
: Professor, Department of Geography and TJEMC /Span 4MCID 8 BDC 0 Tc 0 Tw 5.322 0
Centre, Agriculture and Agri-Food Canada, Ottawa, Ontario

Ph.D. Queen's University – Department of Geography
M.Sc. Queen's University – Department of Geography
B.Sc. University of Toronto – Physical Geography

2019 Macdonald Campus Award for Teaching Excellence
2019 Nominee for the Principal's Prize for Excellence in Teaching
2020 Nominee for the Principal's Prize for Excellence in Teaching
2008 Graham K. Walker Award for excellence in agrometeorology / forest meteorology by the
Canadian Society of Agricultural and Forest Meteorology.

(current or former supervised student/postdoc underlined;

*as corresponding author)

Scopus: h-index=23; citations=2958; Google Scholar: h-index=27; citations=4392 as of Jan 1, 2022

63. Nugent, K.A., , Strack, M., Roulet, N.T., Strom, L. and Chanton, J., 2021. Cutover peat limits methane production causing low emission at a post-extraction restored peatland. *Journal of Geophysical Research – Biogeosciences* 126(12), doi.org/10.1029/2020JG005909
62. Fournier, J., Thibault, A., Nadeau, D.F., Vercauteren, N., Anctil, F., Parent, A-C., and Tremblay, A., 2021. Evaporation from boreal reservoirs: A comparison between eddy covariance observations and estimations relying on limited data. *Hydrological Processes* 35(8):1-19 DOI: 10.1002/hyp.14335
61. Vidana Gamage, D.N., Vasava, H.B., , Adamchuk, V.I., Biswas, A., 2021. Comparison of heating strategies on soil water measurement using actively heated fiber optics on contrasting textured soils. *Sensors* 21(3): 1-18
60. Helbig, M., ... , et al., 2020. The biophysical climate mitigation potei[ti]al o(n)-5 (er)-1.7 i2pialia.7 (

16. Uno, Y., Prasher, S.O., Patel, R.M., , Pattey, E., and Karimi, Y., 2005. Development of field-scale soil organic matter content estimation models in Eastern Canada using airborne hyperspectral imagery.

Tremblay, A., Tardif, S., , and Turpin, C., 2014. Net water evaporation from the Eastmain-1 reservoir. *Hydro Review* 33(5): 52-60.

Tremblay, A., Bastien, J., , and Bonneville, M-C., 2010. Three methods to study CO₂ and CH₄ fluxes at Eastmain 1 reservoir, Canada. *International Journal on Hydropower and Dams*, 17(4): 78-83.

Bonneville, M-C., and * , 2008. Measuring GHG emissions - the use of eddy covariance techniques. *International Water Power and Dam Construction* 60(9): 22-25.

, 2012. Measuring wind and transport in the planetary boundary layer. In: Ahrens, C.D., Jackson, P.L. and Jackson, C.E.J., *Meteorology Today. An Introduction to Weather, Climate, and the Environment. First Canadian Edition*. Nelson Education, pp.262-3. Invited Contribution

Dasgupta, K. Chan, C., , Christopoulos, S., Sigal, R.J., and Joseph, L., 2009. Preliminary analysis demonstrates winter reduction in daily steps and winter increase in blood pressure in type 2 diabetes. *Canadian Journal of Diabetes*, 33(3): 236. Published Abstract

Liu, J., Miller, J.R., Pattey, E., Haboudane, D., , and Hinthner M., 2004. Monitoring crop biomass accumulation using multi-temporal hyperspectral remote sensing data. *Proceedings IEEE International Geoscience and Remote Sensing Symposium (IGARSS '04)*, pp 1637-1640, held September 21 – 25, 2004 in Fairbanks, Alaska, USA.

, 2003. World Survey of Climatology, General Climatology 1C: Classification of Climates: O.M. Essenwanger. *Agricultural and Forest Meteorology*, 115(3-4): 231-232. Book Review

Champagne, C., Pattey, E., Bannari, A. and , 2001. Mapping crop water stress: issues of scale in the detection of plant water status using hyperspectral indices. *Proceedings of the 8th International Symposium On Physical Measurements and Signatures in Remote Sensing*, Aussois, France, pp. 79-84.

1. Invited Speaker at the Chapman Colloquium. March 28, 2019, University of New Hampshire - Durham.
2. KeynoteBtHasuroDur.4 (g822.95 Lpea):3004 Tw (,).001 d(-)Tjd(-)Tj o-1.8 (ss1 (p)2.4 ()-5.1 (w)1.2 (a90)-136.1 (n()-5

Post-Doctoral Researchers

Dr. Manuel Helbig 2017 "Ecosystem CO₂ and CH₄ exchange in restored peatlands"

Dr. Luc Pelletier 2015-2016 "Carbon exchange in restored peatlands"

Dr. Onil Bergeron 2007-2010 "Surface energy budgets of urban, suburban and rural sites"

Dr. Sylvie Leroyer 2007-2009 "Modelling of meso-scale and urban boundary-layer circulations within the Montreal urban area"

Ph.D.

