

# JEAN-SÉBASTIEN MOORE, PH.D.

Université Laval  
Département de Biologie & Institut de Biologie Intégrative et des Systèmes  
1030 Avenue de la Médecine, Québec, QC, G1V 0A6

## EDUCATION & APPOINTMENTS

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<b>Assistant professor (professeur adjoint sous octroi), Université Laval</b> Département de Biologie, Université Laval	2017-present
<b>Postdoctoral researcher, Université Laval</b> Biology; Supervisor: Dr. Louis Bernatchez	2016-2017
<b>W. Garfield Weston Postdoctoral fellow, Université Laval</b> Biology; Supervisors: Dr. Louis Bernatchez & Dr. Aaron Fisk (U. of Windsor)	2014-2016
<b>FQRNT Postdoctoral fellow, Université Laval</b> Biology; Supervisors: Dr. Louis Bernatchez & Dr. Aaron Fisk (U. of Windsor)	2013-2014
<b>Doctor of Philosophy, University of British Columbia</b> Zoology; Supervisor: Dr. Eric B. Taylor	2008-2013
<b>Master of Science (Dean's Honour List), McGill University</b> Biology; Supervisor: Dr. Andrew P. Hendry	2005-2007
<b>Bachelor of Science (First Class Honours), McGill University</b> Biology; Supervisor: Dr. Andrew P. Hendry	2001-2004

## PUBLICATIONS

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(Citations 707 -- h-index 10 -- i10-index 10 -- Google Scholar, 1 June 2017)

24. Lopez, M., L. Benestan, **J.-S. Moore**, C. Perrier, J. Gilbey, A. Di Genova, A. Maass, D. Díaz, J.-P. Lhorente, K. Correa, R. Neira, Roberto, L. Bernatchez, J. Yáñez (In review) Independent and parallel genomic signatures of selection underlying domestication in two Atlantic salmon (*Salmo salar* L.) populations. *Evolutionary Applications* (MS ID: EVA-2017-189-SOA)
23. I. Hashemzadeh Segherloo, E. Normandeau, L. Benestan, C. Rougeux, G. Côté, **J.-S. Moore**, N. Allah Ghaedrahmati, & L. Bernatchez (In press) Evidence for ancient sympatric speciation in fish from subterranean habitats. *Scientific Reports* (MS ID #SREP-17-19983)
22. **Moore, J.-S.**, L.N. Harris, J. Le Luyer, B.J.G. Sutherland, Q. Rougemont, R.F. Tallman, A.T. Fisk, & L. Bernatchez (2017) Genomics and telemetry suggest a role for migration harshness in determining overwintering habitat choice, but not gene flow, in anadromous Arctic Char. *Molecular Ecology*, 26(24): 6784-6800
21. Benestan, L., **J.-S. Moore**, B.J. Sutherland, J. LeLuyer, N. Rycroft, J. Attema, L.N. Harris, R.F. Tallman, C. Rougeux, E. Normandeau, L. Bernatchez. (2017) Sex matters in Massive Parallel Sequencing: evidence for biases in genetic parameter estimation and investigation of sex determination systems. *Molecular Ecology*, 26(24): 6767-6783
20. Hanson, D., **J.-S. Moore**, E.B. Taylor, R.D.H. Barrett, & A.P. Hendry (2016) Assessing reproductive isolation using a contact zone between parapatric lake-stream stickleback ecotypes. *Journal of Evolutionary Biology*, 29: 2491-2501
19. Harris, L.N., **J.-S. Moore**, R. Bajno & R.F. Tallman (2016) Genetic population structure of anadromous Arctic Char (*Salvelinus alpinus*) from the Cambridge Bay region, NU: Potential implications for the management of Canada's largest Arctic Char commercial

