ADRIEN CLAUDE FINZI

Curriculum Vitae

Department of Biology

Boston University

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EDUCATION	1996 Ph.D.	Ecology U	niversity of Conne	cticut & Institute c	of Ecosystem Studies
LDOGATION	1994 M.S.	Ecology, University of Connecticut & Institute of Ecosystem Studies Statistics, University of Connecticut			
	1990 B.S.	Environmental Studies, University of New Hampshire			
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POSITIONS	2009 – 2014	Founding Director , Ph.D. Certificate Program in Terrestrial Biogeoscience, Boston University			
HELD					
	2011 - Present	Professor of Biology, Boston University			
	2005 - 2011	Associate Professor of Biology, Boston University			
	2005 - 2015	Chair, Advancement, Promotion & Tenure Committee , Department of Biology, Boston University			
	2000 - Present	Co-Director, Boston University Stable Isotope Laboratory			
	2008 – 2009	Associate Editor, Biogeochemistry			
	2007 – 2009	Chair, Biogeosciences Section, Ecological Society of America			
	1999 – 2005	Assistant Professor of Biology, Boston University			
	1998 - 1999	Visiting Scholar, Stanford University, CA, USA			
	1996 - 1998	Fellow, Duke University, Alexander Hollaender Postdoctoral Fellow			
	1770 1770	Department of Energy, National Competition			
	1991 – 1996	Doctoral Candidate, University of Connecticut & Cary Institute of			
	Ecosystem Studies, Millbrook, NY, USA				
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UNIVERSITY	Terrestrial Biogeosciences, PhD Program Chair				2009-2014
SERVICE	Chair, Biology Advancement, Promotion and Tenure Committee				2007-Present
	Co-Director, Boston University Stable Isotope Laboratory 2000-Present				
	Faculty Searches				2044 2042
	Biology, Microbial Ecology, Chair				2011-2012
	Geog. & Envt, Environmental Modeling				2010-2011
	Geog. & Envt, Carbon Cycle Science				2008-2009
	Biology, Environmental Ecologist, Chair				2003-2004
	Biology, Evolutionary Ecology				2003-2004, 2000-2002
	Forth Colons of Lord Confere Internations				
	Earth Sciences, Land Surface Interactions				2001-2002
	Graduate Committee, Department of Biology				2000-05
TEACHING	College of Arts &	Sciences	Biology 303	General Ecology	,
	College of Arts & Sciences Biology 306 Biology of Globa				
	College of Arts & Sciences Biol. 643/443 Terrestrial Bioge				
	•	ge of Arts & Sciences Biology 582 Ecosystem Scien			
	College of Arts &				errestrial Biogeoscience
	College of Arts &		GRS 720	•	restrial Biogeoscience
	College of Arts &	JC1C11CE3	JNJ / 20	racticulii iii leli	Courai Diogeoscience

SERVICE, Organized Symposia

MEMBERSHIPS, 2009 NSF Funded Review of Coupled Biogeochemical Cycles (CBC) Program,

ACTIVITIES, Three sessions co-organizers Jon Cole & Beth Holland (NCAR)

AWARDS & CBC I: Response of CBCs to Global Change
CBC II: Response of CBCs to Climate Variability

CBC III: CBCs across space and time

2009 Long-Term Response of Communities and Ecosystems to Global Change, ESA,

Co-organizer Rich Norby (ORNL)

2009 North American Carbon Program Meeting. Breakout Session Leader: Carbon-Nitrogen

Interactions in the Context of Global Scale Carbon Cycle Models. 2/17-2/20 San Diego, CA. 2008 Role of Limiting Nutrients and Climate on Terrestrial Productivity, AGU,

SERVICE, MEMBERSHIPS, ACTIVITIES, AWARDS

Co-organizers Atul Jain, Bill Parton (Colo. State)

2006 Multiple Resource Limitation in Terrestrial and Aquatic Ecosystems, ESA, co-organizer Lars Hedin

2004 Organic N Cycling in Terrestrial Ecosystems, ESA, Co-organizer Erik Hobbie

Grant Review Panels

2006, 2007, 2009 National Science Foundation, Ecosystem Science

2005 EPA/DOE, Nonlinear Responses to Climate Change

2002, 2005 USDA, Managed Ecosystems

Reviews

2004 - 2008, Faculty of 1000, Faculty Contributor, Global Change Ecology

1996 - Present Journal Reviewer (18 journals, 53 manuscripts)

Society Membership

1996 - Present Ecological Society of America

2000 - 2006 American Institute of Biological Sciences

2000 - Present American Geophysical Union (Biogeoscience)

2000 - Present American Association for the Advancement of Science

Awards

2011 Distinguished Alumni Award, School of Natural Resources, U.N.H.

Other

2003 Smithsonian Astrophysical Observatory, Commentator, Material Cycles in Ecosystems, Educational Film

2002 Metcalf Award for Excellence in Teaching at Boston University, Nominee

1996 - 1998 Alexander Hollaender Postdoctoral Fellow, US Department of Energy

1994 - 2006 Christadora Environmental Studies, Educator, Norfolk, CT

GRANTS (updated 2/1/18)

Current

Center for Advances Bioengineering and Bioproducts Innovation (CABBI). \$115,000,000. US Department of Energy. BU Allocation \$1,000,000/5 years. Project Period 12/01/17 – 11/30/22.

Effects of Experimental Warming & Elevated CO₂ on Trace Gas Emissions from a Northern Minnesota Black Spruce Peatland. PI Adrien Finzi. US Department of Energy. \$395,000/3 years. Project Period 07/01/14 – 01/30/18.

LTER V: New Science, Synthesis, Scholarship and Strategic Vision for Society. PI David Foster. Co-PIs Aaron Ellison, David Orwig, Adrien Finzi & 9 others. National Science Foundation. \$5,000,000/6 years. Project Period 01/01/13 – 12/30/19. BU Allocation: \$360,000

Prior

Partitioning CO_2 fluxes with isotopologue measurements and modeling to understand mechanisms of forest carbon sequestration. US Department of Energy. \$1,050,000/3Years [+1 year no-cost extension]. Project Period 9/01/11 – 8/31/15. Pl. Scott Saleska. Co-Pls Adrien Finzi, Eric Davidson, Paul Moorcroft, William Munger. BU Allocation \$275,000

Duke Forest FACE Experiment: Continuation and Termination. U.S. Department of Energy. \$2,618,652/3 Years. Project Period 8/1/09 – 7/31/12). Pl: Ram Oren, Co-Pl: Adrien Finzi.

Dissertation Research: Limits to proteolytic enzyme production and activity in temperate forest soils. NSF \$14,994. Project Period 09/01/10 – 08/31/12. Pl: Adrien Finzi (nominal), Pl: Edward R. Brzostek.

