sicher R and Ziska L. (2009) Kudzu (*Pueraria montana* (Lour.) Merr. variety *lobata*): a new source of carbohydrate for bioethanol production. Biomass and Bioenergy 33:57-61.
- 5. **Way DA** and Sage RF. (2008) Thermal acclimation of photosynthesis in black spruce (*Picea mariana* (Mill.) B.S.P.). Plant, Cell & Environment **31**:1250-1262.
- 4. Sage RF, **Way DA** and Kubien DS. (2008) Rubisco, Rubisco activase and global climate change. Journal of Experimental Botany **59**:1581-1595.
- 3. **Way DA** and Sage RF. (2008) Elevated growth temperatures reduce the carbon gain of black spruce (*Picea mariana* (Mill.) B.S.P.). Global Change Biology **14**:624-636.
- 2. **Way DA**, Seegobin SD and Sage RF. (2007) The effect of carbon and nutrient loading during nursery culture on the growth of black spruce seedlings: a six-year field study. New Forests **34**:307-312.
- 1. Campbell CD, Sage RF, Kocacinar F and **Way DA.** (2005) Estimation of the whole-plant CO₂ compensation point of tobacco (*Nicotiana tabacum* L.). Global Change Biology **11**:1956-1967.

Other Publications

Way DA and Sage RF. (2005) Short-term exposure to elevated CO₂ causes downwards regulation of photosynthesis in black spruce seedlings. *In*: Photosynthesis: Fundamental Aspects to Global Perspectives. pp. 624-626. Allen Press.

Current Funding

- Canadian Foundation for Innovation, John R. Evans Leaders Fund. Infrastructure for the analysis of global change impacts on tree and forest function. 2014-2015. **D Way** (PI). (\$448,366 with the Ontario Research Fund, Small Infrastructure Fund, pending as of Sept 1, 2014)
- Hawkesbury Institute for the Environment, University of Western Sydney Research Exchange Program. Acclimation of respiration and photosynthesis to warming and drought: comparing leaf-level and canopy scale measurements. 2013-2014 **D. Way** (PI), M.G Tjoelker, O. Ghannoum, D. Tissue (Collaborators). (\$6,483)
- NSERC Discovery Grant. Climate change impacts on boreal tree function: implications for carbon and water fluxes. 2013-2018. **D. Way** (PI). (\$150,000)
- NSERC Research Tools and Instruments. Tree hydraulics equipment for assessing tree drought mortality under future climate conditions. 2013-2014. **D. Way** (PI). (\$11,500)

- U.S. Department of Agriculture Agriculture and Food Research Initiative. Hydraulic controls on carbon cycling and water exchange rates of southern conifers. 2011-2014. G. Katul (PI), R. Oren, S. Palmroth, A. Porporato, **D. Way** (Co-PIs). (\$635,647)
- U.S. Department of Energy. Terrestrial Ecosystem Science. Constraining the simultaneous effects of elevated CO₂, temperature, and shifts in rainfall patterns on ecosystem carbon fluxes using multi-scale resource optimization theories. 2011-2014. G. Katul (PI), R. Oren, S. Palmroth, A. Porporato, **D. Way** (Co-PIs). (\$826,270)
- U.S.-Israel Bi-national Science Foundation. Can variation in hydraulic conductance explain isohydric and anisohydric behavior in poplar? 2011-2014. J.-C. Domec, M. Moshelion, R. Oren and **D. Way** (PIs). (\$123,000)
- Western University Academic Development Fund. Do future climate change scenarios decrease tree drought tolerance? 2013-2014. **D. Way** (PI) (\$12,346)
- Western University, Faculty of Science, In-kind support. Use of Biotron biomes by faculty in the Department of Biology, Western University. 2012-2014. B. Branfireun, I. Ensminger, N. Hüner, V. Hurry, Z. Lindo, G. Öquist and **D. Way** (PIs). (\$26,820)

