# Jennifer K. Adams

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## ACADEMIC POSITIONS

## Postdoctoral Research Fellow (September 2019 – January 2024)

Department of Biology, University of Waterloo Paleolimnology to distinguish the roles of river regulation and climate change on persistent low water levels in the Peace-Athabasca Delta

Advisors: Profs. Roland Hall and Brent Wolfe (Wilfrid Laurier University)

#### Faculty of Arts and Sciences Postdoctoral Fellow (September 2017 – September 2019)

Department of Earth Sciences, University of Toronto Microplastic pollution of Canadian freshwaters and remote marine systems Funding: Faculty of Arts and Sciences Postdoctoral Fellowship Award Advisors: Profs. Miriam Diamond and Sarah Finkelstein

#### Maternity Leave 2020-2021, 2023-2024

#### EDUCATION

#### **Doctor of Philosophy** (2017)

Department of Geography, University College London (United Kingdom)

Thesis title: Multiproxy reconstructions of recent environmental change: Understanding the ecological response of shallow lakes within the Selenga River basin, southeast Siberia, to anthropogenic and natural disturbances

Supervisors: Profs. Anson W. Mackay and Neil L. Rose

Thesis examiners: Prof. Vivienne J. Jones (UCL) and Prof. Suzanne McGowan (University of Nottingham)

#### Master of Science (2009)

Department of Geography, University of Toronto (Canada) Thesis title: Quantitative Paleoclimate Reconstructions from the Melville Peninsula, Nunavut, Canada Supervisor: Prof. Sarah A. Finkelstein

## Bachelor of Science (Honours) (2007)

Honours Specialization in Environmental Science, University of Western Ontario (Canada) Honours thesis title: Effects of Potential Changes of Nitrogen Loads to Nitrous Oxide Efflux from Prairie Potholes Supervisor: Prof. Irena F. Creed

#### NON-ACADEMIC POSITIONS

#### Aquatic Science Technician, Fisheries and Oceans Canada (2010 – 2013) Great Lakes Laboratory for Fisheries and Aquatic Sciences, Burlington, Ontario

#### **Peer-Reviewed Publications**

\*First author contributions were equal

- 19. Hingley J.S., Martins C.C., Walker-Trivett C., Adams J.K., Naeher S., Haggi C., Feakins S.J., Naafs B.D.A. Submitted. *Organic Geochemistry*. The global distribution of Isoprenoidal Glycerol Dialkyl Diethers (isoGDDs) is consistent with a predominant degredation origin.
- 18. Martins C.C., Adams J.K., Yang H., Shchetnikov A.A., Di Domeniko M., Rose N.L., Mackay A.W. 2023. Earthquake, floods and changing land use history: A 200-year overview of environmental changes in Selenga River basin as indicated by n-alkanes and related proxies in sediments from shallow lakes. *Science of the Total Environment*. doi.org/10.1016/j.scitotenv.2023.162245.
- 17. Kay M.L., Wiklund J.A., Sun X., Savage C.A.M., Adams J.K., MacDonald L.A, Klemt W.H., Brown K.C., Hall R.I., Wolfe B.B. 2022. Assessment of mercury enrichment in lake sediment records from Alberta Oil Sands development *via* fluvial and atmospheric pathways. *Frontiers in Environmental Science*.
- Adams J.K., Dean B.Y., Athey S.N., Jantunen L.M., Bernstein S., Stern G., Diamond M.L., Finkelstein S.A. 2021. Anthropogenic particles (including microfibers and microplastics) in Canadian Arctic Marine Sediment. *Science of the Total Environment*. doi.org/10.1016/j.scitotenv.2021.147155.
- 15. Sühring R., Diamond M.L., Bernstein S., Adams J.K., Schuster J.K., Fernie K., Elliott K., Stern G., Jantunen L.M. 2020. Organophosphate esters in the Canadian Arctic Ocean. *Environmental Science & Technology*. doi.org/10.1021/acs.est.0c04422.
- 14. Athey S.N.\*, Adams J.K.\*, Erdle L., Jantunen L.M., Helme P.A., Finkelstein S.A., Diamond M.L. 2020. The widespread environmental footprint of indigo denim microfibers from blue jeans. *Environmental Science &Technology Letters*. doi.org/10.1021/acs.estlett.0c00498.

