

Curriculum vitae
Dermot Antoniades
April 2019

1. Contact information

Département de Géographie
Université Laval
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Citizenship: Canadian, Irish

2. Employment and education

2.1. Employment history

Tier II Canada Research Chair, Assistant Professor

April 2014 – present

Département de Géographie

Université Laval

Adjunct Professor

Nov. 2011 – Oct. 2015

Researcher Level 3, PEDECIBA Geociencias

Feb. 2009 – present

Sección Limnología, Facultad de Ciencias Universidad de la República, Montevideo, Uruguay

Research Assistant

Feb. 2009 – Jun. 2010

Department of Earth and Atmospheric Sciences

University of Alberta

Supervisor: Dr. M.S.V. Douglas

Postdoctoral Research Fellow

May 2005 – Feb. 2009

Centre d'études nordiques

Université Laval

Supervisor: Dr. W.F. Vincent

Postdoctoral Researcher

Oct. 2004 – Feb. 2005

Department of Geology

University of Toronto

Supervisor: Dr. M.S.V. Douglas

2.2. Education

Ph.D., Geology/Paleolimnology

Awarded 2004

Department of Geology

University of Toronto

Supervisors: Dr. M.S.V. Douglas and Dr. J.P. Smol

Thesis: The limnology, diatom autecology, and paleolimnology of lakes and Ponds from Alert, Ellesmere Island, Isachsen, Ellef Ringnes Island, and Mould Bay, Prince Patrick Island, Canadian High Arctic.

B.Sc. Honours, Environmental Studies (Earth System Science)

Awarded 1995

Queen's University

Undergraduate Thesis: Characterization and paleolimnological significance of stream diatoms from Cornwallis Island, Nunavut, Canadian High Arctic.

3. Research

3.1. Funded research projects:

- 1) **Project: Lake ecosystem dynamics across four eastern Canadian ecozones over the last ~150 years: A “big data” approach.** (Original title: Dynamique des écosystèmes lacustres dans quatre écozones de l’Est canadien au cours des 150 dernières années : une approche «mégadonnées»)
Funding agency: Fonds de recherche du Québec - Nature et technologies (FRQNT)
Funding call: Team research projects
Status: Investigator (Principal investigator: I. Gregory-Eaves)
Amount awarded: \$162,000
Term: 2018/4 – 2021/3
- 2) **Project: PALEOGREEN - Glacial oscillations and climate variability in NE Greenland**
Funding agency: Ministerio de economía, industria y competitividad, Spain
Status: Investigator (Principal investigator: M. Oliva)
Amount awarded: €194,600
Term: 2018 – 2021
- 3) **Project: Environmental change in aquatic ecosystems of northern Ellesmere Island**
Funding agency: Polar Continental Shelf Program
Status: Principal investigator
Amount awarded: \$109,352
Term: 2018/4 – 2018/6
- 4) **Project: Spatiotemporal dynamics of systems at the taiga / tundra border**
(Original title : Dynamique spatio-temporelle des systèmes à la frontière de la taïga et la toundra)
Funding agency: Canada Foundation for Innovation
Funding call: John R. Evans Leaders Fund
Status: Investigator (Principal investigator: N. Bhiry)
Amount awarded: \$121,770
Term: 2015/12 – 2017/03
- 5) **Project: The Quebec-Catalonia polar research network**
(Original title: Le réseau de recherche polaire Québec-Catalogne)
Funding agency: Ministry of international relations and la francophonie, Québec
Funding call: Bilateral cooperation – Québec-Catalogne
Status: Principal investigator
Amount awarded: \$9,760
Term: 2017/8 – 2019/7
- 6) **Project: An assessment of the impacts of polar scientific bases on aquatic ecosystems**
(Orig. title: Évaluation des impacts des bases scientifiques polaires sur les écosystèmes aquatiques)
Funding agency: Fonds de recherche du Québec - Nature et technologies (FRQNT)
Funding call: New university researchers start up program
Status: Principal investigator
Amount awarded: \$88,037
Term: 2017/04 – 2019/03
- 7) **Project: Research group on Antarctic, Arctic and alpine environments**
Funding agency: Generalitat de Catalunya
Funding call: Ajuts de Suport als Grups de Recerca
Status: Partner (Group leader: M. Oliva)
Amount awarded: €19,200
Term: 2017 – 2019

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- 8) **Project: Environmental change in aquatic ecosystems of northern Ellesmere Island**
Funding agency: Polar Continental Shelf Program
Status: Principal investigator
Amount awarded: \$70,220
Term: 2017/5 – 2017/6
- 9) **Project: Investigations of environmental change in aquatic ecosystems of northern Ellesmere Island**
Funding agency: Networks of Centres of Excellence (NCE) ArcticNet
Funding call: Terrestrial logistics awards
Status: Principal investigator
Amount awarded: \$10,395
Term: 2017/5 – 2017/6
- 10) **Project: Aquatic ecosystems and their microbiota: Sentinels and records of environmental change in the high Arctic** (Orig. title: Les écosystèmes aquatiques et leur microbiote: des sentinelles et archives des changements environnementaux dans le Haut-Arctique)
Funding agency: Fonds de recherche du Québec - Nature et technologies (FRQNT)
Funding call: Team research projects
Status: Principal investigator
Amount awarded: \$162,000
Term: 2017/04 – 2020/03
- 11) **Project: BriGHT (Bridging Global change, Inuit Health and the Transforming Arctic Ocean)**
Funding agency: Sentinel North
Funding call: First call for projects
Status: Investigator (Co-principal investigators: J-É. Tremblay et M. Lemire)
Amount awarded: \$933,000
Term: 2017/01 – 2020/03
- 12) **Project: NSERC Canadian Lake Pulse Network**
Funding agency: Natural Sciences and Engineering Research Council of Canada
Funding call: Strategic Partnership Grants for Networks
Status: Co-principal investigator (Principal investigator: Y. Huot)
Amount awarded: \$5,499,999
Term: 2016/6 – 2021/5
- 13) **Project: Evaluating ecotones in Nunavik aquatic ecosystems** (Orig. title: Évaluation des écotones dans les écosystèmes aquatiques du Nunavik)
Funding agency: Centre d'études nordiques
Funding call: Gradient Nordique
Status: Co-principal investigator (with R. Pienitz)
Amount awarded: \$8,000
Term: 2016 – 2017
- 14) **Project: Hyperspectral imaging and chromatography infrastructure for the analysis of environmental change in aquatic ecosystems**
Funding agency: Canada Foundation for Innovation
Funding call: John R. Evans Leaders Fund
Status: Principal investigator
Amount awarded: \$316,765
Term: 2015/12 – 2017/03

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- 15) **Project: An assessment of the impacts of Antarctic bases on the aquatic ecosystems of the Fildes Peninsula** (Orig. title: Una evaluación de los impactos de las bases antárticas en los ecosistemas acuáticos de la Península Fildes)
Funding agency: Instituto Antártico Chileno (INACH)
Funding call: National competition of scientific and technological research projects in Antarctica
Status: Investigator (Principal investigator: R. Urrutia)
Amount awarded: 50,560,200 Chilean pesos (~\$98,000 CDN)
Term: 2015/11 - 2018/10
- 16) **Project: An assessment of past, present and future environmental changes in Tursujuq National Park** (Orig. title: Évaluation des changements environnementaux passés, présents et futurs du parc national Tursujuq)
Funding agency: Centre d'études nordiques
Funding call: Hudsonie 21
Status: Principal investigator
Amount awarded: \$8,000
Term: 2015 – 2016
- 17) **Project: Holocene environmental change in northern aquatic ecosystems**
Funding agency: Natural Sciences and Engineering Research Council of Canada
Funding call: NSERC Discovery Grants – Northern Research Supplement
Status: Principal investigator
Amount awarded: \$75,000
Term: 2015/4 – 2020/3
- 18) **Project: Long-term responses of aquatic ecosystems to environmental change**
Funding agency: Natural Sciences and Engineering Research Council of Canada
Funding call: Discovery Grants Program
Status: Principal investigator
Amount awarded: \$120,000
Term: 2015/4 – 2020/3
- 19) **Project: Centre d'études nordiques (CEN)**
Funding agency: Fonds de recherche du Québec - Nature et technologies (FRQNT)
Funding call: Strategic research clusters program
Status: Investigator (Principal investigator: N. Bhiry)
Amount awarded: \$2,040,000
Term: 2015/4 - 2020/3
- 20) **Project: Impacts of the changing global environment at Nunavut's northern frontier**
Funding agency: ArcticNet NCE
Funding call: Phase IV Call for Proposals
Status: Investigator (Principal investigator: W. Vincent)
Amount awarded: \$467,817
Term: 2015/4 - 2018/3
- 21) **Project: Canada Research Chair in Aquatic environments and water quality**
Funding agency: Canada Research Chairs Program
Status: Principal investigator
Amount awarded: \$500,000
Term: 2014/4 – 2019/3

22) Project: Start-up funds

Funding agency: Faculty of Forestry, Geography and Geomatics

Status: Recipient

Amount awarded: \$15,000

Term: 2014/4 – 2016/3

23) Project: Long-term responses of aquatic ecosystems to environmental change

Funding agency: Natural Sciences and Engineering Research Council of Canada

Funding call: Discovery Grants Program

Status: Principal investigator

Amount awarded: \$29,000

Term: 2014/4 – 2015/3

24) Project: Holocene environmental change in the Maritime Antarctic. Interactions between permafrost and the lacustrine environment (HOLOANTAR)

Funding agency: Fundação para a Ciência e a Tecnologia (Portugal)

Funding call: Research and development projects in science & technology

Status: Investigator (Principal investigator: Marc Oliva)

Amount awarded: €120,000

Term: 2012/4 – 2014/3

25) Project: Causes and consequences of the propagation of potentially toxic cyanobacteria in Uruguayan shallow lakes (Orig. title: Causas y consecuencias de la propagación de las cianobacterias potencialmente tóxicas en los lagos poco profundos de Uruguay)

Funding agency: National agency for research and innovation (Uruguay)

Funding call: Clemente Estable fund for scientific and technological research

Status: Investigator (Principal investigator: Sylvia Bonilla)

Amount awarded: 674,747 Uruguayan pesos (~\$32,000 CDN)

Term: 2008/1 – 2009/12

3.2. Publications**3.2.1. Book:**

1. Antoniades D, Hamilton PB, Douglas MSV & Smol JP. 2008. Diatoms of North America: The freshwater floras of Prince Patrick, Ellef Ringnes and northern Ellesmere Islands from the Canadian Arctic Archipelago. *Iconographia Diatomologica* vol. 17. A.R.G. Gantner Verlag, Ruggell. 649 pp.