Scholarships and Awards

4 th Pan-American Congress on Plants and Bioenergy, Travel Stipend, 2014	\$595
Helen Battle Research Professorship, Department of Biology, Western University, 2014	\$15,000
C4-CAM Plant Biology, International Symposium, Fellowship, 2013	\$480
NSERC, Post-doctoral Fellowship, 2009-2011	\$80,000
Gordon Research Conference, Early-career Grant, 2008	
Ecological Society of America, Real/Brown Student Travel Grant, 2007	\$225
Centre for Global Change Science, U. of Toronto, Graduate Research Award, 2007	\$2,330
NSERC, Post-graduate Scholarship, 2005-2007	\$42,000
Ontario Graduate Scholarship in Science and Technology, 2004	\$15,000
University of Toronto Fellowship, 2002-2007	\$19,300
Canadian Society of Plant Physiologists, East Section, Best Paper (Honorable Mention), 2006	and 2007
Botany Graduate Student Association, Best Presentation, 2005 and 2006	
D.L. Bailey Award, Best PhD Proposal, Department of Botany, U. of Toronto, 2004	\$200

Invited Workshops and Working Group Participation

2014 – U.S. Department of Energy, Science Scoping Meeting for the Next Generation Ecosystem Experiments (NGEE) Tropics. Puerto Rico (conference call participant).

2014 - Invited participant, 9th New Phytologist Trust Workshop, Representation of photosynthesis in Earth System Models. Montauk, NY.

2014-current - Invited working group member, U.S. National Institute for Mathematical and Biological Synthesis (NIMBIOS), A mechanistic dynamic energy budget model of tree performance to predict functional trait drivers, species distributions, and responses to global change. Knoxville, TN.

Editorial, Reviewing and Society Services

Plant, Cell & Environment, Associate Editor and Commentary Editor (2013-current)

- *Tree Physiology*, Associate Editor (2012-current); Reviews Editors (2014-current); Commentary Editor (2010-current); Editorial Review Board Member (2010-current)
- Annals of Applied Biology, Associate Editor (2008-2011); Senior Editor for Agriculture and the Environment section (2012)
- Ad hoc reviewer for African Journal of Biotechnology, Agricultural and Forest Meteorology, American Journal of Botany, Annales Botanici Fennici, Baltic Forestry, Beskids Bulletin, Botany, Canadian Journal of Forest Research, Ecology, Environmental and Experimental Botany, Functional Ecology, Global Biogeochemical Cycles, Global Change Biology, International Journal of Plant Sciences, Journal of Experimental Botany, Journal of Plant Growth Regulation, New Forests, New Phytologist, Oecologia, Physiologia Plantarum, Plant and Soil, Plant Biology, Plant, Cell and Environment, Plant Ecology, PLoS One, Tree Physiology, and Trees – Structure and Function (~50 manuscripts per year)
- Assessor for Australian Research Council (2013-current)

Panel Member for the U.S. National Science Foundation Division of Integrative Organismal Systems (2014)

Reviewer for: U.S. Department of Energy National Institute for Climate Change Research (2009), Czech Science Foundation (2009-2012), Estonian Science Foundation (2012), European Union Marie Curie Plant Fellows Post-doctoral Fellowships (2013), U.S. Israeli Bi-national Agricultural Research and Development Fund (2013), Austrian Science Fund Lise Meitner Postdoctoral Award (2014), National Assessment of Drought on Forests and Rangelands in the U.S. (2014).

Canadian Society of Plant Biology, Ragai Ibrahim Committee Member (2014-current)

Invited Presentations (students and post-docs underlined)