Featured in Canadian Press, CBC/CBC Radio, New Scientist, Smithsonian Magazine, Wired Magazine, Daily Mail, EurekAlert, Ecowatch, IFL Science, ZME Science, Reddit

- 13. Roberts L., Bishop I., Adams J.K. 2020. Anthropogenically forced change in aquatic ecosystems: reflections on the use of monitoring, archival and palaeolimnological data to inform conservation. *Geo: Geography and Environment*. doi.org/10.1002/geo2.89.
- 12. Cheng B., Adams J.K., Chen J., Zhou A., Zhang Q., Mackay A.W. 2020. Neoglacial trends in diatom dynamics from a small alpine lake in the Qinling Mountains of central China. *Climate of the Past*. doi.org/10.5194/cp-16-543-2020.
- Roberts S.\*, Adams J.K.\*, Mackay A.W., Swann G.E.A., McGowan S., Rose N.L., Panizzo V., Yang H., Vologina E., Sturm M., Shchetnikov A.A. 2020. Mercury loading within the Selenga River Basin and Lake Baikal, Siberia. *Environmental Pollution*. doi.org/10.1016/j.envpol.2019.113814.
- 10. Adams J.K., Peng Y., Rose N.L., Shchetnikov A.A., Mackay A.W. 2019. Diatom community responses to long-term multiple stressors at Lake Gusinoye, Siberia. *Geo: Geography and Environment*. doi.org/10.1002/geo2.72.
- 9. Adams J.K., Martins C.C., Rose N.L., Shchetnikov A.A., Mackay A.W. 2018. Lake sediment records of persistent organic pollutants in Southern Siberia mirror the changing fortunes of the Russian economy over the past 70 years. *Environmental Pollution*. doi.org/10.1016/j.envpol.2018.07.005.
- 8. Vanden Byllaardt J., Adams J.K., Casas-Monroy O., Bailey S.A. 2018. Examination of an indicative tool for rapidly estimating viable organism abundance in ballast water. *Journal of Sea Research*. doi.org/10.1016/j.seares.2017.02.002.
- 7. Casas-Monroy O., Linley R.D., Adams J.K., Chan F.T., Drake D.A.R., Bailey S.A. 2015. Relative invasion risk for plankton across marine and freshwater systems: examining efficacy of proposed international ballast water discharge standards. *PLOS ONE* 10: e0118267.

- 6. Briski E., Linley R.D., Adams J.K., Bailey S.A. 2014. Evaluating efficacy of a ballast water filtration system for reducing spread of aquatic species in the Great Lakes. *Management of Biological Invasions* 5: 245-253.
- 5. Adams J.K., Briski E., Ram J.L., Bailey S.A. 2014. Evaluating the response of freshwater organisms to viability staining. *Management of Biological Invasions* 5: 197-208.
- 4. Finkelstein S.A., Bunbury J., Gajewski K., Wolfe A.P., Adams J.K., Devlin J.E. 2014. Evaluating diatomderived Holocene pH reconstructions for arctic lakes using an expanded 171-lake training set. *Journal of Quaternary Science* 29: 249-260.
- 3. Creed I.F., Miller J., Aldred D, Adams J.K., Spitale S., Bourbonniere R.A. 2013. Hydrologic profiling for greenhouse gas effluxes from natural grasslands in the prairie pothole region of Canada. *Journal of Geophysical Research: Biogeosciences* 118: 680-697. Selected as EOS Research Highlight
- 2. Adams J.K., Finkelstein S.A. 2010. Watershed-scale reconstruction of late and middle Holocene paleoenvironmental changes on Melville Peninsula, Nunavut, Canada. *Quaternary Science Reviews* 29: 2302-2314.
- 1. Finkelstein S.A., Ross J.M., Adams J.K. 2009. Spatio-temporal variability in Arctic climates of the past millennium: implications for the study of Thule culture on Melville Peninsula, Nunavut. *Arctic, Antarctic and Alpine Research* 41: 442-454.