Rhizosphere priming effects on soil nitrogen availability under elevated CO2. USDA \$385,000. Project Period 9/1/08 – 12/31/10. PI: Richard Phillips, Co-PIs Adrien Finzi, Emily Bernhardt.

Organic Nitrogen Cycling in Temperate Forest Soils. NSF. \$527,084. Project Period 3/1/08 – 2/28/11. Pl: Adrien Finzi, Co-Pl: Erik Hobbie.

Duke Forest FACE Experiment: Continuation. U.S. Department of Energy. \$1,559,016/2 Years. Project Period 8/1/07 – 7/31/09). Pl: Ram Oren, Co-Pl: Adrien Finzi.

Dissertation Research: The impact of the invasive species Allaria petiolata on nutrient cycling in northern hardwood – conifer forests. NSF. \$10,772. 2 Years. Project Period: 6/06-5/08 PI: Adrien Finzi (nominal), PI: Vikki L. Rodgers.

Organic Nitrogen Cycling and Uptake in the Northern Forest Region. USDA-NSRC, \$40,000/2 Years. Project Period 9/1/07-8/31/09. Pl: Adrien Finzi.

Carbon Cycling Work Group: A Synthesis of Data and Models for the Northern Forests Region. USDA-NSRC, \$17,876/1 Year. Project Period 9/1/07-12/31/08. Pl: Adrien Finzi, Co-Pls: Christine L. Goodale, Stuart Findlay, Scott V. Ollinger, Andrew D. Richardson.

Bullard Fellow. Harvard Forest/Harvard University. \$37,500. 7/06-12/06. PI: Adrien Finzi

Duke Forest FACE Experiment: Continuation. U.S. Department of Energy. \$3,600,000/3 Years. Project Period 8/1/04 – 7/31/07). PI: Ram Oren, Co-PI: Adrien Finzi.

Collaborative Research: Effects of Elevated CO_2 on Forest N Cycling: Assessment with Large-Scale 15N Tracers and Modeling. NSF. \$790,000/3 Years. PI: Adrien Finzi, Co-PI's: William Currie, Robert Jackson and William Schlesinger. Project Period: 3/01/03 - 2/29/06.

Forest Dynamics Across a Soil Resource Gradient: A Mechanistic and Modeling Approach. USDA \$285,000/4 years. Pl: Adrien Finzi 10/1/00 – 9/31/04.

Duke Forest FACE Experiment: Continuation. U.S. Department of Energy. \$3,211,960/3 Years. Project Period 8/1/01 – 7/31/04. Pl. William Schlesinger. BU Subcontract to Finzi.

An Isotope Ratio Mass Spectrometer and Autoanalyzer for Environmental Research. NSF. \$331,624/2 Years. Pl: Adrien Finzi, Co-Pl's Thomas Kunz, Richard Murray, Ivan Valiela. Project Period 5/1/02 – 5/30/04.

Nutrient Cycling in Response to Forest Growth at Elevated CO_2 (FACE). NSF \$368,411/3 Years. PI: Adrien Finzi, Co-PI: William H. Schlesinger. Project Period: 7/1/99 – 12/30/02.

Feedbacks Between Calcium Cycling and Canopy Tree Dynamics in Northern Temperate Forests. NSF \$450,000/3 years. Pl: Charles Canham, Co-Pls: Gary Lovett, Gene Likens, and Nico Van Breemen and Adrien Finzi. Project Period: 4/16/00 – 4/15/02.

PUBLICATIONS (92 total, ISI/GS citations = 7330/10,961; H-index = 46/53; updated 2/1/2018) **2018**

1. Abramoff, R., X. Xu, M. Hartman, S. O'Brien, W. Feng, E. Davidson, A. Finzi, D. Moorhead, J. Schimel and M. Torn (2018). "The Millennial model: in search of measurable pools and transformations for modeling soil carbon in the new century." <u>Biogeochemistry</u> **137**(1-2): 51-71.

- 2. Terrer, C., S. Vicca, B. D. Stocker, B. A. Hungate, R. P. Phillips, P. B. Reich, A. C. Finzi and I. C. Prentice (2018). "Ecosystem responses to elevated CO2 governed by plant-soil interactions and the cost of nitrogen acquisition." New Phytologist **217**(2): 507-522.
- 3. Sorensen, P. O., A. C. Finzi, M.-A. Giasson, A. B. Reinmann, R. Sanders-DeMott and P. H. Templer (2018). "Winter soil freeze-thaw cycles lead to reductions in soil microbial biomass and activity not compensated for by soil warming." <u>Soil Biology and Biochemistry</u> **116**: 39-47.

2017

- 4. Abramoff, R. Z., E. A. Davidson and A. C. Finzi (2017). "A parsimonious modular approach to building a mechanistic belowground carbon and nitrogen model." <u>Journal of Geophysical Research: Biogeosciences</u> **122**(9): 2418-2434.
- 5. Gill, A. L., M. A. Giasson, R. Yu and A. C. Finzi (2017). "Deep peat warming increases surface methane and carbon dioxide emissions in a black spruce dominated ombrotrophic bog." Global change biology.
- 6. Meier, I. C., A. C. Finzi and R. P. Phillips (2017). "Root exudates increase N availability by stimulating microbial turnover of fast-cycling N pools." <u>Soil Biology and Biochemistry</u> **106**: 119-128.