3.2.2. Peer-reviewed publications:

2. Huot Y, Brown CA, Potvin G, Antoniades D, Baulch HM, Beisner BE, Bélanger S, Brazeau S, Cabana H, Cardille JA, del Giorgio PA, Gregory-Eaves I, Fortin M-J, Lang AS, Laurion I, Maranger R, Prairie YT, Rusak JA, Segura PA, Siron R, Smol JP, Vinebrooke RD & Walsh DA. The NSERC Canadian Lake Pulse Network: A national assessment of lake health providing science for water management in a changing climate. *Science of the Total Environment*: submitted.
3. Kivilä H, Rantala M, Antoniades D, Luoto T, Nevalainen L & Rautio M. Sea level rise may contribute to the Arctic greening of coastal freshwaters – implications from the ontogeny of Greiner Lake, Nunavut, Canada. *Scientific reports*: submitted.
4. Ruiz-Fernández J, Garcia-Hernandez C, Nývlt D, Antoniades D, Hrbacek F, Lopez-Martinez J, Oliva M, Roman M, Guglielmin M, Cannone N, del Carmen Fernandez S. 2019. Patterns of spatio-temporal paraglacial response in the Antarctic Peninsula region and associated ecological implications. *Earth-Science Reviews*, 192: 379-402.

5. Antoniades D, Giralt S, Geyer A, Álvarez-Valero AM, Pla-Rabes S, Granados I, Liu EJ, Toro M, Smellie JL & Oliva M. 2018. The timing and widespread effects of the largest Holocene volcanic eruption in Antarctica. *Scientific reports*, 8(1), 17279.
6. Antoniades D. An overview of paleoenvironmental techniques for the reconstruction of past Arctic ice shelf dynamics. 2017. In: Copland L & Mueller D (eds.) *Arctic Ice Shelves and Ice Islands*. Elsevier, Amsterdam. pp. 207-226.
7. Bouchard F, Prout V, Pienitz R, Antoniades D, Tremblay R & Vincent WF. 2017. Periphytic diatom community structure in thermokarst ecosystems of Nunavik (Québec, Canada). *Arctic Science*, 4(1): 110-129.
8. Oliva M, Hrbacek F, Ruiz-Fernández J, de Pablo M-A, Ramos M, Vieira G & Antoniades D. 2016. Active layer dynamics in three topographically distinct lake catchments in Byers Peninsula (Livingston Island, Antarctica). *Catena*: 149: 558-559.
9. Bonilla S, González-Piana M, Soares MCS, Huszar VLM, Becker V, Somma A, Manzi-Marinho M, Kokocinski M, Dokulil M, Antoniades D & Aubriot L. 2016. The success of the cyanobacterium *Cylindrospermopsis raciborskii* in freshwaters is enhanced by the combined effects of light intensity and temperature. *Journal of Limnology*: 75(3). doi: 10.4081/jlimnol.2016.1479.
10. Oliva M, Antoniades D, Giralt S, Granados I, Pla-Rabes S, Toro I & Liu E. 2016. El retroceso glaciar en las islas Shetland del Sur (Antártida) durante el Holoceno. In: Durán JJ, Montes M, Robador A & Salazar A (eds.) *Comprendiendo el relieve: del pasado al futuro*. Publicaciones del Instituto Geológico y Minero de España, *Geología y Geofísica*, 5: 729-738.
11. Liu E, Oliva M, Antoniades D, Giralt S, Granados I, Pla-Rabes S, Toro M & Geyer A. 2016. Expanding the tephrochronological framework for Byers Peninsula, Antarctica, by combined compositional and textural fingerprinting. *Sedimentary Geology*, 340: 49-61.
12. Oliva M, Serrano E, Gómez Ortiz A, González-Amuchastegui MJ, Nieuwendam A, Palacios D, Pellitero- Ondicol R, Pérez-Alberti A, Ruiz-Fernández J, Valcárcel M, Vieira G & Antoniades D. 2016. The periglaciation of the Iberian Peninsula. Spatial and temporal variability. *Quaternary Science Reviews*, 137: 176-199.
13. Oliva M, Antoniades D, Giralt S, Granados I, Pla S, Toro M, Sanjurjo J, Liu E & Vieira G. 2016. The Holocene deglaciation of the Byers Peninsula (Livingston Island, Antarctica) based on the dating of lake sedimentary records. *Geomorphology*, 261: 89-102.
14. Oliva M, Antoniades D, Giralt S, Granados I, Pla-Rabes S, Toro M, Liu E & Sanjurjo J. 2016. La deglaciación de las áreas libres de hielo de las islas Shetland del Sur (Antártida). Ejemplos de Byers (Livingston) y Barton (King George). *Cuaternario y Geomorfología*, 30 (1-2), 105-118.
15. Antoniades D, Oliva M, Giralt S, Agrela J, Granados I, Pla-Rabes S, Toro M & Vieira G. 2015. Deglaciación Holocena de la Península Barton (Isla King George, Antártida Marítima). In: Gómez Ortiz A, Salvador-Franch F, Oliva M & Salvà-Catarineu M (eds.). *Avances, métodos y técnicas en el estudio del periglaciarismo*. Publicacions i Edicions de la Universitat de Barcelona, Barcelona, pp. 47-54.
16. Toro M, Quesada A, Camacho A, Oliva M, Alcamí A, Antoniades D, Bañón M, Fassnacht S, Fernández-Valiente E, Galan L, Giralt S, Granados I, Justel A, Liu EJ, López-Bueno A, Martínez-Cortizas A, Pla-Rabes S, Rastrojo A, Rico E, Rochera C, Van de Vijver B, Velazquez D, Villaescusa

- J-A & Vincent WF. 2015. CEDEX research activities in Antarctica. Aquatic ecosystems in Byers Peninsula (Livingston Island, maritime Antarctica). *Ingenieria Civil* 179: 175-191.
17. Antoniades D, Douglas MSV, Michelutti N & Smol JP. 2014. Determining diatom ecotones and their relationship to terrestrial ecoregion designations in the central Canadian Arctic Islands. *Journal of Phycology*, 50: 610-623.
18. Martínez de la Escalera G, Antoniades D, Bonilla SE & Piccini C. 2014. Application of ancient DNA to the reconstruction of past microbial assemblages and for the detection of toxic cyanobacteria in subtropical freshwater ecosystems. *Molecular Ecology*, 23: 5791-5802.
19. Oliva M, Antoniades D, Giralt S, Granados I, Toro M, Pla-Rabes S & Vieira G. 2014. La deglaciación holocena de la península Byers (isla Livingston, Antártida Marítima) a partir de la datación de sedimentos lacustres. In: *Avances de la Geomorfología en España 2012-2014*, Universidad de Extremadura, Cáceres, pp. 523-526.
20. Gabito L, Bonilla S & Antoniades D. 2013. Paleolimnological reconstruction of change in a subtropical lake: a comparison of the subfossil record to limnological data. *Limnetica*, 32: 175-188.
21. Michelutti N, McCleary K, Antoniades D, Sutherland P, Blais JM, Douglas MSV & Smol JP. 2013. Using paleolimnology to track the impacts of early Arctic peoples on freshwater ecosystems from southern Baffin Island, Nunavut. *Quaternary Science Reviews*, 76: 82-95.
22. Antoniades D. 2013. Lake Chemistry. In: Elias, S. (ed.) *Encyclopedia of Quaternary Science*. 2nd revised edition. Elsevier, Amsterdam. vol. 3, pp. 292-299.
23. Toro M, Granados I, Pla S, Giralt S, Antoniades D, Galan L, Martínez-Cortizas A, Lim H-S & Appleby P. 2013. Chronostratigraphy of the sedimentary record of Limnopolar Lake, Byers Peninsula (Livingston Island, Antarctica). *Antarctic Science*, 25: 198-212.
24. Oliva M, Antoniades D, Giralt S, Agrela J, Granados I, Pla-Rabes S, Toro M & Vieira G. 2013. The deglaciation process in Barton Peninsula (King George Island, South Shetland, Antarctica). In: Baena R, Fernández JJ & Guerrero I (eds.) *El Cuaternario Ibérico: investigación en el s. XXI*. Asociación Española para el Estudio del Cuaternario, Sevilla, pp. 214-216.
25. Veillette J, Muir DCG, Antoniades D, Small JM, Spencer C, Loewen TN, Babaluk JA, Reist, JD & Vincent WF. 2012. Perfluorinated chemicals in meromictic lakes on the northern coast of Ellesmere Island, high Arctic Canada. *Arctic*, 65: 245-256.
26. Bonilla S, Aubriot L, Soares M, González-Piana M, Fabre A, Huszar V, Lürding M, Antoniades D, Padisák J & Kruk C. 2012. What drives the distribution of the bloom forming cyanobacteria *Planktothrix agardhii* and *Cylindrospermopsis raciborskii*? *FEMS Microbiology Ecology*, 79:594-607.
27. Antoniades D, Francus P, Pienitz R, St-Onge G & Vincent WF. 2011. Holocene dynamics of the Arctic's largest ice shelf. *Proceedings of the National Academy of Sciences*, 108: 18899-18904.
28. Vincent WF, Fortier D, Lévesque E, Boulanger-Lapointe N, Tremblay B, Sarrazin D, Antoniades D. & Mueller DR. 2011. Extreme ecosystems and geosystems in the Canadian High Arctic: Ward Hunt Island and vicinity. *Écoscience*, 18: 236-261.