#### **Manuscripts In Preparation**

- Adams J.K., Rose N.L., Shchetnikov A.A., Mackay A.W. Primary producer community structure across a hydrological gradient in a cold-climate Ramsar wetland. Manuscript 37 pages, 1 table, 5 figures. Plan to submit to *Wetlands*.
- Yu J.T., Diamond M.L., Ward E., Adams J.K., Andre K., Cherian-Hall A., Gamberg M., Obediah T., Palmer M., Platt A., Worthy C., Jantunen L.M. Snow as an Indicator of Atmospheric Transport of Anthropogenic Particles (Microplastics and Microfibers) from Urban to Arctic Regions. Manuscript 34 pages, 1 table, 4 figures. Plan to submit to Arctic Science.

Athey S.N., **Adams J.K**., Jantunen L.M., Helm P.A., Stern G., Finkelstein S.A., Diamond M.L. Fractionation of anthropogenic particles (microplastics and microfibers) along a 2,200 km transect of Canadian sediments. Manuscript 29 pages, 1 table, 4 figures. Plan to submit to *Journal of Great Lakes Research*.

#### **Technical Reports**

Adams J.K., Wiklund J.A., MacDonald L.A., Wolfe B.B., Hall R.I. 2023. Assessing correspondence of interpretations based on paleolimnological records obtained in 2001 and 2018 from perched lakes. Report to BC Hydro and Scientific Advisory Panel: Technical Report of the Peace-Athabasca Delta Paleolimnology Study 33 p.

Adams J.K., Ellis S.M., Chan F.T., Bronnenhuber J.E., Simard N., McKenzie C.H., Martin J.L, Bailey S.A. 2014. Relative risk assessment for ship-mediated introductions of aquatic nonindigenous species to the Atlantic Region of Canada. Department of Fisheries and Oceans, Canadian Science Advisory Secretariat Research Document 2012/116. vi + 403 p.

Casas-Monroy O., Linley R.D., **Adams J.K.**, Chan F.T., Drake D.A.R., Bailey S.A. 2013. National risk assessment for introduction of aquatic nonindigenous species to Canada by ballast water. Department of Fisheries and Oceans, Canadian Science Advisory Secretariat Research Document 2013/128. vii + 74 p.

# GRANTS, AWARDS, AND FELLOWSHIPS

Faculty of Arts and Sciences Postdoctoral Fellowship, University of Toronto, 2017-2019, \$90,000

Postgraduate Conference Travel Grant, University College London, 2017, \$1,000

British Phycological Society Student Bursary, 2016, \$1,000

British Ecological Society Training and Travel Grant, 2016, \$1,000

Faculty of Graduate Studies Postgraduate Award, University College London, 2014, \$10,000

Canadian Centennial Scholarship, 2014, \$5,000

New Research Workers' Award, Quaternary Research Association, 2014, \$1,400

NSERC PGS-Doctoral Award, Natural Sciences and Engineering Research Council Post Graduate Scholarship, 2014-2017, \$63,000

Graduate School Project Fund, University College London, 2014, \$5,000

**Dudley Stamp Memorial Award**, Royal Geographical Society – Institution of British Geographers, 2014, \$1,000

**Henrietta Hutton Research Grant**, Royal Geographical Society – Institution of British Geographers, 2014, \$1,000

Overseas Research Scholarship, University College London, 2013-2016, \$86,000

NSERC PGS-Master's Award, Natural Sciences and Engineering Research Council Post Graduate Scholarship, 2008-2009, \$17,500

Graduate Expansion Funds, University of Toronto, 2008-2009

Northern Scientific Training Program (NSTP), Aboriginal Affairs and Northern Development Canada, 2008-2009

University of Toronto Fellowship, University of Toronto, 2007-2008

# PRESENTATIONS

#### Invited talks:

Disentangling threats to freshwater conservation in the Anthropocene. May 2021. Keynote speaker, Paleolimnology Symposium (PALS), University of Waterloo. Remote.