2016

- 7. Gill AL and **AC Finzi**. 2016 Belowground carbon flux links biogeochemical cycles and resource-use efficiency at the global scale. <u>Ecology Letters</u> DOI: 10.1111/ele.12690
- 8. Abramoff, R. Z. and A. C. Finzi 2016. "Seasonality and partitioning of root allocation to rhizosphere soils in a midlatitude forest." Ecosphere 7(11): e01547.
- 9. Sorensen, P. O., P. H. Templer, L. Christenson, J. Duran, T. Fahey, M. C. Fisk, P. M. Groffman, J. L. Morse and A. C. Finzi (2016). "Reduced snow cover alters root-microbe interactions and decreases nitrification rates in a northern hardwood forest." Ecology 97(12): 3359-3368.
- Sorensen, P. O., P. H. Templer, and A. C. Finzi. 2016. Contrasting effects of winter snowpack and soil frost on growing season microbial biomass and enzyme activity in two mixed-hardwood forests. <u>Biogeochemistry</u> 128 (1-2): 141-154
- 11. Shi, Z., Y. H. Yang, X. H. Zhou, E. S. Weng, A. C. Finzi and Y. Q. Luo (2016). "Inverse analysis of coupled carbon-nitrogen cycles against multiple datasets at ambient and elevated CO2." Journal of Plant Ecology **9**(3): 285-295.
- Stocker, B. D., Prentice, I. C., Cornell, S. E., Davies-Barnard, T., Finzi, A. C., Franklin, O., Janssens, I., Larmola, T., Manzoni, S., Näsholm, T., Raven, J. A., Rebel, K. T., Reed, S., Vicca, S., Wiltshire, A. and Zaehle, S. 2016. Terrestrial nitrogen cycling in Earth system models revisited. New Phytologist, 210: 1165–1168. doi:10.1111/nph.13997
- 13. Luo, Y., A. Ahlström, S. D. Allison, N. H. Batjes, V. Brovkin, N. Carvalhais, A. Chappell, P. Ciais, E. A. Davidson, A. Finzi, K. Georgiou, B. Guenet, O. Hararuk, J. W. Harden, Y. He, F. Hopkins, L. Jiang, C. Koven, R. B. Jackson, C. D. Jones, M. J. Lara, J. Liang, A. D. McGuire, W. Parton, C. Peng, J. T. Randerson, A. Salazar, C. A. Sierra, M. J. Smith, H. Tian, K. E. O. Todd-Brown, M. Torn, K. J. van Groenigen, Y. P. Wang, T. O. West, Y. Wei, W. R. Wieder, J. Xia, X. Xu, X. Xu, and T. Zhou. 2016. Toward more realistic projections of soil carbon dynamics by Earth system models. Global Biogeochemical Cycles 30:40-56.
- 14. Verma, M., M. A. Friedl, **A. Finzi**, and N. Phillips. 2016. Multi-criteria evaluation of the suitability of growth functions for modeling remotely sensed phenology. <u>Ecological Modelling</u> **323**:123-132.

2015

- 15. **Finzi AC**, Abramoff R Z, Brzostek E R, Darby B A, Spiller K S, Kramer M A, Phillips R P. (*2015*). Rhizosphere Processes are Quantitatively Important Components of Terrestrial Carbon and Nutrient Cycles. <u>Global Change Biology</u> **21**:2082-2094.
- 16. Abramoff, R. Z., and **A. C. Finzi**. 2015. Are above- and below-ground phenology in sync? New Phytologist 205:1054-106

- 17. Fulweiler, R. W., T. J. Maguire, J. C. Carey, and **A. C. Finzi**. 2015. Does Elevated CO₂ Alter Silica Uptake in Trees? Frontiers in Plant Science **5**. 10.3389/fpls.2014.00793
- 18. **Finzi AC**, PCL Raymer, MA Giasson and DA Orwig. 2014. Net primary production and soil respiration in New England hemlock forests affected by the hemlock woolly adelgid. <u>Ecosphere</u> 5:art98. http://dx.doi.org/10.1890/ES14-00102.1

2014

- 19. Giasson, M.A., C. Averill, and **A. C. Finzi**. 2014. Correction factors for dissolved organic carbon extracted from soil, measured using the Mn(III)-pyrophosphate colorimetric method adapted for a microplate reader. <u>Soil Biology and Biochemistry</u> **78**:284-287.
- 20. Averill CM, Turner BL and **AC Finzi**. 2014. Mycorrhiza-mediated competition between plants and decomposers drives soil carbon storage. <u>Nature</u> doi:10.1038/nature12901.
- 21. Frey, S. D., S. Ollinger, K. Nadelhoffer, R. Bowden, E. Brzostek, A. Burton, B. A. Caldwell, S. Crow, C. L. Goodale, A. S. Grandy, A. C. Finzi, M. G. Kramer, K. Lajtha, J. LeMoine, M. Martin, W. H. McDowell, R. Minocha, J. J. Sadowsky, P. H. Templer, and K. Wickings. 2014. Chronic nitrogen additions suppress decomposition and sequester soil carbon in temperate forests. Biogeochemistry 121:305-316.
- 22. Zaehle, S., B. E. Medlyn, M. G. De Kauwe, A. P. Walker, M. C. Dietze, T. Hickler, Y. Luo, Y.-P. Wang, B. El-Masri, P. Thornton, A. Jain, S. Wang, D. Warlind, E. Weng, W. Parton, C. M. Iversen, A. Gallet-Budynek, H. McCarthy, A. Finzi, P. J. Hanson, I. C. Prentice, R. Oren, and R. J. Norby. 2014. Evaluation of 11 terrestrial carbon–nitrogen cycle models against observations from two temperate Free-Air CO2 Enrichment studies. New Phytologist DOI: 10.1111/nph.12697
- 23. Hobbie, E. A., L. T. A. van Diepen, E. A. Lilleskov, A. P. Ouimette, **A. C. Finzi**, and K. S. Hofmockel. 2014. Fungal functioning in a pine forest: evidence from a N-15-labeled global change experiment. <u>New Phytologist</u> **201**:1431-1439.
- 24. Hobbie, E. A., K. S. Hofmockel, L. T. A. van Diepen, E. A. Lilleskov, A. P. Ouimette, and **A. C. Finzi**. 2014. Fungal carbon sources in a pine forest: evidence from a 13C-labeled global change experiment. <u>Fungal Ecology</u> 10:91-100.

2013

- 25. Giasson, MA, Ellison AM, Bowden RD, Crill PM, Davidson EA, Drake JE, Frey SD, Hadley JL, Lavine M, Melillo JM, Munger JW, Nadelhoffer KJ, Nicoll L, Ollinger SV, Savage KE, Steudler PA, Tang J, Varner RK, Wofsy SC, Foster DR, and **AC Finzi**. 2013. Soil respiration in a northeastern US temperate forest: a 22-year synthesis. <u>Ecosphere</u> 4 Article Number: UNSP 140, DOI: 10.1890/ES13.00183.1
- 26. Drake JE, Giasson MA, Spiller KJ, and **AC Finzi**. 2013. Seasonal plasticity in the temperature sensitivity of microbial activity in three temperate forest soils. <u>Ecosphere</u> **4**(6) *Article* 77
- 27. Raymer, P. C. L., D. A. Orwig, and **A. C. Finzi**. 2013. Hemlock loss due to the hemlock woolly adelgid does not affect ecosystem C storage but alters its distribution. <u>Ecosphere</u> **4**(6) *Article 63*
- 28. Drake JE, Darby BA, Giasson MA, Kramer MA, Phillips RP, and **AC Finzi**. 2013. Stoichiometry constrains microbial responses to root exudation: insights from a model and experiment in a temperate forest. <u>Biogeosciences</u> 10:821-838
- 29. Rao, P., L. Hutyra, S. Raciti, and **AC Finzi**. 2013. Field and remotely sensed measures of soil and vegetation carbon and nitrogen across an urbanization gradient in the Boston metropolitan area. <u>Urban Ecosystems</u> 16:593-616.