29. Veillette J, Lovejoy C, Potvin M, Harding T, Jungblut A, Antoniades D, Chénard C, Suttle C. & Vincent WF. 2011. Milne Fiord epishelf lake: a coastal arctic ecosystem vulnerable to climate change. *Écoscience*, 18: 304-316.
30. Kirk J, Muir DCG, Antoniades D, Douglas MSV, Evans M, Jackson T, Kling H, Lamoureux S, Lim D, Pienitz R, Smol J, Stewart K, Wang X & Yang F. 2011. Response to comment on climate change and mercury accumulation in Canadian high and subarctic Lakes. *Environmental Science & Technology*, 45: 6705-6706.
31. Antoniades D, Michelutti N, Quinlan R, Blais JM, Bonilla S, Douglas MSV, Pienitz R, Smol JP & Vincent WF. 2011. Cultural eutrophication, anoxia, and ecosystem recovery in Meretta Lake, high Arctic Canada. *Limnology and Oceanography*, 56: 639-650.
32. Kirk J, Muir DCG, Antoniades D, Douglas MSV, Evans M, Jackson T, Kling H, Lamoureux S, Lim D, Pienitz R, Smol J, Stewart K, Wang X & Yang F. 2011. Climate change and mercury accumulation in Canadian high and subarctic lakes. *Environmental Science & Technology*, 45: 964-970.
33. Veillette, J, Martineau M-J, Antoniades D, Sarrazin D. & Vincent WF. 2010. The effects of loss of perennial ice on mixing and phytoplankton dynamics in high Arctic lakes. *Annals of Glaciology*, 51: 56-70.
34. Tomkins JD, Lamoureux SF, Antoniades D & Vincent WF. 2010. Autumn snowfall and hydroclimatic variability during the past millennium inferred from the varved sediments of meromictic Lake A, northern Ellesmere Island, Canada. *Quaternary Research*, 74: 188-198.
35. Antoniades D, Veillette J, Martineau M-J, Belzile C, Tomkins JD, Pienitz R, Lamoureux S & Vincent WF. 2009. Bacterial dominance of phototrophic communities in a High Arctic lake and its implications for paleoclimate analysis. *Polar Science*, 3: 147-161.
36. Mueller DR, Van Hove P, Antoniades D, Jeffries MO & Vincent WF. 2009. Climate-Driven Regime Shifts in High Arctic Ice-Covered Lakes. *Limnology and Oceanography*, 54: 2371-2385.
37. Tomkins JD, Lamoureux SF, Antoniades D & Vincent WF. 2009. Sedimentology of perennial ice-covered, meromictic Lake A, Ellesmere Island, at the northern extreme of Canada. *Canadian Journal of Earth Sciences*, 46: 83-100.
38. Antoniades D, Douglas MSV & Smol JP. 2009. Biogeographic distributions and environmental controls of stream diatoms in the Canadian Arctic Archipelago. *Botany*, 87: 443-454.
39. Lim DSS, Laval B, Slater G, Antoniades D, Forrest A, Pike W, Pieters R, Saffari M, Reid D & McKay CP. 2009. Limnology of Pavilion Lake, B. C., Canada - Characterization of a microbialite forming environment. *Fundamental and Applied Limnology*, 173: 329-351.
40. Tomkins JD, Lamoureux SF, Antoniades D & Vincent WF. 2009. Sedimentary pellets as an ice cover proxy in a High Arctic ice-covered lake. *Journal of Paleolimnology*, 41: 225-242.
41. Antoniades D, Hamilton PB, Hinz F, Douglas MSV & Smol JP. 2009. Seven new species of freshwater diatoms (Bacillariophyceae) from the Canadian Arctic Archipelago. *Nova Hedwigia*, 88: 57-80.

42. Veillette J, Mueller DR, Antoniades D & Vincent WF. 2008. Arctic epishelf lakes as sentinel ecosystems: Past, present and future. *Journal of Geophysical Research - Biogeosciences*, 113: G04014, doi:10.1029/2008JG000730.
43. Tomkins JD, Antoniades D, Lamoureux SF & Vincent WF. 2008. A simple and effective method for preserving the sediment–water interface of sediment cores during transport. *Journal of Paleolimnology*, 40: 577-582.
44. Antoniades D, Crawley C, Douglas MSV, Pienitz R, Andersen D, Doran PT, Hawes I, Pollard W & Vincent WF. 2008. Reply to comment by K. Gajewski on "Abrupt environmental change in Canada's northernmost lake". *Geophysical Research Letters*, 35: L08702, doi:10.1029/2007GL032889.
45. Antoniades D, Crawley C, Douglas MSV, Pienitz R, Andersen D, Doran PT, Hawes I, Pollard W & Vincent WF. 2007. Abrupt environmental change in Canada's northernmost lake inferred from fossil diatom and pigment stratigraphy. *Geophysical Research Letters*, 34: L18708, doi:10.1029/2007GL030947.
46. Antoniades D. 2007. Lake Chemistry. In: *Encyclopedia of Quaternary Science*. Elias, S. (ed.). Elsevier, Amsterdam. vol. 3: 2040-2048.
47. Smol JP, Wolfe AP, Birks HJB, Douglas MSV, Jones VJ, Korhola A, Pienitz R, Rühland K, Sorvari S, Antoniades D, Brooks SJ, Fallu M-A, Hughes M, Keatley B, Laing T, Michelutti N, Nazarova L, Nyman M, Paterson AM, Perren B, Quinlan R, Rautio M, Saulnier-Talbot E, Siitonen S, Solovieva N & Weckström, J. 2005. Climate-driven regime shifts in Arctic lake ecosystems. *Proceedings of the National Academy of Sciences*, 102: 4397-4402.
48. Antoniades D, Douglas MSV & Smol JP. 2005. Diatom autecology and inference model development from the Canadian High Arctic Archipelago. *Journal of Phycology*, 41: 30-45.
49. Antoniades D, Douglas MSV & Smol JP. 2004. Quantitative estimates of recent environmental changes in the Canadian High Arctic inferred from diatoms in lake and pond sediments. *Journal of Paleolimnology*, 33: 349-60.
50. Antoniades D, Douglas MSV & Smol JP. 2004. Diatom species–environment relationships and inference models from Isachsen, Ellef Ringnes Island, Canadian High Arctic. *Hydrobiologia*, 529: 1-18.
51. Antoniades D, Douglas MSV & Smol JP. 2003. Comparative physical and chemical limnology of two Canadian High Arctic regions: Alert (Ellesmere Island, NU) and Mould Bay (Prince Patrick Island, NWT). *Archiv für Hydrobiologie*, 158: 485-516.
52. Antoniades D, Douglas MSV & Smol JP. 2003. The physical and chemical limnology of 24 ponds and one lake from Isachsen, Ellef Ringnes Island, Canadian High Arctic. *International Review of Hydrobiology*, 88: 519-538.
53. Antoniades D. & Douglas MSV. 2002. Characterization of high arctic stream diatom assemblages from Cornwallis Island, Nunavut, Canada. *Canadian Journal of Botany*, 80: 50-58.

3.2.3. Articles and chapters without peer review:

54. Oliva M, Ruiz-Fernández J, Palacios D, Antoniades D, Giralt S, Granados I, Pla-Rabes S. & Toro M. 2018. In: *Cronología del retroceso glaciar en las islas Shetland del Sur (Antártida): desafíos y perspectivas*. Libro de homenaje a Augusto Pérez-Alberti. pp. 345-360.

55. Oliva M, Pereira P & Antoniades D. 2018. The environmental consequences of permafrost degradation in a changing climate. *Science of The Total Environment*, 616: 435-437
56. Oliva M & Antoniades D. 2016. Recent advances in the study of limnological processes in permafrost environments. *Sedimentary Geology*, 340: 1-2.
57. Antoniades D & Daners G. 2016. Paleolimnología. In: Arocena R. (ed.) Métodos en ecología de aguas continentales, pp. 203-218. Montevideo, Ediciones DIRAC.
58. Antoniades D, Douglas MSV & Smol JP. 2000. Limnology and autecology of freshwater diatoms from Alert, northern Ellesmere Island, Nunavut. *Proceedings, 6th national students' conference on northern studies*: 1-11.

