

Laura Logozzo, PhD
Post-doctoral Fellow, University of Lethbridge
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Education

PhD	Yale University School of the Environment Committee: Peter Raymond (Advisor), Jim Saiers, Tim Eglinton, Ben Twining <i>Thesis: "Dissolved Organic Matter Dynamics in a Large Temperate River"</i>	2017 – 2022
MS	CUNY City College Earth and Atmospheric Sciences (EAS) Advisor: Maria Tzortziou <i>Thesis: "Microbial Degradation of Marsh-Exported Carbon"</i>	2015 – 2017
BS	Macaulay Honors College at CUNY City College EAS	2011 – 2015

Research Positions/Collaborations

University of Lethbridge Post-doctoral Fellow Supervisor: Matthew Bogard <i>Define carbon storage potential and GHG emissions of agriculturally-impacted wetlands</i>	2022 –
Apalachicola Bay Sampling Surveys Collaborator Collaborator: Wade McGillis <i>Led dissolved carbon and greenhouse gas sampling surveys along estuarine salinity gradients</i>	May 2022
Watershed Rules of Life Project Collaborator PI: Peter Raymond Co-PIs: Byron Crump, Colin Gleason <i>Sampled dissolved carbon, microbial DNA/RNA, and greenhouse gas across watersheds, seasonally</i>	2019 – 2022
ETH Zürich Visiting Researcher Supervisors: Tim Eglinton, Peter Raymond <i>Prepared DOC samples for radiocarbon measurement using wet chemical oxidation</i>	2019
Smithsonian Environmental Research Center Research Fellow Supervisors: Patrick Neale, Patrick Megonigal, Maria Tzortziou <i>Performed microbial and photochemical incubations on marsh-exported dissolved organic carbon</i>	Summer 2016
Smithsonian Environmental Research Center Research Intern Supervisor: Patrick Neale <i>Estimated tidal marsh dissolved organic matter export and fate in an estuary</i>	Summer 2015
University of New Hampshire & Abisko Naturvetenskapliga Station REU Supervisors: Ruth Varner and Joel Johnson <i>Project Title: "Linking Sediment Characteristics to Methane Emission Potential in Subarctic Lakes"</i>	Summer 2014

Peer-Reviewed Publications

* Denotes mentee

Published

- Logozzo, L.A.**, Hosen, J.D., McArthur, J.*, Raymond P.A. (2023) *Distinct drivers of two size fractions of operationally dissolved iron in a temperate river*. Limnology & Oceanography. doi: [10.1002/lno.12338](https://doi.org/10.1002/lno.12338)
- Maavara, T., Brinkerhoff, C., Hosen, J.D., Aho, K.S., **Logozzo, L.A.**, Saiers, J., Stubbins, A., Raymond, P.A. (2023) *Watershed DOC uptake occurs mostly in lakes in the summer and in rivers in the winter*. Limnology and Oceanography. doi: [10.1002/lno.12306](https://doi.org/10.1002/lno.12306)
- Logozzo, L.A.**, Martin, J.W., McArthur, J.*, Raymond, P.A. (2022) *Contributions of Fe(III) to UV-vis absorbance in river water: A case study on the Connecticut River and argument for the systematic tandem measurement of Fe(III) and CDOM*. Biogeochemistry. doi: [10.1007/s10533-022-00937-5](https://doi.org/10.1007/s10533-022-00937-5)
- Aho, K.S., Fair, J.H., Hosen, J.D., Kyzivat E.D., **Logozzo, L.A.**, Weber, L.C., Yoon, B., Zarnetske, J., Raymond, P.A. (2022) *An intense precipitation event causes a temperate forested drainage network to shift from N₂O source to sink*. Limnology and Oceanography. doi: [10.1002/lno.12006](https://doi.org/10.1002/lno.12006)
- Aho, K.S., Fair, J.H., Hosen, J.D., Kyzivat, E.D., **Logozzo, L.A.**, Rocher-Ros, G., Weber, L.C., Yoon, B., Raymond, P.A. (2021) *Distinct concentration-discharge dynamics in temperate streams and rivers: CO₂ exhibits chemostasis while CH₄ exhibits source limitation due to temperature control*. Limnology and Oceanography. doi: [10.1002/lno.11906](https://doi.org/10.1002/lno.11906)
- Maavara, T., **Logozzo L.A.**, Stubbins, A., Aho, K.S., Brinkerhoff, C., Hosen, J.D., Raymond, P.A. (2021) *Does photomineralization of dissolved organics matter in temperate rivers?*. Journal of Geophysical Research: Biogeosciences. doi: [10.1029/2021JG006402](https://doi.org/10.1029/2021JG006402)
- Aho, K.S., Hosen J.D., **Logozzo L.A.**, McGillis, W.R., Raymond, P.A. (2021) *Highest rates of gross primary productivity maintained despite CO₂ depletion in a temperate river network*. Limnology & Oceanography Letters. doi: [10.1002/lol2.10195](https://doi.org/10.1002/lol2.10195)
- Logozzo, L.A.**, Tzortziou, M., Neale, P. Clark, B. (2021) *Photochemical and microbial degradation of chromophoric dissolved organic matter exported from tidal marshes*. Journal of Geophysical Research: Biogeosciences. doi: [10.1029/2020JG005744](https://doi.org/10.1029/2020JG005744)
- DeVries, S., Loving, M., **Logozzo, L.A.**, Zhang, P., Block, K. (2020) *The Effects of Trace Narasin on the Biogeochemical N-Cycle in a Cultivated Sandy Loam*. Science of the Total Environment. doi: [10.1016/j.scitotenv.2020.137031](https://doi.org/10.1016/j.scitotenv.2020.137031)

