Rose Abramoff

Orme des Merisiers Bat 714, P 2108

Gif-sur-Yvette 91190 France email: rose.abramoff at gmail.com website: https://rabramoff.github.io/

github: rabramoff twitter: ultracricket

Current position

Postdoctoral Researcher, Laboratoire des Sciences du Climat et de l'Environnement

Areas of specialization

Biogeochemistry • Terrestrial Biosphere Modeling

Appointments held

2018-	Postdoctoral Researcher, LSCE
2015-2018	Postdoctoral Researcher, LBNL
2009-2015	Teaching Fellow, Boston University

Education

2015	PнD 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

2019	Abramoff RZ, Torn MS, Georgiou K, Tang J, Riley WJ, Spatial gradients can hide soil organic mat-
	ter temperature sensitivity to warming. Global Biogeochemical Cycles DOI:10.1029/2018GB006001
2018	Contributing author to: 2nd State of the Carbon Cycle Report. Chapter 12: Soils
2018	Sulman BN, Moore JAM, Abramoff RZ, Averill C, Kivlin S, Georgiou K, Sridhar B, Hartman M,
	Wang G, Wieder WR, Bradford MA, Luo Y, Mayes MA, Morrison E, Riley WJ, Salazar A, Schimel JP,
	Tang J, Classen AT, Multiple models and experiments underscore large uncertainty in soil carbon
	dynamics. Biogeochemistry 141:2, 109-123, DOI:10.1007/s10533-018-0509-z

Savage K, Davidson EA, **Abramoff RZ**, Finzi AC, Giasson M-A, Partitioning Soil Respiration: Quantifying the Artifacts of the Trenching Method. *Biogeochemistry* 1-11. DOI:10.1007/s10533-018-0472-8

Abramoff RZ, Xu X, Hartmann M, O'Brien S, Feng W, Davidson EA, Finzi AC, Moorhead D, Schimel J, Torn MS, Mayes M (2018), 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
- 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
- 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
- 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
- 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
- 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

- 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
- 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/b2fe6d68f23ad815f62a022826028328

SELECTED INVITED PRESENTATIONS

- Abramoff RZ, Torn MS, Georgiou K, Tang J, Riley WJ, A tale of four models, or Spatial gradients can hide the temperature sensitivity of soil organic matter to warming. *Enviro-Lunch Seminar, UC Merced*
- 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*
- 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
- 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*
- 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*
- 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

- 2018 Marie Curie Individual Fellowship
- MOPGA Laureate
- LBNL EESA Early Career Development Grant
- 2015 BU Biogeoscience Symposium Outstanding Oral Presentation Award
- 2014 AAUW Dissertation Fellowship

AGU Outstanding Student Paper Award 2013 AGU Student Travel Grant Award 2012,2014 BU George R. Bernard, Jr. Travel Award 2012-2014

BU GRS Graduate Scholarship 2011-2014

NSF Graduate STEM in K-12 Education Fellowship 2011-2012

BU Teaching Fellowship 2010-2014

NSF East Asia and Pacific Summer Institutes Fellowship 2010

Amherst College Fellowship for Graduate Study 2000-2011

BU Dean's Fellowship

Howard Hughes Medical Institute Independent Research Fellowship

Teaching & Mentorship

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

BU Teaching Fellow: Biology I, Biology II, Ecology 2010-2015

Service to the profession

Professional Service

European Geophysical Union Member 2017-

LBNL Women Scientists and Engineers Council Empowerment Committee Member 2016-

CRS BASIS Steering Committee Member 2016

CCIWG International Decade of Soil Workshop Organizer 2016

AGU Global Environmental Change Executive Committee Member 2015-

LTER Higher Education Working Group Member 2013-2015 LTER Harvard Forest Graduate Student Representative 2013-2015

Ecological Society of America Member 2012-American Geophysical Union Member 2012-

Reviewer for 15+ journals, including: Nature Climate Change, Nature Communications, Global 2014-2017

Change Biology, New Phytologist, Soil Biology \$ Biochemistry, Geoscientific Model Development,

Biogeosciences, Agricultural & Forest Meteorology, Geoderma

OUTREACH

The Climate Music Project Science Advisor 2017 CRS BASIS Volunteer & Team Leader 2015-2016

BU Advocates for Literacy in Environmental Sciences Founding Member 2012-2015

(Received Graduate Student Organization Award for Excellence in Student Activities)

Pierce School Climate Change Summit Moderator 2013

Curley K-8 School Science Fair Judge 2012 NSF GK-12 GLACIER Fundraiser Organizer 2011

Summer Pathways Program: Tech Savvy Program Coordinator

Biology Inquiry & Outreach with Boston University Graduate Students Volunteer Instructor 2011

Media Mentions

2018	When Rainforest is Cleared for Palm Oil, a Jet Liner of Carbon is Produced Inverse
2017	EESA Leads Development of New-Generation Soil Carbon Model EESA News Page
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, High Performance Computing