4. Training of highly qualified personnel:

4.1.1. Theses supervised:

PhD

In progress

Florencia Bertoglio. 2018 – . An assessment of the effects of research stations on Antarctic aquatic environments using photosynthetic pigments and molecular methods.

Sebastien Bourget. 2015 – . The use of lake sediments as indicators of anthropogenic activities in Tursujuq National Park and Lake Mégantic, Quebec.

MSc

In progress

Samuel Yergeau. 2018 – . Using diatoms to assess the effects of Antarctic bases on the lakes of Fildes Peninsula, King George Island.

Katherine Triglav. 2018 – . Microbial evolution of coastal Northern Ellesmere Island lakes.

Yohanna Klanten. 2017 – . Paleolimnological reconstruction of Holocene environmental change from northern Ellesmere Island.

Completed

Natalie Corrales. MSc in Geosciences, 2018 (UdelaR, Uruguay). The effects of glyphosate on benthic diatom communities in Laguna del Cisne, Uruguay.

Abderrahim Aziz. MSc in Biogeoscience, 2018. (co-supervised with Dr. R. Pienitz). Biomonitoring of the effects of the Lac Mégantic hydrocarbon spill in the Chaudière River using periphytic diatoms.

Félicia Anctil. MSc in Biogeoscience, 2018. Management of non-exotic macrophytes in Lake Pierre-Paul, Quebec.

Sophie Pouillé. MSc in Biogeoscience, 2018. Paleolimnological reconstruction of anthropogenic effects in Lac Vert (Quebec) using stable isotopes.

Laurie Noël. MSc in Biogeoscience, 2017. Ichthyological assessment of the Beauport River.

BSc

Completed

Samuel Yergeau. 2018. The effects of cottaging activities on Lac Vert, Bellechasse, Quebec.

Camille Coulombe-Potvin. 2018. Paleolimnological assessment of the effects of road salt on Lac Clément, Quebec.

Marc-Élie Adaimé. 2017. Detection of environmental change in Ward Hunt Lake, Nunavut, Canada.

Natalie Corrales. 2013. (co-supervision; supervisor Dr. G. Goyenola). Factors determining periphyton production in second order streams in Uruguay.

Gabriela Martínez. 2013. (co-supervision; supervisor Dr. C. Piccini). Detection and identification of fossil toxic cyanobacteria in the sediments of Laguna Blanca, Uruguay.

Lourdes Gabito. 2010. (co-supervision; supervisor Dr. S. Bonilla). The use of fossil diatoms for evaluation remediation measures in the rehabilitation of eutrophic lakes.

4.1.2. Thesis advisory committees:

Catherine Marois	(MSc, Biochemistry)	2018 – present
Olivier Jacques	(PhD, Geography)	2017 – present
Marc-Élie Adaimé	(MSc, Geography)	2017 – present
Olivier Jacques	(MSc, Geography)	2015 – 2017
Paschale Noël Bégin	(PhD, Biology)	2015 – present
Valentin Proult	(MSc, Geography)	2012 – 2014

4.1.3. External thesis evaluation:

Annie-Pier Trottier. Sedimentary records of paleoseismicity in south-central Quebec lakes : late Quaternary reconstruction using hydro-acoustic surveys. 2016.

Andrea Sánchez. Neogene astronomical forcing on Earth and Mars. PhD thesis, Astronomy. Universidad de la República, Uruguay. 2014.

Laura Pérez. Paleooceanographic study of the Uruguayan internal continental shelf. MSc thesis, Geosciences, Universidad de la República, Uruguay. 2014.

4.1.4. PhD proposal/qualifying examination panels:

Paschale Noël Bégin. Aquatic food webs in lakes of northern Ellesmere Island. Department of Biology, Université Laval. 2015.

Karista Hudelson. Effects of Climate on Mercury Methylation and Bioaccumulation in Arctic lakes of Cornwallis Island, Nunavut, Canada. INRS-ETE, Quebec. 2013.

4.2. Teaching:

I have had the opportunity to teach in courses across university levels and disciplines, including departments of Geography, Geology, Biology and Environmental Studies, teaching in French, English and Spanish. I am currently teaching undergraduate and graduate courses in the Geography Department at Université Laval.

Undergraduate courses

Université Laval

GGR 3306 - Environnements aquatiques	– 2016, 2017, 2018, 2019
GGR 4040 - Paléolimnologie (with R. Pienitz)	– 2015, 2016, 2018, 2019
GGR 1010 - Terrain et laboratoire (coord. Y. Brousseau)	– 2016, 2017
GGR 1008 - Environnements naturels (with M. Simard)	– 2016
GGR 4500 - Problèmes environnementaux en biogéographie (with M. Lavoie)	– 2015, 2016
GGR 1004 - Initiation à la méthodologie (coord. G. Dorval)	– 2014

Universidad de la República (UdelaR) / Uruguayan Antarctic Institute

Summer field school: introduction to Antarctic research	– 2014, 2019
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Graduate and conference courses:*Université Laval*

GGR 7009 - Méthodologie en géographie – 2017, 2018 (2 times), 2019

GGR 7040 - Paléolimnologie (with R. Pienitz) – 2015, 2016, 2018, 2019

GGR 6500 - Problèmes environnementaux en biogéographie (with M. Lavoie) – 2015, 2016

Universidad de la República

Taller de Geociencias (Multidisciplinary geoscience seminar course) – 2012, 2013

Limnología y oceanografía (Team-taught course) – 2011, 2012

Reconstructing long-term environmental changes using lake sediments and other paleoenvironmental approaches – 2010

- Co-organised & co-taught (50%) graduate course with students from Uruguay, Argentina and Brazil.

12th Latin American Phycology Conference

Studying long-term environmental changes using lake sediments – 2011

- Co-organised & co-taught (50%) graduate-level course in La Plata, Argentina.

Invited lectures:

- Efectos del cambio climático sobre ecosistemas acuáticos continentales (UdelaR) – 2013
- Ciencias de tierra y espacio (UdelaR) – 2012
- Cianobacterias: de los organismos al ecosistema límnic (UdelaR) – 2012
- Fitoplancton de Aguas Continentales: Biología y Ecología (UdelaR) – 2010
- Biostratigraphie (ULaval) – 2007
- Limnology and Aquatic Ecology (York University) – 2004
- Introductory Geology (U of Toronto) – 2004

5. Conference presentations

1. Triglav K, Antoniades D, Bonilla S, Klanten Y, Marois C, Culley A & Vincent WF. The ecological functioning of Stuckberry Valley lakes. ArcticNet Annual Scientific Meeting, Ottawa, Canada, December 2018.
2. Klanten Y, Antoniades D, Bonilla S, Campos C, Culley A, St-Onge G & Vincent WF. Stuckberry Valley Lakes: Sentinels of Environmental Change at Canada's extreme Northern Limit. ArcticNet Annual Scientific Meeting, Ottawa, Canada, December 2018.
3. Oliva M, Antoniades D, Fernández-Fernández JM, García-Hernández C, Giralt S, González-Díaz B, Granados I, Palacios D, Pérez-Alberti A, Pla-Rabes S, Sanjurjo J, Schimmelpfennig I, Toro M, Vieira G & Ruiz-Fernández J. Glacial oscillations in the South Shetland Islands since the Last Glacial Maximum. IX Simposio de Estudios Polares, Madrid, Spain, September 2018.
4. Oliva M, Antoniades D, Fernández-Fernández JM, García-Hernández C, Giralt S, González-Díaz B, Granados I, Palacios D, Pérez-Alberti A, Pla-Rabes S, Sanjurjo J, Schimmelpfennig I, Toro M, Vieira G & Ruiz-Fernández J. Glacial oscillations in the South Shetland Islands since the Last Glacial Maximum. XV Reunión de la Sociedad Española de Geomorfología. Palma de Mallorca, Spain, September 2018.
5. Klanten Y, Antoniades D, Bonilla SE, Vincent WF, Triglav K, Marois C & Culley A. Stuckberry Valley lakes: sentinels of environmental change at Canada's extreme northern limit. Réunion annuelle Sentinelle Nord, Quebec, Canada, August 2018.