In prep/Submitted

- Chan, C.N.*, Gushulak, C., Leavitt, P., **Logozzo, L.A.**, Finlay, K., Bogard, M.J. Submitted. *Whole-ecosystem experimental eutrophication causes contrasting effects on emissions of CO₂, CH₄, and N₂O in agricultural ponds*. Environmental Science and Technology.
- Zhou X., **Logozzo, L.A.**, Johnston, S.E., Zink, L., Bogard, M.J. Submitted. *Composition and bioreactivity of dissolved organic matter leachates from end members in a mountain to prairie transitional river valley*. JGR: Biogeosciences

Logozzo, L.A., Eglinton, T., Haghipour, N., Maavara, T., Aho, K.S., Hosen, J.D., Raymond, P.A. In prep. *Tracing the radiocarbon bomb-pulse from the atmosphere to riverine dissolved organic carbon*. Target Journal: Ecosystems

Logozzo, L.A., Soued, C., Badiou, P., Bortolotti, L., Page, B., Kowal, P., Kalyn, H., Bogard, M.J. In prep. *Do different agricultural land use regimes alter the cycling of CO₂, CH₄, and N₂O in wetlands of the Canadian Prairie Pothole Region?* Target journal: Global Biogeochemical Cycles

Invited Talks

Logozzo, L.A. (2023) *Do different agricultural land use regimes alter the cycling of CO₂, CH₄, and N₂O in wetlands of the Canadian Prairie Pothole Region?* Invited Talk. ECCC-CAAF Research Team Annual Meeting. Zoom.

Logozzo, L.A. (2021) *Dissolved organic carbon and iron dynamics in the Connecticut River*. Invited Talk. YSE First Year Doctoral Seminar. New Haven, CT, USA

Logozzo, L.A. (2021) *The mobilization of aged dissolved organic carbon in a large temperate river*. Invited Talk. ETH Zürich, LIP AMS Seminar. Zoom.

Logozzo, L.A. (2021) *Dissolved organic carbon cycling in rivers and estuaries*. Invited Talk. CUNY City College, Earth and Environmental Sciences Seminar. Zoom.

Conference Presentations (first author only)

Logozzo, L.A., Woodman, S.G., Bain, H.D., Fernando, W.O.K., Flanagan, L.B., Bogard, M.J. *Using a whole ecosystem budget to explore whether effluent release shifts a model restored wetland from a net carbon sink to source*. (expected). AGU Fall Meeting. San Francisco, CA, USA.

Logozzo, L.A., Soued, C., Badiou, P., Bortolotti, L., Page, B., Kowal, P., Kalyn, H., Bogard, M.J. (2023) *Do different agricultural land-use regimes alter the cycling of CO₂, CH₄, and N₂O in wetlands of the Canadian Prairie Pothole Region?* Talk. Society of Canadian Aquatic Sciences. Montreal, QC, Canada.

Logozzo, L.A., Martin, J.W., McArthur, J., Raymond, P.A. (2022). *Fe(III) Contributions to UV-vis Absorbance in the Connecticut River Watershed: an Argument for the Tandem Measurement of CDOM and Fe(III)*. Talk. Joint Aquatic Sciences Meeting. Grand Rapids, MI, USA.

Logozzo, L.A., Raymond, P.A. (2021). *The mobilization of aged dissolved organic carbon in the Connecticut River*. Poster. YSE Climate Day. Zoom.

Logozzo, L.A., Raymond, P.A. (2020) [*Seasonal variability in dissolved iron and dissolved organic matter in the Connecticut River*](#). Talk. YSE Research Conference. Zoom.