- Way DA. (2014) Seeing the light: the importance of light respiration on photosynthetic responses to climate change. Gordon Research Conference on CO₂ Assimilation: Genome to Biome. Waterville Valley, NH.
- <u>Attia Z</u>, Menachem M, Domec JC, **Way DA**, Ram O. (2014) Growth and physiological responses of isohydric and anisohydric poplars to drought. 4th Pan-American Congress on Plants and Bioenergy, Guelph, ON.
- Way DA. (2014) Know your limits: constraints on vegetation responses to warming and rising CO₂. Southern Crop Protection and Food Research Centre, Agriculture and Agri-Food Canada, London, ON.
- **Way DA.** (2014) Thermal acclimation of photosynthesis: definitions, patterns and the role of light respiration. Research School of Biology, Australian National University, Canberra, Australia.
- **Way DA.** (2014) Know your limits: constraints on vegetation responses to warming and rising CO₂. Hawkesbury Institute for the Environment, University of Western Sydney, Richmond, Australia.
- **Way DA.** (2014) Lighten up: the importance of light respiration for thermal acclimation of photosynthesis. Sydney Ecophysiology seminar series, Macquarie University, Sydney, Australia.

- **Way DA.** (2013) Know your limits: what factors constrain forest responses to warming and rising CO₂? University of Toronto at Mississauga, Mississauga, ON.
- Way DA, Katul G, <u>Manzoni S</u>, Vico G. (2013) Can the economics of leaf-gas exchange capture stomatal behavior across a continuum of C3, C3-C4 intermediates and C4 photosynthetic species? 16th International Photosynthesis Congress, St. Louis, MO.
- Way DA, Katul G, <u>Manzoni S</u>, Vico G. (2013) Can the economics of leaf-gas exchange capture stomatal behavior across a continuum of C3, C3-C4 intermediates and C4 photosynthetic species? C4-CAM Plant Biology International Symposium, Urbana, IL.
- Way DA. (2013) Know your limits: what factors constrain forest responses to warming and rising CO₂? Canadian Society of Plant Biologists, Quebec City, QC. *Invited plenary speaker*
- Katul G, <u>Manzoni S</u>, Palmroth S, Porporato A, **Way DA**, Oren R. (2013) The economics of leaf gas exchange in a fluctuating environment. Ben Gurion University, Israel.
- Way DA. (2013) Predicting tree responses to climate change: Leaves to forests. Mount Allison University, Sackville, NB.
- **Way DA.** (2013) The good, the bad, and the ugly: tree responses to climate change. University of New Brunswick, Fredericton, NB.
- **Way DA.** (2013) The good, the bad, and the ugly: tree responses to climate change. University of Guelph, Guelph, Ontario.
- Katul G, <u>Manzoni S</u>, Palmroth S, Oren R, **Way DA**. (2012) The economics of leaf gas exchange in a fluctuating environment and their up-scaling to the canopy. American Geophysical Union, San Francisco, CA.
- Way DA. (2011) Predicting tree responses to climate change: Leaves to forests. University of Western Ontario, London, ON.
- Way DA. (2011) Will climate warming stimulate forest growth? University of Georgia, Athens, GA.
- **Way DA.** (2010) Predicting tree responses to rising temperatures. University of Maryland, Centre for Environmental Sciences, Appalachian Lab, Frostburg, MD.
- **Way DA.** (2010) Predicting tree responses to global change: Temperature and CO₂. Case Western Reserve University, Cleveland, OH.
- **Way DA.** (2009) Conifer responses to global change: From north to south. University of Toronto at Mississauga, Mississauga, ON.
- Way DA. (2008) Black spruce on the Atkins Diet: Global warming and the role of Rubisco. USDA Blackland Research Centre, Temple, TX.
- Way DA. (2007) Black spruce on the Atkins Diet: Global warming and the role of Rubisco. Duke University, Durham, NC.
- **Way DA.** (2007) Black spruce on the Atkins Diet: Global warming and the role of Rubisco. Harvard University Herbarium Seminar Series, Harvard University, Cambridge, MA.
- **Way DA.** (2006) Black spruce on the Atkins diet: Will global warming lead to low-carb trees? 1st Annual Ecology and Evolutionary Biology Colloquium, University of Toronto.