2012

30. Brzostek, E., A. Greco, J. Drake, and **AC Finzi**. 2012. Root carbon inputs to the rhizosphere stimulate extracellular enzyme activity and increase nitrogen availability in temperate forest soils. <u>Biogeochemistry</u> 115:65-76

- 31. Houlton, B., E. Boyer, **A.C. Finzi**, J. Galloway, A. Leach, D. Liptzin, J. Melillo, T. Rosenstock, D. Sobota, and A. Townsend. 2012. Intentional versus unintentional nitrogen use in the United States: trends, efficiency and implications. <u>Biogeochemistry</u> DOI 10.1007/s10533-012-9801-5
- 32. Phillips, R. P., I. C. Meier, E. S. Bernhardt, A. S. Grandy, K. Wickings, and **A. C. Finzi**. 2012. Roots and fungi accelerate carbon and nitrogen cycling in forests exposed to elevated CO2. <u>Ecology Letters</u> **15**:1042-1049.
- 33. Drake, J. E., A. C. Oishi, M. A. Giasson, R. Oren, K. H. Johnsen, and **A. C. Finzi.** 2012. Trenching reduces soil heterotrophic activity in a loblolly pine (Pinus taeda) forest exposed to elevated atmospheric CO2 and N fertilization. <u>Agricultural and Forest Meteorology</u> **165**:43-52.
- 34. Brzostek, E. R., J. M. Blair, J. S. Dukes, S. D. Frey, S. E. Hobbie, J. M. Melillo, R. J. Mitchell, E. Pendall, P. B. Reich, G. R. Shaver, A. Stefanski, M. G. Tjoelker, and **A. C. Finzi**. 2012. The effect of experimental warming and precipitation change on proteolytic enzyme activity: positive feedbacks to nitrogen availability are not universal. <u>Global Change Biology</u> **18**:2617-2625.
- 35. Raciti SM, LR Hutyra and **AC Finzi** (2012) Depleted soil carbon and nitrogen pools beneath impervious surfaces, Environmental Pollution 164:248-251
- 36. Raciti SM, LR Hutyra, P Rao and **AC Finzi** (2012). Inconsistent definitions of "urban" result in different conclusions about the size of urban carbon and nitrogen stocks. Ecological Applications 22:1015-1035

2011

- 37. Brzostek ER and **AC Finzi**. (2011). Seasonal variation in the temperature sensitivity of proteolytic enzyme activity in temperate forest soils. <u>Journal of Geophysical Research</u> 117:10. DOI: 10.1029/2011jg001688.
- 38. Averill CM and **AC Finzi**. (2011). Plant regulation of microbial enzyme production in situ. <u>Soil Biology & Biochemistry</u> 43:2457-2469.
- 39. Hofmockel KS, Gallet-Budynek A, WS Currie, RB Jackson and **AC Finzi**. Sources of increased nitrogen uptake in forest trees growing under elevated CO₂: results of a large-scale ¹⁵N tracer study. <u>Global Change Biology</u> 17:3338-3350.
- 40. Yang Y, Y Luo **and AC Finzi**. (2011). Carbon-nitrogen interactions during forest stand development: a global synthesis. New Phytologist 190:977-989
- 41. Brzostek ER and **AC Finzi**. (2011). Substrate supply, fine roots and temperature control proteolytic enzyme activity in temperate forest soils. <u>Ecology</u> 92:892-902
- 42. Averill CM and **AC Finzi**. (2011). Increasing plant dependence on organic nitrogen along an elevation gradient is reflected in nitrogen uptake rates and ecosystem δ^{15} N at Mount Eisenhower, NH, USA. Ecology 92:883-891.
- 43. Phillips RP, **AC Finzi** and ES Bernhardt. (2011). Enhanced root exudation induces microbial feedbacks to N cycling in a pine forest under long-term CO₂ fumigation. <u>Ecology Letters</u> 14(2): 187-194. DOI: 10.1111/j.1461-0248.2010.01570.x
- 44. Drake JE, Budynek AE, Hofmockel KR, Bernhardt ES, Billings SA, Jackson RB, Johnsen KS, Lichter J, McCarthy HR, McCormack L, Moore DJP, Oren R, Palmroth S, Phillips RP, Pippen JS, Pritchard SS, Treseder KK, Schlesinger WH, DeLucia EH and Finzi AC. (2011) Increases in the flux of carbon belowground stimulate nitrogen uptake and sustain the long-term enhancement of forest productivity under elevated CO₂. Ecology Letters doi: 10.1111/j.1461-0248.2011.01593.x
- 45. **Finzi AC**, Doney SC, Jackson RB, Holland EA, Cole J. (2011). Research frontiers in the analysis of coupled biogeochemical cycles. *Invited Special Feature Article in Frontiers in Ecology and the Environment* **9**: 74–80. doi:10.1890/100137
- 46. **Finzi AC**, Austin A, Cleland E, Houlton BZ, Wallenstein MD. (2011). Alterations and feedbacks of coupled biogeochemical cycles to global change in terrestrial ecosystems. *Invited Special Feature Article in* Frontiers in <u>Ecology and the Environment</u> **9**: 61–67. doi:10.1890/100001
- 47. Schlesinger WH, Cole C, **Finzi AC** and EA Holland (2011). Introduction to Coupled Biogeochemical Cycles. *Invited Special Feature Article in Frontiers in Ecology and the Environment* **9**: 5–8. doi:10.1890/090235

48. Melack J, **Finzi AC**, Siegel D, MacIntyre S, Nelson C, Aufdenkampe A and ML Pace (2011). New ways of seeing and measuring ecosystems advance understanding of coupled biogeochemical cycles. *Invited Special Feature Article in Frontiers in Ecology and the Environment* 9:37-43. doi:10.1890/100004