#### Oral Presentations:

- 26. Brown K.C., **Adams J.K**., Wiklund J.A., Telford J.V.K., Wolfe B.B., Hall R.I. 2021. Evaluating the effects of local climate change on lake-water balance at the Peace-Athabasca Delta using paleolimnology. Paleolimnology Symposium (PALS). University of Waterloo. Remote.
- 25. Girard C.L., **Adams J.K**., Telford J.V.K., Wiklund J.A., MacDonald L.A., Hall R.I., Wolfe B.B. 2021. Upstream 'trigger tributary' influence on temporal variation of ice-jam induced flooding at the Peace Athabasca Delta. Paleolimnology Symposium (PALS). University of Waterloo. Remote.
- 24. Stratton M.S., **Adams J.K**., Wiklund J.A., Telford J.V.K., Hall R.I., Wolfe B.B. 2021. Investigating the role of an upstream watershed on ice-jam flood regimes at the Peace-Athabasca Delta. Paleolimnology Symposium (PALS). University of Waterloo. Remote.
- 23. Brown K.C., Adams J.K., Wiklund J.A., Telford J.V.K., Wolfe B.B., Hall R.I. 2021. Evaluating the effects of local climate change on lake-water balance at the Peace-Athabasca Delta using paleolimnology. University of Waterloo Biology Graduate Symposium. Remote.

- 22. Brown K.C., **Adams J.K**., Telford J.V.K., Wiklund J.A., Hall R.I., Wolfe B.B. 2020. How water balance and environmental conditions are changing at two lakes in the Peace-Athabasca Delta region in response to climate. Cold Regions Research Days. Wilfrid Laurier University, Waterloo, Canada. Remote.
- 21. Girard C.L., Adams J.K., Telford J.V.K., Wiklund J.A., MacDonald L.A., Hall R.I., Wolfe B.B. 2020. Evaluating the role of a 'trigger tributary' on temporal variation of ice-jam induced flooding at the Peace-Athabasca Delta. Cold Regions Research Days. Wilfrid Laurier University, Waterloo, Canada. Remote.
- 20. Athey S.N., Adams J.K., Erdle L., Helm P., Jantunen L., Finkelstein S.A., Diamond M.L. 2020. The global environmental footprint of indigo denim microfibers. SETAC Europe, Dublin, Ireland. Remote.
- 19. Girard C.L., Adams J.K., Telford J.V.K., Wiklund J.A., Hall R.I., Wolfe B.B. 2019. Reconstructing the role of a 'trigger tributary' on ice-jam induced flooding at the Peace-Athabasca Delta. Cold Regions Research Days, Wilfrid Laurier University, Waterloo, Canada.
- 18. Stratton M., Adams J.K., Telford J., Wiklund J.A., Hall R.I., Wolfe B.B. 2019. Identifying the role of hydrological changes in a tributary driving ice-jam formation at the Peace-Athabasca Delta. Cold Regions Research Days, Wilfrid Laurier University, Waterloo, Canada.
- 17. Brown K.C., Adams J.K., Wiklund J.A., Telford J.V.K., Wolfe B.B., Hall R.I. 2019. Evaluating the effects of climate change on hydrologically isolated lakes near the Peace-Athabasca Delta using paleolimnology. CAGONT, Guelph, Canada.
- Adams J.K., Athey S.N., Erdle L., Jantunen L.M., Rochman C.M., Helm P., Finkelstein S.A., Diamond M.L. 2019. Assessing blue jeans as a major microfiber source to global aquatic systems. SETAC North America, Toronto, Canada.
- 15. Adams J.K., Jantunen L.M., Diamond M.L., Finkelstein S.A., Rochman C.M., Bernstein S., Stern G. 2018. Evidence for microplastic contamination in remote Canadian Arctic Archipelago marine sediments. SETAC North America, Sacramento, California, U.S.A.
- 14. Adams J.K., Rose N.L., Vologina E., Mackay A.W. 2018. Multi-proxy investigations highlight ecosystem response to hydrological change in wetland shallow lakes. International Paleolimnology Association-International Association of Limnogeology, Stockholm, Sweden.
- 13. Adams J.K., Mackay A.W., Rose N.L., Swann G.E.A., Martins C.C., Vologina E. 2017. Sensitivity of shallow lake ecosystems of the Selenga Delta, Lake Baikal, Siberia to environmental variability. Association for the Science of Limnology and Oceanography Aquatic Sciences Meeting, Honolulu, Hawai'i, U.S.A.
- 12. Adams J.K., Mackay A.W., Rose N.L., Swann G.E.A., Vologina E. 2016. Recent diatom assemblage changes in shallow lakes of the Selenga Delta (Lake Baikal, Siberia) reveal drivers of environmental change. International Diatom Symposium, Québec City, Canada.
- 11. Adams J.K., Mackay A.W., Rose N.L., Swann G.E.A., Martins C.C. 2016. Reconstructing toxicity and ecological impacts in shallow lake ecosystems of the Selenga Delta, Lake Baikal (World Heritage Site). International Society for Limnology Congress, Turin, Italy.
- 10. Adams J.K., Mackay A.W., Rose N.L., Swann G.E.A., Vologina E. 2015. Investigating the extent of natural and anthropogenic disturbances in shallow lakes of the Selenga Delta, Siberia. Quaternary Research Association Postgraduate Symposium, Cambridge, UK.
- 9. Bailey S.A., Casas-Monroy O., Drake D.A.R., Chan F.T., Adams J.K., Linley R.D. 2013. Comparative analysis of ballast-mediated shipping pathways across Canada. International Congress on Biological Invasions, China.
- 8. Adams J.K., Briski E., Bailey S.A. 2013. Assessing the utility of vital fluorescent stains for viability analysis of organisms transported by ballast water. International Conference on Aquatic Invasive Species, Niagara Falls, Canada.

