

Rose Abramoff

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Current position

Postdoctoral Researcher, Lawrence Berkeley National Laboratory

Areas of specialization

Biogeochemistry • Terrestrial Biosphere Modeling

Appointments held

2015-
2009-2015 Postdoctoral Researcher, LBNL
Teaching Fellow, Boston University

Education

2015 PHD in Biology: Ecology, Behavior and Evolution, Boston University
2015 CERTIFICATE in Biogeochemistry, Boston University
2009 BA in Biology, Amherst College
2009 BA in Theater and Dance, Amherst College

Publications & talks

PUBLISHED ARTICLES

2017 **Abramoff RZ**, Xu X, Hartmann M, O'Brien S, Feng W, Davidson EA, Finzi AC, Moorhead D, Schimel J, Mayes M, The Millennial model: in search of measurable pools and exchanges in soil carbon cycling for the new century. *Biogeochemistry* 1-21, DOI:10.1007/s10533-017-0409-7

2017 Georgiou K, **Abramoff RZ**, Harte J, Riley WJ, Torn MS (2017), Microbial community-level regulation explains soil carbon responses to long-term litter manipulations. *Nature Communications* 1223, 1-10, DOI: 10.1038/s41467-017-01116-z

2017 **Abramoff RZ**, Davidson EA, Finzi AC (2017), A parsimonious modular approach to building a mechanistic belowground carbon and nitrogen model. *JGR Biogeosciences* 122, DOI:10.1002/2017JG003796

2016 **Abramoff RZ**, Finzi AC (2016), Seasonality and partitioning of root allocation to rhizosphere soils in a midlatitude forest. *Ecosphere* 7.11, e01547, DOI:10.1002/ecs2.1547

2015 Finzi AC, **Abramoff RZ**, Darby BA, Spiller KS, Brzostek ER, Phillips RP (2015), Rhizosphere processes are quantitatively important components of terrestrial carbon and nutrient cycles. *Global Change Biology* 21.5, 2082-2094, DOI: 10.1111/gcb.12816

2015 **Abramoff RZ**, Finzi AC (2015), Are above-and below-ground phenology in sync? *New Phytologist* 205.3, 1054-1061, DOI: 10.1111/nph.13111

DATASETS

- 2017 Vaughn L, Zhu B, Bimueller C, Porras R, Curtis B, Chafe O, **Abramoff RZ**, Bill M, Torn MS, Soil Mesocosm CO₂ Emissions after ¹³C-glucose Addition, Soil Physical and Chemical Characteristics, and Microbial Biomass, Barrow, Alaska, 2014-2016. *Next Generation Ecosystems Experiment-Arctic, Oak Ridge National Laboratory (ORNL), Oak Ridge, TN (US)* DOI: 10.5440/1364061
- 2016 **Abramoff RZ**, Finzi AC (2016), Phenology and Carbon Allocation of Roots at Harvard Forest 2011-2013. *Long Term Ecological Research Network, Dataset*. DOI:10.6073/pasta/bzfe6d68f23ad815f62a022826028328

SELECTED INVITED PRESENTATIONS

- 2017 **Abramoff RZ**, Georgiou K, Tang J, Torn MS, Riley WJ, Mineral surface properties and mean annual temperature control soil carbon stock. *Department of Geography, ETH Zurich*
- 2017 **Abramoff RZ**, Harden J, Georgiou K (presenting author), Tang J, Torn MS, Riley WJ, Managing for C sequestration: a modeling framework for decision-making. *European Geophysical Union Annual Meeting, Vienna, Austria*
- 2016 Mayes MA, Wang G, **Abramoff RZ**, Xu X, Hartman MD, Feng W, Davidson EA, Finzi AC, Moorhead D, Schimel J, O'Brien SL, Thornton PE, Measurable Pools of Soil Carbon for Carbon Cycle Modeling. *American Geophysical Union Fall Meeting*
- 2016 Sulman B, Moore, J Averill C, **Abramoff RZ**, Bradford M, Classen AT, Hartman MD, Kivlin SN, Luo Y, Mayes MA, Morrison EW, Riley WJ, Salazar A, Schimel J, Sridhar B, Tang J, Wang G, Wieder WR, Key Process Uncertainties in Soil Carbon Dynamics: Comparing Multiple Model Structures and Observational Meta-analysis. *American Geophysical Union Fall Meeting*
- 2015 **Abramoff RZ**, Georgiou K, Tang J, Torn MS, Riley WJ, Climate warming and soil carbon cycling: Emergent responses across time and space. *Ecological Society of America Annual Meeting*