2010 and before

- 49. Way, DA, Ladeau SL, McCarthy HR, Clark JS, Oren R, **Finzi AC**, 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
- 50. McCarthy HR, Oren R, Jackson RB, Palmroth S, Gallet A, Pritchard SG, Cook CW, LaDeau S, Johnsen K, Finzi AC (2010). Reassessment of plant carbon dynamics at the Duke free air CO2 enrichment site: interactions of atmospheric [CO2] with nitrogen and water availability and stand development. New Phytologist 185:514-528.
- 51. **Finzi AC** and VL Rodgers (2009). Bottom-up rather than top-down processes regulate the abundance and activity of nitrogen fixing plants in two Connecticut old-field ecosystems. Biogeochemistry 95:309-321.
- 52. **Finzi AC** (2009). Decades of enhanced atmospheric N deposition do not increase the occurrence of P limitation or N saturation in two southern New England forests. Biogeochemistry 92(3):217-229.
- 53. Anne Gallet-Budynek, Brzostek E, Rodgers VL, Talbot JM Hyzy S, **Finzi AC** (2009). Amino acid uptake in northern hardwood-conifer forests. Oecologia 160(1):129-138.
- 54. Franklin O, McMurtrie RE, Iversen CM, Crous KY, **Finzi AC**, Tissue DT, Ellsworth DS, Oren R, Norby RJ (2009). Forest fine-root production and nitrogen use under elevated CO2: contrasting responses in evergreen and deciduous trees explained by a common principle. Global Change Biology 15(1) 132-144.
- 55. Lichter J, Billings SA, Ziegler SE, Gaindh D, Ryals R, **Finzi AC**, Jackson RB, Stemmler EA, Schelsinger WH (2008). Soil carbon sequestration in a pine forest after 9 years of atmospheric CO2 enrichment. Global Change Biology 14(12):2910-2922.
- 56. Rodgers VL, Werden L, Wolfe B, **Finzi AC** (2008). The invasive species Alliaria petiolata (garlic mustard) increases soil nutrient availability in northern hardwood-conifer forests. Oecolgia 157(3):459-471.
- 57. Natali SM, Sanudo-Wilhelmy SA, Norby RJ, Zhang H, **Finzi AC**, Lerdau MT (2008). Increased mercury in forest soils under elevated carbon dioxide. Oecologia 158(2)343-354.
- 58. Talbot JM, **Finzi AC** (2008). Differential Effects of Sugar Maple, Red Oak, and Hemlock Tannins on Carbon and Nitrogen Cycling in Temperate Forest Soils. Oecologia. 155(3):583-592. *Citations = 3*
- 59. Rodgers VL, Stinson KA, **Finzi AC** (2008). Ready or not, garlic mustard is moving in: Alliaria petiolata as a member of eastern North American forests. Bioscience 58(5):426-436.
- 60. Pritchard SG, Strand AE, McCormack ML, Davis MA, **Finzi AC**, Jackson RB, Matamala R, Rogers HH, and Oren R. (2008). Fine root dynamics in a loblolly pine forest are influenced by Free-Air- CO2 Enrichment (FACE): a six-year minirhizotron study. Global Change Biology 14(3):588-602.
- 61. McCarthy HL, Oren R, **Finzi AC**, Ellsworth DS, Kim HS, Johnsen KS, Millar BS (2007). Temporal dynamics and spatial variability in the enhancement of canopy leaf area under elevated atmospheric CO2. Global Change Biology 13:2479-2497.
- 62. Zaccherio MT, **Finzi AC**. (2007). Atmospheric N deposition and acid rain may affect the composition of northern hardwood-conifer forests by altering the availability of soil nitrogen and calcium. Ecological Applications 17:1929-1941.
- 63. Finzi AC, Norby RJ, Calfapietra C, Gallet A, Gielen B, Holmes WE, Hoosbeek MR, Iversen CI, Jackson RB, Kubiske ME, Ledford J, Liberloo M, Oren R, Polle A, Pritchard S, Zak DR, Schlesinger WH, Ceuelmans. (2007). Increases in nitrogen uptake rather than nitrogen-use efficiency support higher rates of forest productivity under elevated CO2. Proceedings of the National Academy of Sciences of the United States of America 104:14014-14019.
- 64. McCarthy H.R., R. Oren, **A.C. Finzi**, and K.H. Johnsen (2006). Canopy leaf area constrains [CO2]-induced enhancement of productivity and partitioning among aboveground carbon pools. Proceedings of the National Academy of Sciences of the United States of America 103: 19356-19361. *Ci*
- 65. Palmroth S, R. Oren, H.R. McCarthy, K.H. Johnsen, A.C. Finzi, J.R. Butnor, M.G. Ryan, and W.H. Schlesinger (2006). Aboveground sink strength in forests controls the allocation of carbon below ground and its [CO2]induced enhancement. Proceedings of the National Academy of Sciences of the United States of America 103: 19362-19367.

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- 87. **Finzi, A.C.**, N. van Breemen, and C.D. Canham. 1998. Canopy tree-soil interactions within temperate forests: tree species effects on carbon and nitrogen. Ecological Applications 8(2):440 446.
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- 92. Canham, C.D., **A.C. Finzi**, S.W. Pacala, and D.H. Burbank. 1994. Causes and consequences of resource heterogeneity in forests: interspecific variation in light transmission by canopy trees. Canadian Journal of Forest Research 24:337 349.

BOOK CHAPTER

Schlesinger W.H., E.S. Bernhardt, E.H. DeLucia, D.S. Ellsworth, A.C. Finzi, G.R. Hendrey, K.S. Hofmockel, J. Lichter, R. Matamala, D. Moore, R. Oren, J.S. Pippen, R.B. Thomas. (2006). The Duke Forest FACE Experiment: CO₂ Enrichment of a Loblolly Pine Forest. IN J. Nösberger, S.P. Long, R.J. Norby, M. Stitt, G.R. Hendrey, H. Blum (eds). Managed Ecosystems and CO₂: Case Studies, Processes and Perspectives. Ecological Studies Vol. 187, Springer-Verlag, Berlin, Heidelberg, 2006. Book Chapter.

INVITED WORKSHOPS

- 2018 Spruce and Peatland Response to Climatic and Environmental Change All-Hands Meeting, Minneapolis MN
- 2. 2018 Center for Advanced Bioenrgy and Bioproducts Innovation. University of Illinois, IL.
- 3. 2017 Spruce and Peatland Response to Climatic and Environmental Change All-Hands Meeting, Minneapolis MN
- 4. 2016 Ameriflux Annual PI Meeting, Breakout Session Leader, Golden, CO
- 5. 2016 Awesome Phosphorus Workshop, Department of Energy, Townsend, TN.
- 6. 2016 Spruce and Peatland Response to Climatic and Environmental Change All-Hands Meeting, Minneapolis MNI
- 7. 2016 International Decade of the Soil Planning Meeting, Carbon Cycle Interagency Working Group, Boulder,
- 8. 2016 Modeling the Global Terrestrial Nitrogen Cycle, Totnes, England. Organized by Iain Colin Prentice, Imperial College, England.
- 9. 2015 Advanced Research Programs Administration Energy. Phytosequestration Workshop. July.
- 10. 2014 INTERFACE meeting: "Improving Soil C Prediction in Earth System Models" Breckenridge CO, June. Organized by INTERFACE & Yiqi Luo
- 11. 2012 National Science Foundation, All Scientists Meeting, Estes Park Colorado, September 2012. Workshop Organizer: Belowground Processes Across the LTER Network.
- 12. 27th New Phytologist Symposium on Stoichiometric Flexibility in Terrestrial Ecosystems. *Invited Speaker*. Biosphere 2, Oracle Arizona. September 2011.
- 13. Rhizosphere Processes Microbial Acclimation Summit. May 9, 2011. Boston University. Conference Organizer
- 14. INTERFACE meeting: "How Do We Improve Earth System Models: Integrating Earth System Models, Ecosystem Models, Experiments and Long-Term Data?" travel grant. Captiva Island, FL. February 2011.