Presented Papers (students and post-docs underlined)

- Kroner Y, **Way DA.** (2014) Effects of elevated CO₂ and growth temperature on respiration rates in Norway spruce (*Picea abies*). Ecological Society of America, Sacramento, CA.
- Katul G, <u>Manzoni S</u>, Palmroth S, Porporato A, **Way DA**, Oren R. (2014) Multi-scale modeling of ecosystem structure and function. Terrestrial Ecosystem Science, Principal Investigators Meeting, Washington, DC.
- Marin M. and **Way DA**. (2014) Leaf anatomical acclimation to elevated atmospheric temperatures and [CO₂] in two boreal conifer species. Ontario Biology Day, University of Toronto Mississauga, Mississauga, ON.
- <u>Stinziano J.</u>, Way DA. (2013) Canada's forests in a changing climate: impacts, responses, and unanswered questions. Canadian Society of Plant Physiologists, Eastern Section, University of Toronto Mississauga, Mississauga, ON.
- **Way DA** and Yamori W. (2013) Thermal acclimation of photosynthesis: the importance of definitions and thermal acclimation of respiration. Canadian Society of Plant Physiologists, Eastern Section, University of Toronto Mississauga, Mississauga, ON.
- Manzoni S, Vico G, **Way DA**, Katul G, Porporato A. (2013) Optimization theories to link water and carbon fluxes in forest ecosystems. Integrated Carbon Observation System (ICOS), Uppsala, Sweden.
- <u>Stinziano J</u>, <u>Kurepin L</u>, **Way DA**, Hurry V, Öquist G, Hüner N. (2013) Elevated temperature prevent photosynthetic decline in Norway spruce (*Picea abies*) during a simulated autumn. Canadian Society of Plant Biologists, Quebec, QC.
- Way DA, Domec J-C, Jackson RB. (2012) Elevated growth temperatures alter hydraulic characteristics in trembling aspen (*Populus tremuloides*) seedlings: implications for tree drought tolerance. Ecological Society of America, Portland, OR.
- <u>Stinziano J</u>, <u>Kurepin L</u>, **Way DA**, Hurry V, Öquist G, Hüner N. (2012) Elevated temperature eliminates the decline in photosynthetic capacity during a simulated autumn in Norway spruce (*Picea abies*). Canadian Society of Plant Biologists, Eastern Regional Meeting, Waterloo, ON.
- Fay PA, Polley WH, Jin VL, Gill RA, Jackson RB, **Way DA**. (2011) Rising atmospheric CO₂ effects on productivity and plant composition differs among soils in Southern Plains tallgrass prairie. Ecological Society of America, Austin, TX.
- **Way DA.** (2008) Black spruce on the Atkins Diet: Climate change and the boreal forest. Department of Ecology and Evolutionary Biology, University of Toronto, Toronto, ON.
- Way DA, Sage RF. (2007) Thermal acclimation of photosynthesis in black spruce: implications for climate change. Canadian Society of Plant Physiologists, Eastern Section, University of Western Ontario, London, ON.
- **Way DA**, Sage RF. (2007) Importance of photosynthetic and respiratory acclimation in black spruce grown at high temperatures: trees on the Atkins Diet. Ecological Society of America, San Jose, CA.
- **Way DA**, Sage RF. (2007) Growth of black spruce at high temperatures is limited by carbon uptake: an analysis of photosynthetic limitations. Research Frontiers with Rubisco, Rothamsted, Harpenden, UK.
- **Way DA**, Sage RF. (2007) Relative importance of acclimation in respiration and photosynthesis in black spruce grown at high temperatures. Canadian Society of Ecology and Evolution, Toronto, ON.

- **Way DA**, Sage RF. (2006) High growth temperatures reduce carbon balance and growth in black spruce. Canadian Society of Plant Physiologists, Eastern Section. McMaster University, Hamilton, ON.
- Way DA, Sage RF. (2006) High growth temperatures reduce photosynthesis, respiration and growth in black spruce. International Union of Forest Research Organizations, Canopy Processes Working Group Workshop, Black Rock Forest, NY.
- **Way DA**, Sage RF. (2005) High temperatures reduce spruce growth and survival, but increase thermotolerance. Ecological Society of America, Montreal, QC.