- 7. Casas-Monroy O., Chan F.T., Adams J.K., Linley R.D., Bailey S.A. 2013. Estimating the risk of shipmediated NIS introductions into marine and freshwater ecosystems of Canada. International Conference on Aquatic Invasive Species, Niagara Falls, Canada.
- 6. Linley R.D., Adams J.K., Bailey S.A., Briski E. 2013. Evaluating efficacy of ballast water filtration system for reducing risk of spread of aquatic species in the great lakes. International Conference on Aquatic Invasive Species, Niagara Falls, Canada.
- 5. Adams J.K., Briski E., Bailey S.A. 2013. Evaluation of vital fluorescent stains for analysis of viable organisms transported by ballast water. Association for the Sciences of Limnology and Oceanography, New Orleans, U.S.A.
- 4. Finkelstein S.A., Adams J.K., Iamonaco J.-P., Ross J.M. 2012. Multi-proxy records of Holocene paleoclimate from Melville Peninsula, Nunavut, Canada. International Polar Year, Montreal.
- 3. Adams J.K., Iamonaco J.-P., Finkelstein S.A. 2008. Quantitative Paleoclimate Reconstructions from the Melville Peninsula. Canadian Association of Geographers (Ontario Section), Brock University.
- 2. Finkelstein S.A., Ross J.M., **Adams J.K.**, Iamonaco J.-P. 2009. Late Holocene Regional Paleoclimates of the Eastern Canadian Arctic: implications for the study of Thule culture on Melville Peninsula, Nunavut, Canada. GeoArk Workshop, Copenhagen.
- 1. Adams J.K., Creed I.F, Bourbonniere R.A. 2007. Nitrous Oxide Emissions from Prairie Potholes: Is Nitrogen Availability the Limiting Factor? Ontario Biology Day, McMaster University.