- 15. Climate Research Road Mapping for the next decade of DOE Carbon Cycle Science Research. Invited Panelist and White Paper Coauthor. May 13-14, 2010, Arlington VA
- 16. Exploring the Science Needs for Next Generation Elevated CO_2 and Global Change Experiments, DOE, Washington DC, April 2008
- 17. FACET Workshop, Future of European Global Change Experiments, ESF, Rome Italy, December 2007. LESC-PESC Science Position Paper. Available at www.esf.org.
- 18. Belowground Processes at the Duke FACE site: Recent Analysis and Synthesis. Organizer: Adrien Finzi. November 2007
- 19. Planning Workshop on Data-Model Fusion at Duke FACE. Durham, NC. The Southern Global Change Center, Forest Service USDA. January 2005
- 20. Progressive N Limitation under Elevated CO₂, National Center for Ecological Analysis and Synthesis, June 2001, 2002

INVITED SEMINAR PRESENTATIONS (2000-2018, 29 total)

- 1. University of Delaware. Belowground Allocation by Plants Regulates Biogeochemical Cycles at Local to Global Scales. May 2018. Department of Plant & Soil Sciences [Host: Rodrigo Vargas]
- 2. Universitat Autonoma de Barcelona. Belowground Allocation by Plants Regulates Biogeochemical Cycles at Local to Global Scales. April 2018. Global Ecology Unit CREAF-CSIC-UAB [Host: Josep Penuelas]
- 3. Freie Universsität Berlin. Belowground Allocation by Plants Regulates Biogeochemical Cycles at Local to Global Scales. April 2018. Institute of Biology [Host: Matthias R. Rillig]
- 4. West Virginia University. Belowground Allocation by Plants Regulates Biogeochemical Cycles at Local to Global Scales. March 2018. Department of Biology [Host: Edward R. Brzostek]
- 5. Princeton University. Belowground Allocation by Plants Regulates Biogeochemical Cycles at Local to Global Scales. April 2017. Department of Ecology & Evolutionary Biology [Host: Lars O. Hedin]
- 6. Swedish Agricultural University. Getting to the Root of Soil Biogeochemistry: Belowground Allocation & Rhizosphere Processes Regulate Element Cycling at Local to Global Scales. February 2016. Uppsala Sweden (Host: Bjorn Lindhal)
- 7. University of Illinois. Getting to the Root of Soil Biogeochemistry: Belowground Allocation & Rhizosphere Processes as Regulators of Carbon, Nitrogen, and Phosphorus Cycling at Local to Global Scale. November 2014 (Host: Evan DeLucia)
- 8. Ohio State University. Belowground Carbon Allocation as a Major Driver of Soil Organic Matter Decomposition: Implications for Forest-Atmosphere Exchanges of CO₂ and C Storage. May 2011 (Host: Peter Curtis)
- 9. Endicott College. *Scientific basis for climate change*. Keynote Speaker: Induction Ceremony, North Shore Chapter of the Sigma Xi honor society. November 2009.
- 10. Cary Institute of Ecosystem Studies. Belowground carbon allocation as a major driver of soil organic matter decomposition and nutrient cycling. January 2009.
- 11. Michigan State University. Forest productivity, nitrogen cycling and the long-term response of forests to rising CO₂. April 2008.
- 12. Bowdoin College. Coupled carbon and nitrogen cycles in forests exposed to elevated concentrations of atmospheric CO2. October 2008.
- 13. University of Kentucky. Forest responses to elevated CO2: Nitrogen constraints on forest-C uptake. March 2008
- 14. Brown University. Constraints to forest productivity imposed by the terrestrial N cycle: A multi-FACE site analysis of N cycling responses to high CO2. March 2008.
- 15. Yale University. Coupled carbon and nitrogen cycles in forests exposed to elevated concentrations of atmospheric CO2. February 2008
- 16. State University of New York, Binghamton. Nitrogen cycling and the response of forest ecosystems to rising atmospheric CO2: A 10-Year analysis of Duke FACE data. October 2007

- 17. Michigan Technical University. Does soil nitrogen availability contrasting long-term forest responses to rising concentrations of atmospheric CO₂? September 2007.
- 18. Cary Institute of Ecosystem Studies, Millbrook NY. Organic nitrogen cycling in temperate forests: patterns and mechanisms. January 2007
- 19. Harvard University, Harvard Forest, Petersham, MA. *Amino acid cycling in three cold-temperate forests.* March 2005
- 20. University of Massachusetts, Boston. Department of Biology. Can forest ecosystems absorb excess anthropogenic-CO₂ emissions? Lessons from a warm-temperate forest. November 2004.
- 21. University of Indiana, School of Public and Environmental Affairs. Does soil nitrogen availability control forest productivity and ecosystem carbon storage under elevated CO₂? January 2004.
- 22. Boston University, Department of Geography. Forest Productivity under Elevated CO₂: Results of the first 6 years of forest growth under elevated CO₂. November 2003.
- 23. Department of Ecology and Evolutionary Biology, Cornell University. Resource dynamics in New England forests. January 2002.
- 24. Harvard University, Harvard Forest, Petersham Massachusetts. Nutrient cycling under elevated CO₂. April 2001.
- 25. National Center for Ecological Analysis and Synthesis. Progressive N limitation of plant production under elevated CO₂: A case study of the Duke Forest FACE experiment. May 2001, 2002
- 26. US Department of Energy Annual Science Team Meeting. *The response of terrestrial ecosystems to global change.* Argonne National Lab. January 2001
- 27. Range and Ecosystem Science Department, Colorado State University. The relationship between NPP and nitrogen cycling in a forest under FACE: 4-Year Results. March 2001.
- 28. Boston University, Marine Program Seminar Series. Net primary production and nutrient cycling in response to forest growth under free-air CO₂ enrichment. May 2000.
- 29. Idaho State University, Department of Biology Seminar. Net primary production and nutrient cycling in response to forest growth under free-air CO₂ enrichment. March 2000.