6. Marois C, Klanten Y, Triglav K, Antoniades D & Culley AI. Diversité des communautés microbiennes des lacs de la vallée de Stuckberry (Nunavut, Canada) dans un contexte de changements climatiques. Réunion annuelle Sentinelle Nord, Quebec, Canada, August 2018.
7. Triglav K, Antoniades D, Bonilla S & Vincent WF. Microbiomes of Stuckberry Valley: Coastal northern Ellesmere Island lakes. Réunion annuelle Sentinelle Nord, Quebec, Canada, August 2018.
8. Gregory-Eaves I, Baud A, Garner R, Griffiths K, Jeziorski A, MacKeigan P, Paquette C, Simmatis B, Amyot M, Antoniades D, Francus P, Beisner B, Huot Y, Poulain A, Walsh D & Smol J. Landscape paleolimnological insights from the Canadian Lake Pulse network (lakepulse.ca). 20th International Sedimentological Congress, Quebec, Canada, August 2018.
9. Giralt S, Antoniades D, Granados I, Liu E, Pla-Rabes S, Toro M & Oliva M. Subdecadal Holocene climate reconstruction of Byers Peninsula (Antarctica). Polar 2018 – SCAR/IASC Open Science Conference, Davos, Sweden, June 2018.
10. Griffiths K, Smol J, Antoniades D, Jeziorski A & Gregory-Eaves I. Inferring past environments across the Lake Pulse Network: Tracking diatom changes across four Canadian ecozones. International Paleolimnology Association – International Association of Limnogeology Joint Conference, Stockholm, Sweden, June 2018.
11. Gregory-Eaves I, Baud A, Garner R, Griffiths K, Jeziorski A, MacKeigan P, Paquette C, Simmatis B, Amyot M, Antoniades D, Francus P, Beisner B, Huot Y, Poulain A, Walsh D & Smol J. Landscape paleolimnological insights from the Canadian Lake Pulse Network (lakepulse.ca). International Paleolimnology Association – International Association of Limnogeology Joint Conference, Stockholm, Sweden, June 2018.
12. Oliva M, Antoniades D, Giralt S, Granados I, Palacios D, Pla-Rabes S, Ruiz-Fernández J, Sanjurjo J, Toro M & Vieira G. Reconstructing the deglaciation of ice-free environments in the Antarctic Peninsula: recent findings and new perspectives. Polar 2018 – SCAR/IASC Open Science Conference, Davos, Switzerland, June 2018.
13. Giralt S, Urrutia R & Antoniades D. Assessing the impacts of Antarctic bases on Fildes Peninsula aquatic ecosystems. Polar 2018 – SCAR/IASC Open Science Conference, Davos, Switzerland, June 2018.
14. Baud A, Griffiths K, MacKeigan P, Paquette C, Smol J, Antoniades D, Beisner B & Gregory-Eaves I. A changing Canada – the paleo-perspective from the Lake Pulse Network. Groupe de recherche interuniversitaire en limnologie et en environnement aquatique (GRIL) Annual Symposium 2018, Jouvence, Canada, February 2018.
15. Jeziorski A, Griffiths K, Simmatis B, Gregory-Eaves I, Antoniades D & Smol J. Paleolimnological data from the Canadian LakePulse Network 2017 field campaign (Eastern Canada). Society of Canadian Limnologists Conference, Edmonton, Canada, January 2018.
16. Klanten Y, Antoniades D, Bonilla S & Vincent WF. Stuckberry Valley lakes: Sentinels of environmental change at Canada's extreme northern limit. Arctic Change 2017, Quebec, Canada, December 2017.

17. Oliva M, Antoniades D, Giralt S, Granados I, Palacios D, Pla-Rabes S, Ruiz-Fernández J, Sanjurjo J, Toro M & Vieira G. The deglaciation of ice-free environments in the Antarctic Peninsula region. 1st International ANTPAS Workshop on Antarctic Permafrost, Varese, Italy, October 2017.
18. Oliva M, Serrano E, Gómez Ortiz A, González-Amuchastegui MJ, Nieuwendam A, Palacios D, Pellitero-Ondicol R, Pérez-Iberty A, Ruiz-Fernández J, Valcárcel M, Vieira G, & Antoniades D. Spatial and temporal variability of periglacial of the Iberian Peninsula. 1st International Conference on Research for Sustainable Development in Mountain Regions, Bragança, Portugal, October 2016.
19. Tassino B, Antoniades D, Castro S, Eguren G, Ponce de León R, Silva A, Volonterio A & Cristina J. Escuela de Verano Iniciación a la Investigación Antártica: una experiencia de enseñanza innovadora, integradora e interdisciplinaria. I Congreso Latinoamericano de Investigación y Educación Superior Interdisciplinaria. Montevideo, Uruguay, September 2016.
20. Oliva M, Antoniades D, Giralt S, Granados I, Toro M, Pla-Rabes S, Sanjurjo J, Vieira G & Hong SG. The deglaciation of the ice-free areas in the South Shetland Islands. Examples from Byers (Livingston) and Barton (King George). 2016 SCAR Open Science Conference. Kuala Lumpur, Malaysia, August 2016.
21. Oliva M, Antoniades D, Giralt S, Granados I, Pla-Rabes S, Toro M & Liu E. El retroceso glaciar en las islas Shetland del Sur (Antártida) durante el Holoceno. XIV Reunión de la Sociedad Española de Geomorfología. Málaga, Spain, June 2016.
22. Oliva M, Serrano E, Gómez-Ortiz A, González Amuchastegui MJ, Nieuwendam A, Palacios D, Pellitero-Ondicol R, Pérez-Alberti A, Ruiz-Fernández J, Valcárcel M, Vieira G & Antoniades D. The periglacial of the Iberian Peninsula. XI International Conference on Permafrost. Potsdam, Germany, June 2016.
23. Toro M, Alcamí A, Antoniades D & 16 others. Aquatic ecosystems in Byers Peninsula, Livingston Island: An Antarctic Noah's Ark in a changing world, The 6th Symposium on Polar Science, Tokyo, Japan, November 2015.
24. Oliva M, Antoniades D, Giralt S, Granados I, Pla-Rabes S, Toro M & Liu EJ. Holocene environmental changes in Byers Peninsula (South Shetland Islands, Antarctica) inferred from lake sediments. VII Conferência Portuguesa das Ciências Polares. Évora, Portugal, October 2015.
25. Oliva M, Antoniades D, Giralt S, Granados I, Pla S, Toro M & Liu EJ. Ongoing analysis of lake sediments from Byers Peninsula (Livingston Island, South Shetland Islands). PAGES Antarctica2k. Venice, Italy, September 2015.
26. Oliva M, Antoniades D, Giralt S, Granados I, Pla S, Toro M, Sanjurjo J & Liu EJ. The deglaciation of the Byers peninsula based on a multiple dating-method approach in lake sediments of Byers Peninsula (South Shetland Islands, Antarctica). Proceedings of the XIX INQUA Congress. Nagoya Japan, August 2015.
27. Oliva M, Antoniades D, Giralt S, Granados I, Pla S, Toro M, Sanjurjo J, Liu EJ & Vieira G. Holocene environmental changes in Byers Peninsula (South Shetland Islands, Antarctica) based on a multiple dating method approach to lake sediments. Proceedings of the XII International Symposium on Antarctic Earth Science. Goa, India, July 2015.

28. Lee MK, Lim H-S, Antoniades D, Toro M, Lee JI, Yoo K-C, Yoon HI, Lee YI. Geochemical Characteristics of Volcanic Glasses from the Limnopolar Lake, Byers Peninsula, Livingston Island, Antarctica: Application as Age Indicators. Proceedings of the XII International Symposium on Antarctic Earth Science. Goa, India, July 2015.
29. Oliva M, Antoniades D, Giralt S, Granados I, Pla S, Toro M, Sanjurjo J, Liu EJ & Vieira G. Holocene deglaciation of Byers Peninsula (South Shetland Islands, Antarctica) using a combined dating-method approach to lake sediments. Proceedings of the V Iberian Conference of the International Permafrost Association. Valladolid, Spain, June 2015.
30. Oliva M, Antoniades D, Giralt S, Granados I, Toro M, Pla-Rabes S & Vieira G. The Holocene deglaciation of the Byers Peninsula (Livingston, Antarctica) inferred from lake sediment records. VI Conferência Portuguesa das Ciências Polares. Porto, Portugal, October 2014.
31. Hordeñana J, Illarze M, Manta G, Olivera A & Antoniades D. Paleolimnología en el continente blanco: reconstrucción del pasado del Lago Uruguay, Isla Rey Jorge, Antártida. XV Jornadas de la Sociedad Uruguaya de Biociencias. Piriapolis, Uruguay, September 2014.
32. Oliva M, Antoniades D, Giralt S, Granados I, Toro M & Pla-Rabes S. Chronology of the deglaciation of of Byers Peninsula (Livingston Island, Maritime Antarctica) inferred from lake records. XIII Reunión de la Sociedad Española de Geomorfología. Caceres, Spain, September 2014.
33. Oliva M, Antoniades D, Giralt S, Granados I, Toro M & Pla-Rabes S. Chronology of the deglaciation of of Barton Peninsula (King George Island Island, Maritime Antarctica) inferred from lake records. XIII Reunión de la Sociedad Española de Geomorfología. Caceres, Spain, September 2014.
34. Piccini C, Aubriot L, Vico P, Martigani F, Martínez de la Escalera G, Antoniades D & Bonilla S. Plasticity, diversity and toxicity in *Cylindrospermopsis raciborskii*: an insight into its worldwide success. 9th European Workshop on the Molecular Biology of Cyanobacteria, Texel, Holland, September 2014.
35. Oliva M, Antoniades D, Giralt S, Granados I, Toro M, Pla-Rabes S & Vieira G. The process of deglaciation of Byers Peninsula (Livingston Island, Maritime Antarctica) based on lake sediments. 2014 SCAR Open Science Conference. Auckland, New Zealand, August 2014.
36. Cristina J, Antoniades D, Castro S, Eguren G, Ponce de Leon R, Silva A & Tassinio B. First Uruguayan Antarctic Research School: training the next generation of Uruguayan Antarctic researchers. 2014 SCAR Open Science Conference, Auckland, New Zealand, August 2014.
37. Antoniades D, Oliva M, Giralt S, Granados I, Toro M, Pla-Rabes S. Holocene environmental evolution of Barton peninsula (King George Island, Antarctica) based on lacustrine records. 4th European Conference on Permafrost. 4th European Conference on Permafrost. Evora, Portugal, June 2014.
38. Nicholson E, Oliva M, Giralt S, Antoniades D, Granados I, Toro M, Pla-Rabes S. Tephra stratigraphy of lake sediments from Byers Peninsula, Antarctica: insights from volcanology. 4th European Conference on Permafrost. 4th European Conference on Permafrost. Evora, Portugal, June 2014.