Logozzo, L.A., Raymond, P.A. (2019) [*The Coupled Cycling of Dissolved Iron and Dissolved Organic Matter in the Connecticut River*](#). Poster. YSE Research Conference. New Haven, CT, USA. **Best poster award winner.**

Logozzo, L.A., Raymond, P.A. (2019) *The Coupled Cycling of Dissolved Iron and Dissolved Organic Matter in the Connecticut River*. Talk. ASLO Aquatic Sciences Meeting. San Juan, Puerto Rico.

Logozzo, L.A., Tzortziou, M., Neale, P. (2017) [*Dissolved Organic Matter Fate in Estuaries: Spatial Variations in Bioavailability and Photoreactivity*](#). Poster. ASLO Aquatic Sciences Meeting. Honolulu, HI, USA.

- LogoZZo, L.A., Neale, P., Tzortziou, M., Nelson, N., Megonigal, P. (2016) [*Tidal Marshes as Pulsing Systems: New Estimates of Marsh-Carbon Export and Fate*](#). Talk. AGU Ocean Sciences Meeting. New Orleans, LA, USA.
- LogoZZo, L.A., Kidder, S. (2015) *A model for mapping titanium concentrations in quartz using blue-wavelength cathodoluminescence and c-axis plunge*. Poster. Jeffrey Steiner Memorial Symposium. New York, NY, USA.
- LogoZZo, L.A., Devries, S., Zhang, P. (2015) *The effects of antibiotics on the nitrifying bacteria *Alcaligenes faecalis**. Poster. Jeffrey Steiner Memorial Symposium. New York, NY, USA. **Best poster award winner.**
- LogoZZo, L.A., Perry A., Wik, M., Thornton, B., Crill, P., Johnson, J., Varner, R. (2014) [*Linking Sediment Characteristics to Methane Emission Potential in Subarctic Lakes*](#). Poster. AGU Fall Meeting. San Francisco, CA, USA

Workshop Participation

“Wetlands as Nature-Based Climate Change Solutions” May 2023
ECCC-CAAF funded project

Highwood Little Bow River Management Plan – Public Advisory Committee 2023

Fellowships & Grants

Society of Canadian Aquatic Sciences Early Career Travel Award \$150	2023
Yale Graduate Student Assembly Conference Travel Fund \$500-\$750 USD	2019/2022
NASA Connecticut Space Grant Graduate Research Fellowship \$8000 USD “Illuminating riverine dissolved organic carbon dynamics and export using carbon age”	2019
Yale Institute of Biospheric Studies RFP Grant \$3950 USD	2018
ASLO Aquatic Sciences Meeting Student Travel Fund \$500 USD	2017
Smithsonian Graduate Student Fellowship \$8000 USD “Microbial degradation of marsh-exported carbon”	2016
NOAA-CREST Graduate Student Fellowship \$36,000 USD	2015 – 2017

Teaching and Mentoring

Mentorship of:

Sara Valizadeh (PhD)	2023 –
Ilyanna Janvier (MSc)	2022 –
Mariya Denny (MSc)	2022 –

Chun Ngai Chan (PhD)	2022 –
Johnae McArthur (BSc) New Haven Promise Internship	Summer 2018
Jocelyn Mendez (BSc) Smithsonian Internship Program	Summer 2016
Teaching fellow (<i>Yale University</i>):	
The Physical Science of Climate Change	Spring 2021
Watershed Cycles and Processes	Fall 2019/2020
Multivariate Statistics for the Environmental Sciences	Spring 2019

Professional Service/Volunteering

Reviewer for:	
<i>Limnology and Oceanography</i>	2023 –
<i>Journal of Geophysical Research: Global Biogeochemical Cycles</i>	2023 –
<i>Biogeosciences</i>	2022 –
<i>Biogeochemistry</i>	2021 –
<i>Hydrological Processes</i>	2021 –
<i>Global Biogeochemical Cycles</i>	2020 –
Poster Presentation Judge	
<i>Meeting of the Minds</i> , University of Lethbridge	March 2023
Yale Graduate Student Health Advisory Committee	2019 – 2021
Yale Graduate Student Assembly (GSA) Representative	2019 – 2021
YSE Student Affairs Committee Member, Student Life Division	2018 – 2019
YSE PhD Student Interest Group (SIG), Co-chair	2018 – 2019
United States Geological Survey (USGS), Volunteer	2017 – 2019

Grant/Award Reviewing

University of Lethbridge Graduate Scholarships Adjudication Committee	August 2023
MITACS Accelerate Research Proposal	April 2023

Professional Affiliations

American Geophysical Union
Association for the Sciences of Limnology and Oceanography
Society of Canadian Aquatic Sciences

Press

[“Exploring the Depths of Water's Role in Climate Change”](#)

2022

Canopy Magazine

[“New Haven Promise Inspires New ‘Champions’ for the Environment”](#)

2018

Yale School of the Environment