Poster Presentations (students and post-docs underlined)

- Stinziano J, Hüner N, **Way DA**. (2014) How does photosynthetic capacity vary with temperature and photoperiod in white spruce (*Picea glauca*)? Gordon Research Conference on CO₂ Assimilation: Genome to Biome. Waterville Valley, NH.
- Attia Z, Menachem M, Domec JC, **Way DA**, Ram O. (2014) Growth and physiological responses of isohydric and anisohydric poplars to drought. 4th Pan-American Congress on Plants and Bioenergy, Guelph, ON.
- Katul G, Palmroth S, **Way DA**, <u>Manzoni S</u>, Porporato A, Oren R. (2014) Constraining the simultaneous effects of elevated CO₂, temperature, and shifts in rainfall patterns on ecosystem carbon fluxes using multi-scale resource optimization theories. Terrestrial Ecosystem Science, Principal Investigators Meeting, Washington, DC.
- **Way DA**, Oren R, Kim H-S, Katul GG. (2014) How well do stomatal conductance models perform on closing plant carbon budgets? A test using seedlings grown under current and elevated air temperatures. Terrestrial Ecosystem Science, Principal Investigators Meeting, Washington, DC.
- Kroner Y, Way DA. (2013) Effects of elevated CO₂ and growth temperature on respiration and growth in Norway spruce (*Picea abies*). Canadian Society of Plant Physiologists, Eastern Section, University of Toronto Mississauga, Mississauga, ON.
- Lu M, <u>Ferouz A</u>, Edues F, **Way DA**, Tian L. (2103) Transient expression of β-glucuronidase in soybean somatic embryos using cell penetrating peptide transfection. Canadian Society of Plant Physiologists, Eastern Section, University of Toronto Mississauga, Mississauga, ON.
- Kroner Y, Way DA. (2013) Effects of elevated CO₂ and growth temperature on respiration rates in Norway spruce (*Picea abies*). Biology Graduate Research Forum, Western University, London, ON.
- Way DA, Yamori W. (2013) Thermal acclimation of photosynthesis: on the importance of adjusting definitions and accounting for thermal acclimation of respiration. 16th International Photosynthesis Congress, St. Louis, MO.
- <u>Stinziano J</u>, <u>Kurepin L</u>, **Way DA**, Hurry V, Öquist G, Hüner N. (2013) Elevated temperatures prevent photosynthetic decline in Norway spruce (*Picea abies*) during a simulated autumn. International Photosynthesis Congress, St. Louis, MO.
- Katul GG, Palmroth S, Way DA, Manzoni S, Porporato A, Oren R. (2013) Constraining the simultaneous effects of elevated CO₂, temperature and shifts in rainfall patterns on ecosystem carbon fluxes using multi-scale resource optimization theories. Terrestrial Ecosystem Science, Principal Investigators Meeting, Washington, DC.