39. Oliva M, Antoniades D, Giralt S, Granados I, Toro M, Pla-Rabes S, Vieira G. Deglaciation process in Byers Peninsula (Livingston Island, Maritime Antarctica) based on lake records. 4th European Conference on Permafrost. 4th European Conference on Permafrost. Evora, Portugal, June 2014.
40. Oliva M, Antoniades D, Giralt S, Granados I, Toro M, Pla-Rabes S, Vieira G. (2014). Holocene deglaciation of Byers Peninsula (Livingston Island, Maritime Antarctica) inferred from lake records. European Geoscience Union, General Assembly 2014. Vienna, Austria, April 2014.
41. Oliva M, Antoniades D, Giralt S, Granados I, Toro M & Pla-Rabes S. Holocene deglaciation of Byers Peninsula (Livingston Island, Maritime Antarctica) inferred from lake records. THAW 2014 - Thermokarst Aquatic ecosystems Workshop: Freshwater ecosystems in changing permafrost landscapes. Quebec, Canada, March 2014.
42. Oliva M, Antoniades D, Giralt S, Granados I, Pla-Rabes S, Toro M & Vieira G. Preliminary results on the Holocene deglaciation of Byers Peninsula (Livingston Island, Antarctica) inferred from lake records. VI Conferência Portuguesa das Ciências Polares. Faro, Portugal, November 2013.
43. Oliva M, Antoniades D, Giralt S, Agrela J, Granados I, Pla-Rabes S, Toro M & Vieira G. The Holocene deglaciation of Barton Peninsula (King George, Antarctica) based on lacustrine records. IV Conferência Portuguesa das Ciências Polares. Faro, Portugal, November 2013.
44. Antoniades D, Oliva-Franganillo M, Giralt S, Agrela J, Granados I, Pla-Rabes S, Toro M & Vieira G. La deglaciación holocena de la Península de Barton (Isla Rey Jorge, Antártida marítima). IV Congreso Ibérico de la International Permafrost Association. Barcelona, Spain, June 2013.
45. Oliva M, Antoniades D, Giralt S, Granados I, Toro M, Pla S, Vieira G, Mora C, Trindade A, Agrela J, Batista V, Correia A, Schaefer C, Simas F, Ramos M, De Pablo M, Galán L, Ruiz-Fernández J & Serrano E. Evolución ambiental holocena de la Península Byers. Proyecto HOLOANTAR, primera campaña de campo. Proceedings of the IV Iberian Conference of the International Permafrost Association. Barcelona, Spain, June 2013.
46. Oliva M, Vieira G, Mora C, Trindade A, Agrela J, Batista V, Correia A, Schaefer C, Simas F, Ramos M, De Pablo M, Toro M, Antoniades D, Galán L, Giralt S, Granados I, Pla S & Serrano E. The HOLOANTAR project: Holocene environmental change in the Maritime Antarctic. Interactions between permafrost and the lacustrine environment. European Geoscience Union, General Assembly. Vienna, Austria, April 2013.
47. Martínez de la Escalera G, Antoniades D, Bonilla S & Piccini C. Detection and identification of toxic cyanobacteria in the sediment of a shallow lake with molecular methods (Diversidad, detección e identificación de cianobacterias tóxicas fósiles en el sedimento de un lago somero a través de métodos moleculares. 10th meeting of the Uruguayan Society of Microbiology. Montevideo, Uruguay, April 2013.
48. Corrales N, Goyenola G, Teixeira de Mello F, Antoniades D, Meerhoff M. Factores determinantes de la producción perifítica en arroyos de bajo orden: evaluación experimental en arroyo Chal-Chal (Uruguay). V Reunión Binacional de Ecología. Puerto Varas, Chile, March 2013.
49. Martínez de la Escalera G, Antoniades D, Bonilla S & Piccini C. Diversity and detection of fossil toxic cyanobacteria in the sediment of a shallow lake using molecular methods (Diversidad,

- detección e identificación de cianobacterias tóxicas fósiles en el sedimento de un lago somero a través de métodos moleculares. 5th Argentinian Congress of Limnology. Santa Fe, Argentina, November 2012.
50. Oliva M, Vieira G, Mora C, Trindade A, Agrela J, Batista V, Correia A, Schaefer C, Simas F, Ramos M, De Pablo M, Toro M, Antoniades D, Galán L, Giralt S, Granados I & Pla S. Understanding present and past interactions between permafrost and climate in the Maritime Antarctica. The HOLOANTAR Project. IV Conferência Portuguesa das Ciências Polares. Lisbon, Portugal, October 2012.
51. Verleyen E, Van de Vijver B, Souffreau C, Sabbe K, Hodgson D, Nedbalová L, Antoniades D, Convey P, Vanormelingen P & Vyverman W. Diatom distributions in space and time - A case study from the polar regions. Polar Ecology Conference 2012. České Budějovice, Czech Republic, October 2012.
52. Martínez de la Escalera G, Antoniades D, Bonilla S & Piccini C. Diversidad, detección e identificación de cianobacterias tóxicas fósiles en los sedimentos de un lago somero a través de métodos moleculares (Diversity, detection and identification of fossil toxic cyanobacteria in the sediments of a shallow lake using molecular methods). XIV Jornadas de la Sociedad Uruguaya de Biociencias. Piriápolis, Uruguay, September 2012.
53. Oliva M, Vieira G, Mora C, Trindade A, Agrela J, Batista V, Schaefer C, Simas F, Ramos M, de Pablo M-Á, Toro M, Antoniades D, Galán L, Giralt S, Granados I & Pla S. Holocene climate variability in a maritime permafrost environment (Byers Peninsula, Livingston Island) inferred from lacustrine records: the HOLOANTAR project. XXXII SCAR Open Science Conference, Portland, USA, July 2012.
54. Vyverman W, Verleyen E, Souffreau C, Van de Vijver B, Hodgson D, Jones V, Nedbalova L & Antoniades D. Bioregionalisation and evolutionary origins of freshwater Antarctic diatoms. XXXII SCAR Open Science Conference, Portland, USA, July 2012.
55. Oliva M, Vieira G, Mora C, Trindade A, Agrela J, Batista V, Correia A, Schaefer C, Simas F, Ramos M, De Pablo M, Serrano E, Toro M, Antoniades D, Galán L, Giralt S, Granados I & Pla S. Project HOLOANTAR: Holocene environmental change in the Maritime Antarctic. Interactions between permafrost and the lacustrine environment. Tenth International Conference on Permafrost. Salekhard, Russia, June 2012.
56. Verleyen E, Van de Vijver B, Hodgson D, Sabbe K, Souffreau C, Nedbalová L, Tavernier I, Sterken M, Jones V, Vanormelingen P, Antoniades D, Van Nieuwenhuyze W, Satoshi I, Kudoh S, Vyverman W. Poles apart: Interhemispheric contrasts in polar diatom diversity driven by differences in tectonics and glacial history. Geobiology and environments of siliceous biomineralizers. Lille, France, September 2011.
57. Antoniades D, Blais J, Toro M, Pienitz R, Quesada A & Vincent WF. Reconstructing eutrophication and past marine mammal populations from shallow coastal lakes on Byers Peninsula, Livingston Island, Antarctica. 13th Brazilian Limnology Congress, Natal, Brazil, September 2011. (Invited talk).

58. Van de Vijver B, Verleyen E, Hodgson D, Sabbe K, Souffreau C, Nedbalova L, Tavernier I, Antoniades D & Vyverman W. Endemism and biogeographical regionalism in Antarctic diatom communities. 21st North American Diatom Symposium. Polson, USA, September 2011.
59. Antoniades D, Blais J, Toro M, Pienitz R, Quesada A & Vincent WF. Reconstructing past abundances of southern elephant seals at Byers Peninsula, Livingston Island from the sedimentary record. Scientific Committee on Antarctic Research Open Science Conference, Buenos Aires, Argentina, August 2010.
60. Vincent WF, Mueller DR & Antoniades D. Extreme warming and ecosystem collapse in the Canadian High Arctic. The State of the Arctic Conference. Miami, USA, March 2010.
61. Gabito L, Bonilla S, Garcia-Rodriguez F & Antoniades D. Diatomeas fósiles para evaluar medidas de rehabilitación en lagos subtropicales. XIV Simposio Argentino de paleobotánica y palinología. Mar del Plata, Argentina, December 2009.
62. Gabito L, Antoniades D, Garcia-Rodriguez F & Bonilla S. Diatomeas fósiles para reconstruir eutrofización en lagos subtropicales. Cianobacterias: del conocimiento a la gestión – 1^o Encuentro Uruguayo, Montevideo, Uruguay, October 2009.
63. Antoniades D, Tomkins J, Lamoureux S, Pienitz R & Vincent WF. Microbial pigments in the High Arctic: From plankton to sediments to past climate. International Polar Year – MERGE Workshop, Montréal, QC, June 2009.
64. Antoniades D, Francus P, Pienitz R, St-Onge G & Vincent WF. Northern ice shelves were stable on millennial time scales before recent breakup. Arctic Change 2008, Quebec, QC, December 2008.
65. Veillette J, Muir D, Wang X, Small J, Spencer C, Antoniades D, Babaluk J & Vincent WF. Perfluorinated acid contaminants in a high Arctic meromictic lake: Transport pathways and implications of climate change. Arctic Change 2008, Quebec, QC, December 2008.
66. Vincent WF, Mueller D, Antoniades D, Veillette J, Jungblut A, Sarrazin D, Lemay M. & Barnard C. Extreme warming, habitat loss and abrupt ecosystem change at Canada's northern edge. Arctic Change 2008, Quebec, QC, December 2008.
67. Mueller DR, Van Hove P, Antoniades D, Jeffries MO & Vincent WF. Climate-Driven Regime Shifts in High Arctic Ice-Covered Lakes. AGU Chapman Conference on Lakes and Reservoirs as Sentinels, Integrators and Regulators of Climate Change, Lake Tahoe, NV, September 2008.
68. Antoniades D, Pienitz R, St. Onge G. & Vincent WF. Stratified fiords and paleoclimate change in high Arctic Canada. SCAR/IASC International Polar Year Open Science Conference, St. Petersburg, Russia, July 2008.
69. Antoniades D, Tomkins JD, Lamoureux SF, Pienitz R. & Vincent WF. Changements climatiques dans le Haut Arctique canadien: aperçu d'un lac méromictique sur l'île d'Ellesmere. 28^e Colloque du Centre d'études nordiques. Quebec City, QC, February 2008.
70. Tomkins JD, Lamoureux SF, Antoniades D. & Vincent WF. A 1000-year record of hydroclimatic variability from a lake at the northern extreme of Canada. 4th ArcticNet annual scientific meeting, Collingwood, ON, December 2007.