- fishery. *North American Journal of Fisheries Management*, 36: 1473-1488
18. **Moore, J.-S.**, L.N. Harris, S. Kessel, L. Bernatchez, R.F. Tallman, A.T. Fisk (2016) Preference for near-shore and estuarine habitats in anadromous Arctic char (*Salvelinus alpinus*) from the Canadian high Arctic (Victoria Island, NU) revealed by acoustic telemetry. *Canadian Journal of Fisheries and Aquatic Sciences*, 73(9): 1434-1445.
  17. **Moore, J.-S.**, R. Bajno, J.D. Reist & E.B. Taylor (2015) Post-glacial re-colonization of the North American Arctic by Arctic char (*Salvelinus alpinus*): genetic evidence of multiple northern refugia and hybridization between glacial lineages. *Journal of Biogeography*, 42: 2089-2100. \*On the cover
  16. **Moore, J.-S.\***, V. Bourret\*, M. Dionne, I. Bradbury, P. O'Reilly, M. Kent, G. Chaput, & L. Bernatchez (2014) Conservation genomics of anadromous Atlantic salmon across its North American range: outlier loci identify the same patterns of population structure as neutral loci. *Molecular Ecology*, 23:5680-5697. \*co-first authors
  15. Harris, L.N., **J.-S. Moore**, C.G. McDermid, & H.K. Swanson (2014) Long-distance anadromous migrations in a freshwater specialist: the Lake Trout (*Salvelinus namaycush*). *Canadian Field Naturalist*, 128: 260-264. \*On the cover
  14. Harris, L. N., **J.-S. Moore**, P. Galpern, R. F. Tallman, and E. B. Taylor. (2014) Geographic and landscape influences on fine-scale, hierarchical population structure in northern Canadian populations of anadromous Arctic char (*Salvelinus alpinus*). *Environmental Biology of Fishes*, 97:1233-1252.
  13. Mee, J.A. & **Moore, J.-S.** (2014) The ecological and evolutionary implications of microrefugia. *Journal of Biogeography*, 41: 837-841.
  12. **Moore, J.-S.**, T.N. Loewen, L.N. Harris & R.F. Tallman (2014) Genetic analysis of sympatric migratory ecotypes of Baffin Island Arctic char *Salvelinus alpinus*: alternative mating tactics or reproductively isolated strategies? *Journal of Fish Biology*, 84: 145-162.
  11. Vines TH, AYK Albert, RL Andrew, F Débarre, D Bock, MT Franklin, KJ Gilbert, **J-S Moore**, S Renaut, DJ Rennison (2014) How does the availability of research data change with article age? *Current Biology*, 24: 1-4
  10. Baker, J.A., Räsänen, K., **J.-S. Moore** & A.P. Hendry (2013) Genetic and plastic contributions to trait divergence between parapatric habitats: female life-history traits in threespine stickleback within the Misty Lake system. *Evolutionary Ecology Research*, 15: 473-487.
  9. **Moore, J.-S.**, L.N. Harris, R.F. Tallman & E.B. Taylor (2013) The interplay between dispersal and gene flow in anadromous Arctic char (*Salvelinus alpinus*): implications for potential for local adaptation. *Canadian Journal of Fisheries and Aquatic Sciences*, 70: 1327-1338.
  8. **Moore, J.-S.**, & D.J. Fraser (2013) *Perspective*: Puny males punch above their weight to preserve genetic diversity in a declining Atlantic salmon population. *Molecular Ecology*, 22: 2364-2365.
  7. Vines T.H., R.L. Andrew, D.G. Bock, M.T. Franklin, K.J. Gilbert, N.C. Kane, E.J. Kleynhans, **J.-S. Moore**, B.T. Moyers, S. Renaut, D.J. Rennison, T. Veen, S. Yeaman (2013) Mandated archiving greatly improves access to research data. *FASEB Journal*, 27: 1304-1308.
  6. Gilbert, K.J., R.L. Andrew, D.G. Bock, M.T. Franklin, N.C. Kane, **J.-S. Moore**, B.T. Moyers, S. Renaut, D.J. Rennison, T. Veen, & T.H. Vines (2012) Recommendations for utilizing and reporting population genetic analyses: the reproducibility of genetic clustering using the program STRUCTURE. *Molecular Ecology*, 21: 4925-4930.
  5. Gerstein, A., & **J.-S. Moore.** (2011) *Perspective*: Small is the new big: Assessing the population structure of microorganisms. *Molecular Ecology*, 20:4385-4387.
  4. Crispo, E.\*, **J.-S. Moore\***, J. Lee-Yaw, S.M. Gray, & B. Haller. (2011) Broken barriers: Human-induced changes to gene flow and introgression in animals. *BioEssays*, 33:508-518.