#### Poster Presentations:

- 19. Brown K.C., Adams J.K., Wiklund J.A., Telford J.V.K., Wolfe B.B., Hall R.I. 2021. How has local climate change affected lake-water balance at the Peace-Athabasca Delta? Global Water Futures. Remote.
- Girard C.L., Adams J.K., Telford J.V.K., Wiklund J.A., MacDonald L.A., Hall R.I., Wolfe B.B. 2021. Upstream 'trigger tributary' influence on temporal variation of ice-jam induced flooding at the Peace-Athabasca Delta using paleolimnological reconstructions. Global Water Futures. Remote.
- 17. Stratton M.S., **Adams J.K**., Wiklund J.A., Telford J.V.K., Hall R.I., Wolfe B.B. 2021. Investigating the role of an upstream watershed on ice-jam flood regimes at the Peace-Athabasca Delta. Global Water Futures. Remote.
- 16. Girard C.L., **Adams J.K.**, Telford J.V.K., Wiklund J.A., MacDonald L.A., Hall R.I., Wolfe B.B. 2021. Evaluating the role of a 'trigger tributary' on temporal variation of ice-jam induced flooding at the Peace-Athabasca Delta. Canadian Geophysical Union. Remote.
- Athey S.N., Adams J.K., Erdle L., Helm P., Jantunen L.M., Rochman C.M., Finklestein S.A., Diamond M.L. 2020. The global environmental footprint of indigo denim microfibers from blue jeans [Poster Spotlight]. Society of Ecotoxicology and Chemistry SciCon. Remote.
- 14. Brown K.C., **Adams J.K**., Telford J.V.K., Wiklund J.A., Hall R.I., Wolfe B.B. 2020. Climate change and lakes: how water balance and environmental conditions are changing in the Peace-Athabasca Delta region. Arctic Change. Remote.
- 13. Girard C.L., **Adams J.K**., Telford J.V.K., Wiklund J.A., MacDonald L.A., Hall R.I., Wolfe B.B. 2020. Evaluating the role of a 'trigger tributary' on temporal variation of ice-jam induced flooding at the Peace-Athabasca Delta. Arctic Change. Remote.
- 12. Girard C.L., Adams J.K., Telford J.V.K., Wiklund J.A., Hall R.I., Wolfe B.B. 2020. Reconstructing the role of a 'trigger tributary' on ice-jam induced flooding at the Peace-Athabasca Delta. Canadian Geophysical Union. Remote.

- 11. Athey S.N., **Adams J.K.**, Erdle L., Helm P., Jantunen L., Finkelstein S.A., Diamond M.L. 2020. The global environmental footprint of indigo denim microfibers. Society of Ecotoxicology and Chemistry Europe, Dublin, Ireland. Remote.
- Brown K.C., Adams J.K., Telford J.V.K., Wiklund J.A., Hall R.I., Wolfe B.B. 2019. Evaluating the effects of climate change on closed-drainage lakes outside the Peace-Athabasca Delta using paleolimnology. Cold Regions Research Days, Wilfrid Laurier University, Waterloo, Canada.
- 9. Stratton M., Telford J., Adams J.K., Wiklund J.A., Hall R.I., Wolfe B.B. 2019. Identifying the role of hydrological changes in a tributary driving ice-jam formation at the Peace-Athabasca Delta. CAGONT, Guelph, Canada
- 8. Athey S.N., **Adams J.K.**, Erdle L., Helm P., Jantunen L.M., Rochman C.M., Finklestein S.A., Diamond M.L. 2019. From your laundry to the lake: Blue jeans as a sources of anthropogenic microfibers to the aquatic environment. Society of Ecotoxicology and Chemistry 40<sup>th</sup> Annual North America Meeting, Toronto, Canada.
- 7. Adams J.K., Athey S.N., Erdle L., Jantunen L.M., Rochman C.M., Helm P., Finkelstein S.A., Diamond M.L. 2019. When 'natural' microfibers are not natural: A method for identifying anthropogenic cellulose-based microfibers in different environmental media. Society of Ecotoxicology and Chemistry 40<sup>th</sup> Annual North America Meeting, Toronto, Canada
- Adams J.K., Athey S.N., Erdle L., Jantunen L.M., Rochman C.M., Helm P., Finkelstein S.A., Diamond M.L. 2019. The microfiber footprint of blue jeans in a Great Lakes Watershed. International Association of Great Lakes Research, Brockport, New York, USA.
- 5. Athey S.N., **Adams J.K.**, Erdle L., Helm P., Jantunen L.M., Rochman C.M., Finkelstein S.A., Diamond M.L. 2019. From your laundry to the lake: Blue jeans as a source of microfibers to the aquatic environment. Advances in Earth Science Research Conference, University of Toronto, Toronto, Canada.
- 4. Adams J.K., Jantunen L.M., Diamond M.L., Finkelstein S.A., Rochman C.M., Bernstein S., Stern G. 2019. Understanding sources and transport of microplastic pollution to the Canadian Arctic. SETAC Europe, Helsinki, Finland.
- 3. Finkelstein S.A., Bunbury J., Gajewski K., Wolfe A.P., **Adams J.K.**, Devlin J.E. 2012. Reconstructing Holocene changes in lake water pH using 171-lake modern diatom training set from the Canadian Arctic. International Paleolimnology Symposium, Glasgow, Scotland.
- 2. Adams J.K., Finkelstein S.A. 2009. Quantitative Paleoclimate Reconstructions from the Melville Peninsula, Nunavut, Canada. American Geophysical Union Annual Fall Meeting, San Francisco, USA.
- 1. Adams J.K., Finkelstein S.A. 2008. Quantitative Reconstructions from the Melville Peninsula, Nunavut. Interprovincial Graduate Paleolimnology Symposium Annual Meeting, Quebec City, Canada.