Miranda Hunter 2019-current "Hydrological controls on carbon and water vapour fluxes from peatlands undergoing active harvest" (U. Waterloo; as co-supervisor w. M. Strack)

Silvie Harder 2019 (as co-supervisor w. N.T. Roulet) "Relationships between carbon, energy and water balance in a palsa permafrost peatland: Can we explain the ecosystem-scale fluxes by its component parts?"

Kelly Nugent 2019 "Carbon cycling at a post-extraction restored peatland: Small-scale processes to global climate impacts"

Duminda Vidana Gamage 2019 (as supervisor w. A. Biswas – U.Guelph) "New soil water sensing technique"

- Marie-Eve Lemieux 2010 "From forest to lake: effect of hydroelectric reservoir impoundment on the net ecosystem exchange of carbon dioxide" 131 pp.
- Eric Christensen 2010 "Measurement and modelling of snow properties in urban and suburban Montreal neighbourhoods." 127 pp.
- Jackie Dee Grom 2008 (as co-supervisor w. W. Pollard) "Environmental controls on retrogressive thaw slump development".
- Pierre-Luc Lizotte 2007 "A portable profiling system for determining horizontal and vertical CO₂ advection" 92 pp.
- Marie-Claude Bonneville 2006 "Measurement and modeling of surface-atmosphere exchange of CO₂ and CH₄ in a cattail marsh in Eastern Ontario" 144 pp.
- Lynda Blackburn 2006 "Quantification and estimation of N₂O emissions from dairy manure applications in a Western Quebec pea-forage and an Eastern Ontario alfalfa-forage cropping system" 139 pp.
- Nathalie Mathieu 2004 "A study of atmospheric properties and their impact on the use of the nocturnal boundary layer budget technique for trace gas measurement" 106 pp.

Recent senior undergraduate (honours) project supervision:

- Kaiyun Wang 2021-current "A further examination of peat stockpile emissions"
- Amelia Weiss 2021-current "Towards an urban carbon budget"
- Karina Volpato 2020 "Reducing production stage carbon emissions: A peat industry case study"
- Maria Gheta 2020 "CO₂ and CH₄ emissions from stockpiles of an exploited peatland in eastern Quebec"
- William Xing 2019-20 "Net effect of flooding a black spruce forest on CO₂ emissions"
- Laura Clark 2018-19 "Effects of age on CO₂ emissions from in-production drained peatlands"
- Naomi Weinberg 2018 "Effects of extraction on CO₂ emissions from an in-production drained peatland"
- Maude Durand 2017-18 "Using digital images to estimate net CO₂ uptake in a marsh"
- Iona Sobral 2017-18 "Comparing urban rooftop- and suburban-garden microclimates"
- Grace O'Brien 2016-17 "Measurements of urban heat in Montreal neighbourhoods"
- Emma Webb, 2016 "GHG exchange from pools in restored peatlands"
- Gwen Miller-Dannelongue, 2014 "Methane from reed plants in restored peatlands"

Nugent, K.A., and Strack, M., 2017. -

I have taught on both of McGill's campuses since my initial appointment. ENVB301 is offered annually at the Macdonald Campus; NRSC/GEOG221 is offered each academic year on alternating campuses; GEOG321 is offered in alternate years on the downtown campus. I also am part of the teaching team for WILD475 Desert Ecology – a two-week experiential ecology course in the southwestern US desert environments.

Teaching evaluations (mean +/- SD) out of 5.0 based on annual student evaluations.

The following questions are used for annual reporting:

Q1. "Overall, this is an excellent course"

Q2. "Overall, I learned a great deal from this course." Overall, I learned a great deal from this course. "Overall, I learned a great deal from this course." Overall, I learned a great deal from this course.

McGill Graduate Admissions Average Working Group (2015-16)
McGill uApply Academic View-Requirements Working Group (2014-15)
Graduate Program Director, Dept. Natural Resource Sciences (2009-11)

Other Past Committee work:

Host of 2013, 2017-19 McGill Tomlinson Talks events
Cyclical Review of the McGill Institute of Parasitology, Review Committee Member (2012)
McGill internal NSERC review com(o)-1 (8O4Tw 0 Tw 6.)2.5 (c)-3.vTj0 Tc39A