Avni Malhotra
Oak Ridge National Laboratory, Environmental Sciences Division and Climate Change Science Institute, Building 4500N, 1 Bethel Valley Road, Oak Ridge, TN, USA 37831-6301
Office: (865) 241-6246; malhotraa@ornl.gov

Research and Education

Postdoctoral Researcher, Oak Ridge National Lab, Oak Ridge, USA 2016-present
Belowground plant dynamics and ecosystem carbon cycling at SPRUCE

Visiting Scientist, University of Wisconsin-Madison, USA 2/2016-7/2016
Kettle lake carbon burial over the Holocene

Doctor of Philosophy, McGill University, Montréal, Canada 2010-2015
Relating self-regulation with ecosystem structure and function in northern peatlands

Master of Science (Biology), Villanova University, Philadelphia, USA 2008-2010
Carbon cycling, hydrology and *Sphagnum* primary production in boreal fens

Bachelor of Science (Honors; Biology focus), York University, Toronto, Canada 2003-2007

Professional Experience

Course Lecturer (GEOG 350: Quantitative Methods), McGill University, Canada 1/2015-5/2015

Publications

Malhotra A, Moore TR, Limpens J, Roulet NT. (2018) Post-thaw variability in litter decomposition best explained by microtopography at an ice-rich permafrost peatland. *Arctic, Antarctic, and Alpine Research*, 50:1, e1415622 https://www.tandfonline.com/doi/full/10.1080/15230430.2017.1415622

Harden, JW, Hugelius, G, Ahlström, A, Blankinship, JC, Bond-Lamberty, Lawrence C, Loisel J, **Malhotra** A, Jackson RB, Ogle S, Phillips C, Ryals R, Todd-Brown K, Vargas R, Vergara SE, Cotrufo MF, Keiluweit M, Heckman KA, Crow SE, Silver WL, DeLonge M, and Nave L (2017) Networking our science to characterize the state, vulnerabilities, and management opportunities of soil organic matter. *Global Change Biology*, 24:705–718, doi: 10.1111/gcb.13896
http://onlinelibrary.wiley.com/doi/10.1111/gcb.13896/full

Loisel, J., A. **Malhotra**, and C. Phillips (2017), A new platform for managing soil carbon and soil health, *Eos*, 98, https://doi.org/10.1029/2017EO080753

Griffiths NA, Hanson PJ, Iversen CM, **Malhotra** A, McFarlane KJ, Norby RJ, Ricciuto DM, Sebestyen SD, Walker AP, Ward E, Warren JM, Weston DJ (2017) Temporal and spatial variation in peatland carbon cycling and implications for interpreting responses of an ecosystem-scale warming experiment. *Soil Science Society of America Journal*, 81:1668–1688, doi:10.2136/sssaj2016.12.0422
https://www.fs.usda.gov/treesearch/pubs/55486

Walker AP, KR Carter, L Gu, PJ Hanson, A **Malhotra**, RJ Norby, SD Sebestyen, SD Wullschleger, DJ Weston (2017), Biophysical drivers of seasonal variability in *Sphagnum* gross primary production in a

northern temperate bog, *Journal of Geophysical Research: Biogeosciences*, 122, 1078–1097, doi:10.1002/2016JG003711. http://onlinelibrary.wiley.com/doi/10.1002/2016JG003711/full

Malhotra A, Roulet NT, Wilson P, Giroux-Bougard X, Harris LI (2016) Ecohydrological feedbacks in peatlands: an empirical test of the relationship among vegetation, microtopography and water table. *Ecohydrology* 9: 1346–1357, doi: 10.1002/eco.1731. http://onlinelibrary.wiley.com/doi/10.1002/eco.1731/full

Malhotra A, Roulet NT. (2015) Environmental correlates of peatland carbon fluxes in a thawing landscape: do transitional thaw stages matter? *Biogeosciences*, 12, 3119-3130, doi:10.5194/bg-12-3119-2015. https://www.biogeosciences.net/12/3119/2015/

Synergistic Activities

- Co-ordinator for the International Soil Carbon Network (ISCN; 2017-present)
- American Geophysical Union (AGU) Fall Meeting Planning Committee representative for the Biogeosciences Section (three-year term starting 2018)
- Session organizer and chair at AGU 2017: Soil carbon dynamics at broad scales (oral and poster sessions)
- Invited early career participant at the SEARCH International Methane Budgets Workshop on 'Reconciling top down and bottom up methane budgets', Seattle, March 2018; focused on methane budgets at the inland terrestrial aquatic interface
- Research mentor in the Northern Ecosystems Research for Undergraduates (NERU) program at the University of New Hampshire (Summer 2013-2016)
- Reviewer for Global Change Biology, Biogeochemistry, Journal of Geophysical Research: Biogeosciences, Ecosystems, Forests, Agricultural and Forest Meteorology, Sustainability, and International Journal of Environment and Pollution