ORAL & POSTER MEETING PRESENTATIONS (2000-present, N=62, **bold name** = presenter, ESA=Ecological Society of America Annual Meeting in August, AGU = American Geophysical Union annual Meeting in December, EGU = European Geophysical Union annual Meeting, April

- 1. Contributed 2018. ESA. The Harvard Forest Carbon Budget: Patterns, Processes and Response to Global Change. **AC Finzi** + 20 coauthors.
- 2. Contributed 2018. EGU. The Harvard Forest Carbon Budget: Patterns, Processes and Response to Global Change. **AC Finzi** + 20 coauthors.
- 3. Poster 2017. ESA. Bacterial carbon-use- efficiency predicted from genome-specific metabolic models varies phylogenetically and correlates with genome traits. **M Saifuddin** & AC Finzi
- 4. Contributed 2017. AGU. Response of surface CH₄ and CO₂ fluxes to whole ecosystem warming and elevated CO₂ in a boreal black spruce peatland, northern Minnesota. **IF Hsieh**, AR Gill, MA Giasson & AC Finzi.
- 5. Poster 2016. AGU. Effects of experimental warming and elevated CO₂ on surface methane and CO₂ fluxes from a boreal black spruce peatland. **A.R. Gill**, I.F. Hsieh, M.A. Giasson & A.C. Finzi
- 6. Contributed 2016. AGU. Rhizosphere Processes Are Quantitatively Important Components of Terrestrial Biogeochemical Cycles: Data & Models. **A.C. Finzi**
- 7. Contributed 2016. ESA. Effects of experimental warming and elevated CO₂ on trace gas emissions from a northern Minnesota black spruce peatland. **AR Gill**, MA Giasson & AC Finzi
- 8. Contributed 2016. ESA. Belowground carbon allocation and mycorrhizal fungi couple biogeochemical cycles at plot-to-global scales. **AC Finzi**

- 9. Contributed 2016. ESA. Effects of climate change across seasons on mycorrhizal community composition at Hubbard Brook Experimental Forest. **MO Garcia**, JM Talbot, PH Templer, PO Sorensen, AC Finzi, PM Groffman & J Campbell.
- 10. Poster 2015. AGU. Effects of experimental warming and elevated CO₂ on surface methane and CO₂ fluxes from a boreal black spruce peatland. **A.R. Gill** & A.C. Finzi
- 11. Contributed 2015. ESA. Increased freeze-thaw cycles in winter partially offsets stimulatory effects of growing season soil warming on microbial activity in northern hardwood forests. **PO Sorensen**, PH Templer & AC Finzi
- 12. Contributed 2014. ESA. What is the relationship between above and belowground phenology?: A meta-analysis and case study. **R.A. Abramoff** & A.C. Finzi
- 13. Contributed 2014. ESA. Soil moisture deficit drives proteolytic enzyme activity in a consistent way at the site-level and across a network of global change experiments. **ER BRzostek**, J. Swilik, AC Finzi, RP Phillips.
- 14. Contributed 2014. ESA. Nitrogen vs. phosphorus limitation of terrestrial produtivity: A global scale analysis based on the carbon costs of resource uptake. AC Finzi and AR Gill.
- 15. Invited 2014. AGU. A Parsimonious Modular Approach to Building a Mechanistic Belowground C and N Model. **R.A. Abramoff**, E.A. Davidson & A.C. Finzi
- 16. Poster 2014. AGU. Partitioning soil respiration: examining the artifacts of the trenching method. **K. Savage**, E.A. Davidson, A.C. Finzi, R. Wehr, M.A. Giasson.
- 17. Poster 2014. AGU. Are above- and belowground phenology in sync? Rose Abramoff & Adrien Finzi
- 18. Poster 2014. AGU. Poster 2014. AGU. Measurement and Modeling of Root-Zone Processes Influencing Water, Carbon, and Nitrogen Cycles at Various Scales. **Patrick O. Sorensen**, Pamela H. Templer & Adrien c. Finzi
- 19. Poster 2014. AGU. Measurement and Modeling of Root-Zone Processes Influencing Water, Carbon, and Nitrogen Cycles at Various Scales. **Allison Gill** & Adrien Finzi
- 20. Poster 2013. AGU. The coupled effects of carbon and nitrogen on soil decomposition: A theoretical model. **Bridget Darby** and Adrien C. Finzi
- 21. Contributed 2013. AGU. The carbon cost of nutrient uptake: global patterns and use in regional to global scale models of terrestrial productivity. **Adrien C. Finzi** and Allison L. Gill.
- 22. Contributed 2013. AGU. Root Phenology at Harvard Forest and Beyond. Rose Z. Abramoff and Adrien C. Finzi
- 23. Contributed 2013. ESA. Quantifying competition between ectomycorrhizal and saprotrophic fungi, and implications for soil carbon and nitrogen cycling. Colin Averill, Adrien C. Finzi and Christine V. Hawkes
- 24. Poster 2013. ESA & AGU. The influence of water table position on soil microbial processes and carbon mineralization in a mid latitude spruce peatland. **Allison L. Gill** and Adrien C. Finzi
- 25. Contributed 2012. ESA. Responses and feedbacks of coupled biogeochemical cycles to global change. **Adrien**C. Finzi and John E. Drake
- 26. Contributed 2012. ESA. The importance of definition and scale: Soil and vegetation carbon across an urban to rural gradient. **Steve M. Raciti**, Lucy R. Hutyra, Preeti Rao and Adrien C. Finzi
- 27. Invited 2012. ESA. Fungi decrease the sequestration of root-derived C under elevated CO₂. **Richard P. Phillips**, Adrien C. Finzi, Ina C. Meier and Emily S. Bernhardt.
- 28. Contributed 2012. ESA. Seasonal variation in the temperature sensitivity of soil nitrogen transformations in New England forests. **John E. Drake** and Adrien C. Finzi
- 29. Contributed 2012. ESA. Using Rayleigh Isotope Equations to predict foliar δ¹⁵Nitrogen signatures and form of nitrogen uptake across biomes. **Colin Averill** and Adrien C. Finzi
- 30. Contributed 2012. ESA. The decline of a northeastern foundation species (*Tsuga canadensis*) and its implications for forest carbon storage capacity. Poliana Lemos and Adrien C. Finzi
- 31. *Contributed 2010. Fall Meeting of the American Geophysical Union. Coupled Biogeochemical Cycles and Global Change in Terrestrial Ecosystems. Adrien Finzi