Grants, honors & awards

- 2017 LBNL EESA Early Career Development Grant - \$25000
- 2015 BU Biogeoscience Symposium Outstanding Oral Presentation Award - \$500
- 2014 AAUW Dissertation Fellowship - \$20000
- 2013 AGU Outstanding Student Paper Award
- 2012,2014 AGU Student Travel Grant Award - \$1000
- 2012-2014 BU George R. Bernard, Jr. Travel Award - \$1200
- 2011-2014 BU GRS Graduate Scholarship - \$8067
- 2011-2012 NSF Graduate STEM in K-12 Education Fellowship - \$20000
- 2010-2014 BU Teaching Fellowship - \$56400
- 2010 NSF East Asia and Pacific Summer Institutes Fellowship - \$5617
- 2009-2011 Amherst College Fellowship for Graduate Study - \$13600
- 2009 BU Dean's Fellowship - \$18900
- 2007 Howard Hughes Medical Institute Independent Research Fellowship - \$5000

Teaching & Mentorship

- 2013-2014 Pomona College undergraduate thesis advisor: Johanna Recalde
- 2012,2013 Harvard Forest REU Program Mentor: Samuel Knapp, Arline Gould, Johanna Recalde
- 2011-2015 Undergraduate Research Intern Mentor: Amanda Alon, Aubree Woods
- 2011-2012 NSF GK-12 GLACIER Teaching Fellow: Curley K-8 School
- 2010-2015 BU Teaching Fellow: Biology I, Biology II, Ecology

Service to the profession

PROFESSIONAL SERVICE

2017	European Geophysical Union Member
2016-	LBNL Women Scientists and Engineers Council Empowerment Committee Member
2016-	CRS BASIS Steering Committee Member
2016	CCIWG International Decade of Soil Workshop Organizer
2015-	AGU Global Environmental Change Executive Committee Member
2013-2015	LTER Higher Education Working Group Member
2013-2015	LTER Harvard Forest Graduate Student Representative
2012-	Ecological Society of America Member
2012-	American Geophysical Union Member
2014-2017	Reviewer for Global Change Biology, Agricultural & Forest Meteorology, New Phytologist, Biogeosciences, Ecosystems, Soil Science, Biotropica, Ecology & Evolution, Biological Conservation

OUTREACH

2017	The Climate Music Project Science Consultant
2015-2016	CRS BASIS Volunteer & Team Leader
2012-2015	BU Advocates for Literacy in Environmental Sciences Founding Member (Received Graduate Student Organization Award for Excellence in Student Activities)
2013	Pierce School Climate Change Summit Moderator
2012	Curley K-8 School Science Fair Judge
2011	NSF GK-12 GLACIER Fundraiser Organizer
2011	Summer Pathways Program: Tech Savvy Program Coordinator
2011	Biology Inquiry & Outreach with Boston University Graduate Students Volunteer Instructor

Media Mentions

2017	Editor's Highlight Journal of Geophysical Research: Biogeosciences
2017	EESA Research Shines Light on Role Soil Microbes Play in Carbon Sequestration EESA News Page
2015	Tracing Our Roots: GRS student digs deep into the carbon cycle BU Today

Programming Skills

R, Matlab, Fortran, Python, Unix