- Way DA, Domec J-C, Jackson RB. (2012) Elevated growth temperatures alter hydraulic characteristics in trembling aspen (*Populus tremuloides*) seedlings: implications for tree drought tolerance. Canadian Society of Plant Biologists, Eastern Regional Meeting, Waterloo, ON.
- Manzoni S, Vico G, Katul G, **Way DA**, Oren R, Palmroth S, Jackson RB, Porporato A. (2012) Hydraulic controls on canopy gas exchanges. Joint meetings of the American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America, Cincinnati, OH.
- Way DA, Oren R, Kim H-S, Katul GG. (2012) How well do stomatal conductance models perform on closing plant carbon budgets? A test using seedlings grown under current and elevated air temperatures. Stomata, New Phytologist Symposium, Manchester, UK.
- Katul GG, Palmroth S, **Way DA**, <u>Manzoni S</u>, Porporato A, Oren R. (2012) Constraining the simultaneous effects of elevated CO₂, temperature and shifts in rainfall patterns on ecosystem carbon fluxes using multi-scale resource optimization theories. Terrestrial Ecosystem Science, Principal Investigators Meeting, Washington, DC.
- Way DA, Oren R, Kim H-S, Katul GG. (2011) How well do stomatal conductance models perform on closing plant carbon budgets? A test using seedlings grown under current and elevated air temperatures. American Geophysical Union, San Francisco, CA.
- Way DA, Oren R. (2011) Differential responses to changes in growth temperature in trees: functional groups and biomes matter. CO₂ Assimilation in Plants: Genome to Biome, Gordon Research Conference, Les Diablerets, Switzerland.
- Way DA, Schnitzler J-P, Monson RK, Jackson RB. (2010) Isoprene-related sunfleck tolerance is greater at low atmospheric CO₂: Implications for the evolution of isoprene biosynthesis and rising atmospheric CO₂ concentrations. Ecological Society of America, Pittsburgh, PA.
- Way DA, LaDeau SL, McCarthy HR, Clark JS, Oren R, Finzi AC, Jackson RB. (2009) Greater seed production in elevated CO₂ is not accompanied by reduced seed quality in *Pinus taeda*. Ecological Society of America, Albuquerque, NM.
- Way DA, Sage RF. (2008) Acclimation of photosynthesis and respiration to elevated temperatures in black spruce: What limits carbon gain at high temperatures? CO₂ Assimilation in Plants: Genome to Biome, Gordon Research Conference, Biddeford, ME
- **Way DA**, Sage RF. (2007) Growth of black spruce at high temperatures is limited by carbon uptake: an analysis of photosynthetic limitations. International Congress of Photosynthesis, Glasgow, Scotland.
- Way DA, Sage RF. (2007) Growth of black spruce at high temperatures is limited by carbon uptake: an analysis of photosynthetic limitations. Research Frontiers with Rubisco, Rothamsted, Harpenden, UK.
- Crawley C, **Way DA**, Sage RF. (2006) Climate warming and thirsty black spruce. Centre for Global Change Science, University of Toronto.
- **Way DA**, Sage RF. (2004) Can elevated CO₂ improve greenhouse production of black spruce seedlings for reforestation? International Congress of Photosynthesis, Montreal, QC.

Public Outreach

Way DA. (2014) Interview for the League of Remarkable Women in Science, a website by Dr. Anne-Sophie Dielen (ANU, Canberra, Australia) to encourage women in science. http://remarkablewomeninscience.tumblr.com/

Way DA. (2011) Duke Forest Research Tour, Duke University, Durham, NC.

Way DA. (2011) FACE-ing up to climate change – How will North Carolina's forests respond? Apex Community Center, Marine Mammal/Climate Change Geodome Event, Apex, NC.

Way DA. (2007) Invasive species: Alien life-forms among us. Sunnybrook Hospital, Toronto, ON.

Way DA. (2007) Why do evergreens stay green? Sunnybrook Hospital, Toronto, ON.

Way DA. (2006) Global warming: An introduction. Sunnybrook Hospital, Toronto, ON.

Way DA. (2006) Where to look for the first leaves of spring. Sunnybrook Hospital, Toronto, ON.

Way DA. (2003) Why do evergreens keep their needles in winter? Ask Us @ U of T, University of Toronto.

Teaching Experience

Plant Ecophysiology (3rd year course) Dept. of Biology, Western University. Instructor (2013-current).

Political Biology (4th year course) Dept. of Biology, Western University. Guest lecturer (2013, 2014).

Ecosystem Ecology (4th year courses) Dept. of Biology, Western University. Guest lecturer (2013).

Organismal Physiology (2nd year course). Dept. of Biology, Western University. Instructor (2012-current).

- Plant-Atmosphere Interactions in a Changing Climate (Grad course). Dept. of Plant and Environmental Sciences, University of Gothenburg, Sweden. Instructor (2011).
- Trees: Structure and Function (Grad course). Nicholas School of the Environment, Duke University. Instructor (2011), Guest lecturer (2010).
- Global Change Biology (4th year course). Dept. of Botany, University of Toronto. Instructor (2005); Teaching assistant (2004, 2006, 2008).
- Plant and Microorganism Physiology (2nd year course). Dept. of Ecology and Evolutionary Biology, University of Toronto. Teaching assistant (2007-2008).