71. Veillette J, Mueller DR, Antoniades D & Vincent WF. Epishelf lakes as sentinels of climate change: implications of Arctic ice shelf break-up. 4th ArcticNet annual scientific meeting, Collingwood, ON, December 2007.
72. Muir DCG, Evans MS, Jackson TA, Kling H, Antoniades D, Douglas M, Pienitz R, Smol JP, Wang X & Yang F. Investigating relationships between climate warming and mercury in arctic and subarctic lake sediments. 4th ArcticNet annual scientific meeting, Collingwood, ON, December 2007.
73. Antoniades D, Tomkins JD, Pienitz R, Lamoureux SF & Vincent WF. Biological and geochemical proxy evidence of long-term environmental change from meromictic Lake A in the Canadian High Arctic. 30th Congress of the International Association of Theoretical and Applied Limnology, Montreal, QC, August 2007.
74. Veillette J, Mueller DR, Antoniades D & Vincent WF. Epishelf lakes as sentinels of climate change: Implications of Arctic ice shelf break-up. 30th Congress of the International Association of Theoretical and Applied Limnology, Montreal, QC, August 2007.
75. Muir DCG, Evans MS, Jackson TA, Kling H, Antoniades D, Douglas M, Pienitz R, Smol JP, Wang X & Yang F. Investigating relationships between climate warming and mercury in arctic and subarctic lake sediments. 30th Congress of the International Association of Theoretical and Applied Limnology, Montreal, QC, August 2007.
76. Veillette J, Antoniades D, Garneau M-È & Vincent WF. Indicateurs aquatiques de changements environnementaux dans l'Arctique canadien. 27^e Colloque du Centre d'études nordiques, Quebec, QC, February 2007.
77. Tomkins JD, Lamoureux SF, Antoniades D & Vincent WF. Twentieth century changes in lake productivity and sedimentation in meromictic Lake A, Ellesmere Island, Nunavut. 3rd ArcticNet annual scientific meeting, Victoria, BC, December 2006.
78. Veillette J, Antoniades D, Garneau M-È & Vincent WF. Development of environmental change indicators in the Canadian High Arctic: Ward Hunt Island Observatory 2006. 3rd ArcticNet annual scientific meeting, Victoria, BC, December 2006.
79. Muir D, Evans M, Jackson T, Kling H, Antoniades D, Douglas M, Pienitz R, Smol J, Wang X & Yang F. Investigating relationships between climate warming and mercury in Arctic and subarctic lake sediments. 8th International conference on mercury as a global pollutant, Madison, WI, August 2006.
80. Antoniades D, Crawley C, Andersen D, Douglas MSV & Vincent WF. Environmental change inferred from diatoms and fossil pigments in lake and epishelf systems in the Canadian High Arctic. 10th International paleolimnology symposium. Duluth, MN, June 2006.
81. Douglas M, Antoniades D, Keatley B, Lim D, Michelutti N, Quinlan R & Smol J. Paleolimnological perspective on long-term environmental change in the Canadian High Arctic. 2006 ARCUS annual meeting and Arctic forum. Washington DC, May 2006.

82. Antoniades D, Lamoureux SF, Pienitz R, Mueller DR, Van Hove P, Tomkins JD & Vincent WF. Reconstructing environmental changes from northern Ellesmere Island lakes and fiords. 16th GRIL symposium, St. Ferdinand, QC, March 2006.
83. Antoniades D, Lamoureux SF, Pienitz R, Mueller DR, Van Hove P, Tomkins JD & Vincent WF. Extreme northern aquatic ecosystems as sentinels of global environmental change. 2nd ArcticNet annual scientific meeting, Banff, AB, December 2005.
84. Vincent WF, Antoniades D, Mueller DR, Sarrazin D, Lévesque E & Glenfield R. Ward Hunt Island Observatory: An ArcticNet partnership at the northern limit of Nunavut. 2nd ArcticNet annual scientific meeting, Banff, AB, December 2005.
85. Tomkins JD, Lamoureux SF, Antoniades D. & Vincent WF. Long-term water balance variability in Lake A, northern Ellesmere Island. 2nd ArcticNet annual scientific meeting, Banff, AB, December 2005.
86. Douglas MSV, Antoniades D, Keatley B, Lim DSS, Michelutti N, Quinlan R & Smol JP. Paleolimnological perspectives on long-term environmental change in the Canadian High Arctic. PAGES 2nd open science meeting, Beijing, China, August 2005.
87. Muir DCG, Lim D, Antoniades D, Douglas MSV, Evans M, Jackson T, Kling H, Smol JP, Wang X & Yang F. Investigating linkages between climate warming and mercury in Arctic and sub-Arctic lake sediments. American society of limnologists and oceanographers summer meeting, Santiago de Compostela, Spain, June 2005.
88. Muir DCG, Antoniades D, Douglas MSV, Evans M, Jackson T, Kling H, Lim DSS, Smol JP, Wang X & Yang F. Investigating linkages between climate warming and mercury in Arctic and sub-Arctic lake sediments. Society of environmental toxicology and chemistry Europe, 15th Annual Meeting, Lille, France, May 2005.
89. Antoniades D, Douglas MSV & Smol JP, Asynchronous ecological responses to climatic change in Canadian high arctic lakes and ponds. 34th International Arctic workshop, Boulder, CO, March 2004.
90. Antoniades D, Douglas MSV & Smol JP, Diatom-based quantitative reconstructions of recent environmental change in Canadian High Arctic lakes and ponds. 9th International paleolimnological symposium, Helsinki, Finland, August 2003.
91. Smol JP, Douglas MSV, Michelutti N, Rühland K, Lim D, Antoniades D & Blake W. Jr. Assessing long-term environmental changes in Canadian Arctic lakes and ponds using paleolimnological techniques. Canadian Quaternary association annual meeting, Halifax, NS, June 2003.
92. Smol JP, Douglas MSV, Michelutti N, Rühland K, Lim D, Antoniades D. & Blake W. Jr. Tracking climatic and other environmental changes in Canadian Arctic lakes and ponds using paleolimnological techniques. 3rd International limnogeology congress, Tucson, AZ, March 2003.
93. Antoniades D, Douglas MSV & Smol JP. Establishing baseline chemical and biological conditions in high arctic lakes and ponds: laying the foundation for future biomonitoring of environmental

- change in Canada's High Arctic. North American lake management society symposium, Anchorage, AK, November 2002.
94. Antoniades D, Douglas MSV & Smol JP. Paleoenvironmental change inferred from the diatom sedimentary record at Alert, Ellesmere Island, Nunavut. Geological Society of America annual meeting, Denver, CO, October 2002.
 95. Douglas MSV, Smol JP, Antoniades D, Lim D. & Michelutti N. Tracking climate change in the Canadian High Arctic using paleoenvironmental techniques. 2nd ARCSS all-hands workshop, Seattle, WA, February 2002.
 96. Antoniades D, Douglas MSV & Smol JP. Diatom biostratigraphy of two High Arctic ponds at Isachsen, Ellef Ringnes Island, Canadian High Arctic. 16th North American diatom symposium, Ely, MN, September 2001.
 97. Antoniades D, Douglas MSV & Smol JP. Recent environmental change inferred from diatom records at Isachsen, Ellef Ringnes Island, Canadian High Arctic. Canadian Quaternary association annual meeting, Whitehorse, YT, August 2001.
 98. Antoniades D, Douglas MSV & Smol JP. Freshwater diatoms from Mould Bay, Prince Patrick Island, Alert, Ellesmere Island, and Isachsen, Ellef Ringnes Island, Canadian High Arctic. 31st Arctic workshop, Amherst, MA, March 2001.
 99. Antoniades D, Douglas MSV & Smol JP. Diatom autecology and paleolimnology of Ellesmere, Ellef Ringnes, and Prince Patrick islands, Canadian High Arctic. 8th International paleolimnology symposium, Kingston, ON, August 2000.
 100. Antoniades D, Douglas MSV, Smol JP, Lim, D.S.S. & Michelutti N. Applications of diatoms to assessing paleoenvironmental change in the Canadian High Arctic. GeoCanada 2000, Calgary, AB, June 2000.
 101. Antoniades D. Freshwater diatoms from Alert, Ellesmere Island. 6th national students' conference on northern studies, Quebec City, QC, May 2000.
 102. Antoniades D, Douglas MSV & Smol. JP. Freshwater diatoms from Alert, Ellesmere Island, Canadian High Arctic. 15th North American diatom symposium, Boulder, CO, September 1999.
 103. Antoniades D & Douglas MSV Characterization and paleolimnological significance of stream diatoms from Cornwallis Island, Nunavut, Canada. 29th Arctic workshop, University of Washington, Seattle, WA, April 1999.
 104. Antoniades D & Douglas MSV Stream diatoms from Cornwallis Island, Nunavut, Canada, and their paleolimnological significance. University of Toronto Arctic working group symposium, Toronto, ON, March 1999.
 105. Lim DSS, Douglas MSV, Smol JP, Antoniades D & Michelutti N. Tracking climate change in the Canadian High Arctic using paleoenvironmental techniques. International symposium of environmental biogeochemistry, Huntsville, ON, Sept. 1999.