# Conference Session Organizer and Chair:

Adams J.K., Roberts L., Bishop I., Gell P. 2017. Aquatic Transitions: tracking the nature and trajectories of change using paleolimnological approaches. Aquatic Sciences Meeting - Association for the Sciences of Limnology and Oceanography, Honolulu, Hawai'i.

# SUPERVISORY AND MENTORING EXPERIENCE

#### Graduate Students:

H. Thibault (2020-2023): Thesis title TBD. MSc, Department of Biology, University of Waterloo.

K. Brown (2019-2022): Evaluating the role of local climate change on reduced freshwater availability in the Peace-Athabasca Delta using paleolimnology. MSc, Department of Biology, University of Waterloo.

M. Stratton (2019-2022): Understanding the role of an upstream watershed on ice-jam flood regimes at the Peace Athabasca Delta, northern Alberta. MSc, Department of Biology, University of Waterloo.

C. Girard (2019-2022): Reconstructing the role of the Wabasca River tributary on ice-jam induced flooding at the Peace-Athabasca Delta. MSc, Department of Biology, University of Waterloo.

E. Eftesum (2017; Dissertation Merit): Reconstructing shallow lake ecosystem dynamics in southeastern Siberia using macrofossil analysis. MSc Aquatic Sciences, Department of Geography, University College London.

D. Kuznetsova (2015; Dissertation Distinction): Temporal and spatial variations in ostracod communities in the Selenga Delta, Siberia. MSc Conservation, Department of Geography, University College London.

## Undergraduate Students:

C. Nomanee (2021-2022): Evaluating reproducibility of hydroecological inferences from paleolimnological analyses of diatoms at a floodplain lake. Undergraduate honours thesis, Department of Biology, University of Waterloo.

A. Lacey (2021-2022): A multi-century evaluation of the role of local hydroclimate on lake levels in the Peace-Athabasca Delta. Undergraduate honours thesis, Department of Biology, University of Waterloo.

N. Farn-Wei Lim (2020): Temporal assessment of microplastics contamination from stratigraphic analysis of sediments in Lake Wilcox. Undergraduate honours thesis, Department of Biology, University of Waterloo.

S. Mathews (2020): Co-op student in the Department of Biology at the University of Waterloo and Department of Geography and Environmental Studies at Wilfrid Laurier University

S. McLay (2019-2020): Paleolimnological assessment of climatic variations adjacent to the Peace Delta, northeastern Alberta. Undergraduate honours thesis, Department of Biology, University of Waterloo.

T. Pang (2019-2020): Paleolimnological analysis of past climate conditions adjacent to the Athabasca Delta, northern Alberta, Undergraduate honours thesis, Department of Biology, University of Waterloo.

S. Hak (2019) Investigating temporal trends in microplastic and microfiber pollution in Greater Sudbury Area lakes. NSERC USRA, Department of Earth Sciences, University of Toronto.

J. Yu (2019) Investigating temporal trends in microplastic and microfiber pollution in Greater Sudbury Area lakes. Research Opportunity Program, Department of Earth Sciences, University of Toronto.