Alpine Ecosystems (3rd year course). Dept. of Botany, University of Toronto. Teaching assistant (2006).

Physiological Ecology (Grad and 3rd year course). Dept. of Botany, University of Toronto. Teaching assistant (2003-2004, 2008).

Student Training

Supervised

Yulia Kroner (MSc, 2013-current); Joseph Stinziano (MSc, 2013-current); Vi Bui (Msc, 2014-current)

4th year honors thesis students: 2013 - Kiri Latuske, Snow Le, Marin Mema, Adam Paul Sullivan; 2014 - Nicholas Harris

Co-supervised

Atiyyah Ferouz (MSc w/ Lining Tian, 2013-current); Leonid Kurepin (Post-doc w/ Norm Hüner, 2012current); Stefano Manzoni (Post-doc w/ Gabriel Katul, 2011-2013); Farida Meerja (PhD w/ Lining Tian, 2014-current); Anthony Parolari (Post-doc w/ Gabriel Katul, 2012-current); Joseph Stinziano (Honours thesis w/ Norm Hüner, 2012-2013).

Supervisory committee

Henry Berghoff, PhD, Duke (2012-current); Jessica Clapp, MSc, Western (2013-current); Joshua Farhi, MSc, Western (2013-current); Ruth Jakobs, MSc, Western (2013-current); Joanna Konopka, PhD, Western (2014-current); Matthew Kwit, PhD, Duke (2012-current); Patrick Langille, MSc, Western (2013-current); Mathis Natvik, MSc, Western (2013-current); Pantana Tor-ngorn, PhD, Duke (2011current), Yan Xu, MSc, Western (2014-current).

Undergraduate volunteers

- 2012-2013: Meghana Garisa, Snow Le, Tari Nicole Little, Vrushank Patel, Sudha Penumala, Emma Rossi, William Sheridan
- 2013-2014: Nigel Bally, Meghana Garisa, Nicholas Harris, Brian Ngo, Vrushank Patel, Emma Rossi, William Sheridan
- 2014-2015: Camille Chemali, Yiran Liu

Graduate Exams: Chair – Lena Vanden Elsen (MSc proposal, 2012), Laura Ferguson (PhD proposal, 2013)

Examiner – 2014: Daniel Dyce (MSc defense, Dept. of Geography), Maksym Misyura (PhD defense, University of Guelph); Chelsea Ismael (MSc proposal) 2013: Golnaz Salehipour (MSc defense); Dan Lim (MSc defense); Eric Moise (PhD defense); Xue Du (MSc defense); Travis Howe (MSc defense); Aleksey Paltsev (MSc proposal); Ying Wang (MSc proposal). 2012: Rainer Bode (PhD defense); Kristie Bruinsma (MSc proposal); Avery McCarthy (PhD proposal).

Committees and Elected Positions

Faculty of Science representative, Faculty of Social Science, University of Western Ontario (2014-current) Research Committee, Department of Biology, University of Western Ontario (2013-current)

Biology Undergraduate Education Committee, Department of Biology, University of Western Ontario (2013current)

Physiology and Biochemistry Seminar Series co-organizer, Department of Biology, University of Western Ontario (2013)

Seminar Committee, Department of Biology, University of Western Ontario (2012-current)

Undergraduate Affairs Committee, Department of Ecology and Evolutionary Biology, University of Toronto (2006-2007)

Graduate Studies Committee, Department of Botany, University of Toronto (2005-2006)

Student representative, Plant Ecology Faculty Search, Department of Botany, University of Toronto (2005) President, Botany Graduate Student Association (BGSA), Department of Botany, University of Toronto

(2004-2005) Graduate Student Union Representative, BGSA, Department of Botany, University of Toronto (2003-2004)

Graduate Student Union Representative, BGSA, Department of Botany, University of Toronto (2003-2004)