7. Leadership and service

7.1. National and international committee memberships and affiliations:

- Uruguayan national committee to the Scientific Committee on Antarctic Research (SCAR). Member, 2018 – present.
- Canadian Committee on Antarctic Research (Polar Knowledge Canada). CCAR's mandate is to serve as "a national advisory body on Antarctic matters...and act as a link between the international Antarctic science community and Canadian scientists active in or seeking to become involved in Antarctic and/or bipolar research". Member, April 2014 – present.
- Physical Science Standing Group, Scientific Committee on Antarctic Research (SCAR). Canadian delegate, 2016 – present.
- Conflict of interest committee, NSERC Canadian Lake Pulse Network. Member, 2017 – present.
- Scientific Committee, Unit of Antarctic Studies (Universidad de la República, Uruguay). This committee is charged with elevating the profile of Uruguayan Antarctic research, increasing the number of active polar researchers, financing Antarctic-specific funding calls and developing an Antarctic Science graduate program. Member, 2011 – present.
- Graduate committee, PEDECIBA Geoscience, Uruguay. This committee is responsible for approving and overseeing all graduate theses and course offerings under the Uruguayan Basic Sciences Graduate Program, Geosciences Section. June 2011 – March 2012.

7.2. Conference organization committees:

- Session co-coordinator: *Arctic freshwater response to environmental stressors on a circumpolar scale: the paleo-perspective*. International Paleolimnology Association – International Association of Limnogeology Joint Conference, Stockholm, Sweden, June 2018.
- Member, Organizing committee: 38^e colloque annuel du Centre d'études nordiques, Sherbrooke, QC, February 2018.
- Member, Local organizing committee: 24th International Diatom Symposium, Quebec, QC, August 2016.
- President, Student assistance evaluation committee: 24th International Diatom Symposium, Quebec, QC, August 2016.
- Session co-coordinator: *Limnological processes in permafrost environments*. 4th European Conference on Permafrost, Evora, Portugal, June 2014.

7.3. Internal committees and memberships:

- Member, Centre d'études nordiques
- Researcher, CNRS/ULaval Unité Mixte Internationale Takuvik
- Member, ArcticNet
- Researcher, Sentinelle Nord
- Member, Undergraduate program committee, Department of Geography, ULaval (2016 – present)
- Department representative, Fonds de recherche et de développement en foresterie (FRDF), FFGG, ULaval (2016 – 2018)
- Member, Course evaluation committee, Department of Geography, ULaval (2014 – present)

7.4. Editorships:

Guest editor, *Science of the total Environment*. Special issue: The environmental consequences of permafrost degradation in a changing climate. Co-editor with Dr. Paulo Pereira and Dr. Marc Oliva. Published 2017.

Guest editor, *Sedimentary Geology*. Special issue: Limnological processes in permafrost environments. Co-editor with Dr. Marc Oliva. Published 2016.

7.5. Review activities:

- Peer review of manuscripts for the journals *Arctic*, *Antarctic Science*, *Anthropocene*, *Arctic Science*, *Boreas*, *Canadian Journal of Fisheries and Aquatic Sciences*, *Freshwater Biology*, *Fundamental and Applied Limnology*, *Geology*, *Geomicrobiology Journal*, *Hydrobiologia*, *Inland Waters*, *International Journal of Limnology*, *International Review of Hydrobiology*, *Intropica*, *Journal of Great Lakes Research*, *Journal of Marine Systems*, *Journal of Paleolimnology*, *Journal of Phycology*, *Journal of Plankton Research*, *Plant Ecology and Evolution*, *Proceedings of the National Academy of Sciences*, *Quaternary International*, *Quaternary Research*, *Quaternary Science Reviews*, *Revista Biota Colombiana*, *Science of the Total Environment*, *Sedimentary Geology* and *Water Quality Research Journal of Canada*.
- Proposal review for NSERC (Canada), the United States National Science Foundation, the Czech Science Foundation, the Instituto Antártico Uruguayo and MITACS Elevate.

7.6. Selected Media interviews / contributions to popular magazines / Outreach activities:

- Presentations to high school students for Antarctica Day. Quebec High School (70 minutes) and St. Patrick's High School (35 minutes). December 3, 2018.
- International media coverage of our study of paleolimnological records of the Deception Island caldera collapse eruption (See Antoniades et al. 2018, *Sci. Rep.*) in numerous media outlets including those from Canada, USA, UK, Spain, Singapore and Ukraine, e.g., “Mystery Of Largest Eruption To Rock Antarctica In 12,000 Years Finally Solved”, *Forbes* (USA), November 25, 2018; “Antarctica's horseshoe-shaped Deception Island was sculpted by massive volcanic eruption 4,000 years ago”, *The Daily Mail* (UK), November 27, 2018.
- Discovering the past in Antarctica (Descubriendo el pasado en la Antártida) Article submitted to *Geocrítica* (A magazine aimed at educating the general public about geographic issues), 2015. Barcelona, Spain. Authors: Oliva M, Antoniades D, Giralt S, Granados I, Pla-Rabes S, Ruiz-Fernández J, Toro M & Zarankin A.
- Radio interview, No toquen nada - Oceano-FM (Uruguay). Subject: Environmental change in Antarctica. February 10, 2014.
- Magazine story, Copos de Nieve, (Uruguay). Sedimentological study of Lake Uruguay, King George Island (“Estudio de sedimentación en la Antártida”). April 2014.
- Newspaper article, Semanario Busqueda (Uruguay). Freshwater resources in Antarctica (“La mayoría del agua dulce está congelada en los polos; científicos estudian el pasado y analizan los cambios que afectan al mundo”). February 20, 2014.
- Interview with science website, 180 Ciencia (Uruguay). Sedimentological study of Lake Uruguay, King George Island (“Estudio de sedimentación en la Antártida”). February 10, 2014.
- Newspaper article, *El Observador* (Uruguay). Anthropogenic impacts on Antarctic lakes (“La huella del ser humano en la Antártida” - The footprint of human beings in Antarctica). January 6, 2014.
- Interview about Arctic environmental change related to Antoniades et al. (2011) *PNAS* publication: “Holocene dynamics of the Arctic's largest ice shelf” - Print and internet articles published related to interview in the *International Business Times* (USA), *The Daily Mail* (UK), *Bild der Wissenschaft* (Germany), *Malayala Manorama* (India), and *Physorg.com* (web site), among others, week of October 20, 2011.
- School visit, presentation about Arctic lakes and environmental change, given to senior students at Qarmartalik School, Resolute Bay, Nunavut, June 9, 2008.
- Coverage/co-operation for an episode of the scientific TV show *Découverte* (Radio-Canada) that aired Oct. 14, 2007.
- Interview about Arctic paleolimnological research with CHYZ Radio (Quebec City), October 5, 2007.

- Contributed article for Scitizen.com, “Abrupt Environmental Change in Ward Hunt Lake, Canada's Northernmost Lake”, October 5, 2007.
- Interview with Radio-Canada (Radio), Quebec City, September 27, 2007.
- International media coverage of our study from Ward Hunt Lake (See Antoniades et al. 2007, GRL) in over 40 newspapers including those from Canada, USA, UK, France, Germany, Croatia, New Zealand, India, Pakistan, Malaysia, and Georgia, and numerous websites, e.g., “Wakening northern lake sounds dire warning”, Ottawa Citizen, September 27, 2007.
- Story on “The Daily Planet” (TV; Discovery Channel), September 27, 2007.
- Invited public seminar: “Paleolimnology and climate change: Lessons from the Arctic”. Universidad de la República, Montevideo, Uruguay. December 5, 2007.
- School visit, Qarmartalik School, Resolute Bay, Nunavut, August 2007.
- Climate change in Quebec and its effects on winter activities. Video interview with Grade 11 Class, École secondaire Saint-Pierre et des Sentiers, Charlesbourg, QC. February 2007.
- Public seminar: “Reconstitutions paléolimnologiques des changements récents du climat du Haut Arctique canadien” (Paleolimnological reconstructions of recent climate change in the Canadian high Arctic). Centre d'études nordiques, Université Laval, Quebec City, March 31, 2006.

8. Language Skills

Language	Spoken	Reading	Written
English	Native	Native	Native
French	Fluent	Fluent	Fluent
Spanish	Fluent	Fluent	Fluent
Greek	Conversational	Basic	Limited