A. Filipovich (2019) Spatial variation in microplastic and microfiber pollution in lakes of the Greater Sudbury Area. Research Opportunity Program, Department of Earth Sciences, University of Toronto.

R. Springle (2018-2019): Spatial variation in microplastic pollution of surface waters from freshwater ecosystems in Ontario, Canada. Research Opportunity Program, Department of Earth Sciences, University of Toronto.

S. Yohannes (2018-2019): Spatial variation in microplastic pollution of surface waters from freshwater ecosystems in Ontario, Canada. Research Opportunity Program, Department of Earth Sciences, University of Toronto.

D. Nouri Parto (2018): Assessing the contribution of atmospheric deposition of microplastics from snow fall in the Greater Toronto Area. Research Opportunity Program, Department of Earth Sciences, University of Toronto.

S.A. Anas (2018): Assessing the contribution of atmospheric deposition of microplastics from snow fall in the Greater Toronto Area. Research Opportunity Program, Department of Earth Sciences, University of Toronto.

#### TEACHING EXPERIENCE

## Teaching Distinctions:

Associate Fellow of the United Kingdom Higher Education Academy, awarded April 2017.

# Training Courses and Workshops:

Teaching Assistantship Program, University College London (2016) Object-Based Learning Seminar, University College London (2016) University College London Arena One Gateway Program (2015)

## Teaching Assistantships:

## Graduate Courses:

Global Environmental Change, Department of Geography, University College London (2013-2017)Biological Indicators of Environmental Change, Department of Geography, University College London (2014-2015)

# Undergraduate Courses:

Global Environmental Change, Department of Geography, University College London (2013-2017)
Statistics for Environmental Geographers, Department of Geography, University College London (2014-2016)
Reconstructing Past Environments, Department of Geography, University College London (2013-2016)
Data Acquisition and Interpretation, Department of Geography, University College London (2013-2015)
Global Warming, Department of Geography, University of Toronto (2008 - 2009)

# SERVICE CONTRIBUTIONS

**Journal reviewer**, Environmental Pollution, Environmental Science & Technology, Inland Waters, Journal of Paleolimnology, Limnologica, Limnology and Oceanography Letters, Marine Pollution Bulletin, Neobiota, Polycyclic Aromatic Compounds, Science of the Total Environment, The Anthropocene

**Member,** Science Cluster (2020-2023) Past Global Changes (PAGES) Early Career Network

**Regional Representative for Canada** (2018 - 2023) Past Global Changes (PAGES) Early Career Network

**Member,** Diversity in Science Committee (2018 – 2020) Laurentian Chapter of the Society of Environmental Toxicology and Chemistry (SETAC)

#### Guest co-editor (2019-2020)

Special issue of *Geo: Geography and Environment*: "Aquatic transitions: tracking the nature and trajectories of anthropogenically forced change in freshwater and coastal ecosystems"

# Workshop participant (2018)

Athena SWAN Made-in-Canada initiative, "Adapting the UK Athena SWAN program for implementation in Canada", Sponsored by the Tri-Agency Council (NSERC, SSHRC, CIHR)

**PhD research student representative**, Athena SWAN Committee (2015 - 2016) Committee for assessing departmental policies and practices regarding gender equality Department of Geography, University College London, United Kingdom **Co-organizer**, Physical Geography Weekly Seminar Series (2014 – 2016) Department of Geography, University College London, United Kingdom

**Graduate Student Representative**, Geography Lab Committee (2014 – 2016) Department of Geography, University College London, United Kingdom

**Co-founder and Vice-President,** Arctic Student Network (2007 - 2009) University of Toronto, Canada

**Graduate Student Representative,** Physical Geography Building Health and Safety Committee (2007 – 2009), University of Toronto, Canada

## PROFESSIONAL MEMBERSHIPS

Society of Canadian Limnologists (SCL) International Society of Limnology (SIL) Society of Freshwater Sciences (SFS) International Society for Diatom Research (ISDR) International Paleolimnology Association (IPA) Association for the Sciences of Limnology and Oceanography (ASLO) Society of Environmental Toxicology and Chemistry (SETAC)