- 32. *Contributed 2010. Fall Meeting of the American Geophysical Union. The response of amino acid cycling to global change across multiple biomes: Feedbacks on soil nitrogen availability. **Edward Brzostek** & Adrien Finzi
- 33. *Contributed 2010. Annual Meeting of the Ecological Society of America. The response of amino acid cycling to global change across multiple biomes: Feedbacks on soil nitrogen availability. **Edward Brzostek**, Adrien Finzi
- 34. *Contributed* 2010. Annual Meeting of the Ecological Society of America. The response of amino acid cycling to global change across multiple biomes: Feedbacks on soil nitrogen availability. **Edward Brzostek**, Adrien Finzi
- 35. Contributed 2010. Annual Meeting of the Ecological Society of America. Biogeochemical consequences of changes in root-derived carbon inputs to soil in a forest exposed to CO₂ enrichment. **Richard Phillips**, Adrien Finzi.
- 36. Contributed 2009 Annual Meeting of the Ecological Society of America. Integrating new paradigms in C and N cycling: Rhizo-accelerated mineralization and priming in an elevated CO₂ forest. **Rich Phillips**, Adrien Finzi, Emily Bernhardt.
- 37. Contributed 2009 Annual Meeting of the Ecological Society of America. Elevation driven dynamics of organic nitrogen cycling and uptake in the White Mountains, NH, USA. Colin Averill, Adrien Finzi
- 38. *Invited* 2009 Annual Meeting of the Ecological Society of America. Annual Meeting of the Ecological Society of America. Carbon as the common currency linking the biogeochemical cycles of nitrogen and water in ecosystems exposed to experimental increases in atmospheric carbon dioxide. **Adrien Finzi**.
- 39. Contributed 2009 Annual Meeting of the Ecological Society of America. The role of tree species and mycorrhizal fungi on amino acid production and turnover in temperate forest soils. **Edward Brzostek**, Adrien Finzi
- 40. *Contributed* 2009 Annual Meeting of the Ecological Society of America. Belowground carbon dynamics at Duke FACE: A summary. **John Drake**, Evan DeLucia, Adrien Finzi
- 41. Poster Presentation. 2009 Annual Meeting of the Ecological Society of America. Greater seed production in elevated CO₂ is not accompanied by reduced seed quality in loblolly pine. **Danielle Way**, Shannon LeDeau, Heather R. McCarthy, James S. Clark, Ram Oren, Adrien Finzi, Robert Jackson.
- 42. Poster Presentation. 2009 Annual Meeting of the Ecological Society of America. Evaluating the role of root exudates in coupling ecosystem C and N cycling using a rhizosphere simulator in forest soils. **Andrea Martin**, Jackie Burmeister, Adrien Finzi, Emily Bernhardt, Richard Phillips.
- 43. Invited 2009 Soil Science Society of America Meeting. Extracellular Enzyme Activities in the Soil as the Dynamic Link Between the Nitrogen Cycle and Global Scale Terrestrial Carbon Storage. Adrien Finzi.
- 44. Contributed 2008 Annual Meeting of the Ecological Society of America. Nitrogen and phosphorus limitation of tree growth in southern New England Forests. Adrien Finzi.
- 45. Contributed 2007 Annual Meeting of the Ecological Society of America. Reassessment of carbon accumulation at the Duke free air CO₂ enrichment site: Interactions of atmospheric [CO₂] with nitrogen and water availability and stand development. **Heather R. McCarthy**, Ram Oren, Kurt H. Johnsen, Adrien C. Finzi, Seth G. Pritchard, Robert B. Jackson, Charles W Cook, and Kathleen K. Treseder\Invited, Symposium 2006 Annual Meeting of the Soil Science Society of America. Microbial community responses to elevated CO2. Indianapolis, IN.
- 46. Invited, 2006 Annual Meeting of the Ecological Society of America. Causes and consequences of multiple resource limitation in temperate forests. Adrien Finzi.
- 47. Contributed 2006 Annual Meeting of the Ecological Society of America Nitrogen uptake and net primary productivity in four forest FACE experiments. **Richard Norby**, Adrien Finzi, EvanDeLucia, Reinhart Ceulemans, Birgit Gielen.
- 48. *Contributed* 2006 Annual Meeting of the Ecological Society of America. Tannin influences on carbon nitrogen dynamics in temperate forest soils. **Jennifer Talbot**, Adrien Finzi
- 49. Contributed 2006 Annual Meeting of the Ecological Society of America. Mycorrhizal dynamics under CO₂ and nitrogen enrichment. **Maria Garcia**, Tatevik Ovasapyan, Adrien Finzi, Kathleen Treseder.

- 50. Contributed 2006 Annual Meeting of the Ecological Society of America. The effects of light, soil nutrients, and herbivory on the growth and survivorship of symbiotic, nitrogen-fixing clovers in temperate old fields. **Vikki Rodgers**, Adrien Finzi
- 51. Contributed 2006 Annual Meeting of the Ecological Society of America. More rapid acquisition of N in forest trees growing under elevated CO₂ I: results of a large-scale 15N study. **Anne Budynek**, Kirsten Hofmockel, William Currie, Robert Jackson, Adrien Finzi.
- 52. Contributed 2006 Annual Meeting of the Ecological Society of America. More rapid acquisition of N in forest trees growing under elevated CO₂ II. Modeling increased plant N demand and sources for N uptake at the Duke FACE site. **William Currie**, Anne Budynek, Kirsten Hofmockel, Robert Jackson, Adrien Finzi.
- 53. Contributed 2005 Annual Meeting of the Ecological Society of America. Atmospheric deposition, soil nutrient availability and the composition of northeastern U.S. forests. **Adrien Finzi**
- 54. Contributed 2005 Annual Meeting of the Ecological Society of America. Temporal dynamics and spatial variability in the enhancement of canopy leaf area under elevated CO₂. **Heather McCarthy**, Ram Oren, Adrien Finzi, David Ellsworth, Hyun-Soek Kim, Kurt Johnsen.
- 55. Contributed 2005 Annual Meeting of the Ecological Society of America. Does Alliaria petiolata invasion alter nutrient cycling dynamics in southern New England? Vikki Rodgers, Adrien Finzi
- 56. Invited 2005 Planning Workshop on Data-Model Fusion at Duke FACE. Durham, NC. N Limitation, Net Primary Production and Elevated CO₂: Extrapolating Duke FACE Results to the Southeastern US. Funded By: The Southern Global Change Center, Forest Service USDA. Adrien Finzi.
- 57. *Invited 2004* Northeastern Ecosystem Research Cooperative. 2nd Annual Meeting, Durham, NH. Soil nitrogen cycling in three temperate forests contrasting in parent material and canopy tree species composition. **Adrien Finzi**
- 58. Invited, Symposium 2003 Annual Meeting of the Ecological Society of America. <u>Invited Symposium Talk</u>
 Progressive N limitation of ecosystem function in the Duke Forest FACE experiment. Savanna, GA. **Adrien Finzi**
- 59. Contributed 2002 Annual Meeting of the Ecological Society of America. Tucson, AZ. Models and mechanisms linking carbon, water and nutrient cycles under elevated CO₂.
- 60. Invited 2002 <u>Terrestrial Ecosystem Response and Acclimation to Climate Change (TERACC)</u>. Transient dynamics in plant and microbial processes in a pine forest under elevated CO₂. University of New Hampshire.
- 61. Contributed 2001 Annual Meeting of the Ecological Society of America. The relationship between NPP and nitrogen cycling in a forest under FACE: 4-year results. Madison, WI.
- 62. Contributed 2000 Annual Meeting of the Ecological Society of America. The distribution of N in plants, soils and microbes following three years of FACE in a pine forest. Snowbird, UT.