\*Contributed equally

3. **Moore, J.-S.** & A.P. Hendry (2009) Can gene flow have negative demographic consequences? Mixed evidence from stream stickleback. *Philosophical Transactions of the Royal Society B*, 364:1533-1542.
2. **Moore, J.-S.**, J.L. Gow, E.B. Taylor, & A.P. Hendry (2007) Quantifying the constraining influence of gene flow on adaptive divergence in the lake-stream threespine stickleback system. *Evolution*, 61:2015-2027.
1. **Moore, J.-S.**, & A.P. Hendry (2005) Both selection and gene flow are necessary to explain adaptive divergence: evidence from clinal variation in stream stickleback. *Evolutionary Ecology Research*, 7:871-886.

## PEER-REVIEWED TECHNICAL REPORTS

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5. **Moore, J.-S.**, L.N. Harris, & R.F. Tallman (2014) A review of anadromous Arctic char (*Salvelinus alpinus*) migratory behavior: implications for genetic population structure and fisheries management. Can. Manuscr. Rep. Fish. Aquat. Sci. 2014/3051: vi + 27 p.
4. **Moore, J.-S.**, M. VanGerwen-Toyne, C. Lewis, R.F. Tallman (2014) Population structure, genetic diversity and dispersal of anadromous Arctic Char (*Salvelinus alpinus*) in Frobisher Bay, Nunavut, inferred from microsatellite markers. Can. Manuscr. Rep. Fish. Aquat. Sci. 3046. vi + 22 p
3. VanGerwen-Toyne, M., C. Lewis, R.F. Tallman, Z. Martin, **J.-S. Moore** (2013) Information to support the assessment of Arctic Char (*Salvelinus alpinus*) in the Sylvia Grinnell River, Nunavut, 2009-2011. DFO Can. Sci. Advis. Sec. Res. Doc. 2013/109. vi + 19 p.
2. **Moore, J.-S.**, J. Rosenfeld (2013) Partial validation of streamflow metrics and runoff parameters, and identification of physical variables to help predict streamflow sensitivity using selected EcoProvinces within British Columbia. BC Ministry of Environment, Fisheries Research Report RD142, Victoria, B.C.
1. **Moore, J.-S.**, D. Nowosad, & J. Mee (2012) Update COSEWIC status report on the Channel Darter *Percina copelandi* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa.

## GRANTS AWARDED

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- 2017 **Northern Science and Technology Program - POLAR Knowledge Canada**  
*Migrations of searun Arctic char in a changing Arctic: Integrating acoustic telemetry, physiology, and genomics*  
Co-applicant (lead : Dr. Louis Bernatchez, ULaval) -- **\$246,026**
- 2017 **Sentinel Nord – Université Laval**  
*Bridging Global Change, Inuit Health and the Transforming Arctic Ocean*  
Co-applicant (lead: Drs. Jean-Éric Tremblay & Mélanie Lemire, U Laval) -- **\$933,136**
- 2016 **Northern Science and Technology Program - POLAR Knowledge Canada**  
*Arctic char knowledge sharing camp: bringing elders, youth and scientists together to bridge the gap between knowledge systems*  
Co-leader (with Natasha Thorpe and Ekaluktitiak Hunters and Trappers Organization) -- support to organize an elder-youth knowledge sharing camp -- **\$119,000**
- 2016 **Aboriginal Fund for Species at Risk – Environment Canada**

- Inuit Qaujimagatuqangit of Arctic Char near Ekalluk River: Bringing together Elders, Fishers and Youth to Understand Arctic Char Today and Tomorrow*  
Co-leader (with Natasha Thorpe and Ekaluktitiak Hunters and Trappers Organization) -- support to organize an elder-youth knowledge sharing camp -- **\$47,500**
- 2016 **Nunavut Wildlife Management Board**  
*Inuit Qaujimagatuqangit (traditional knowledge) of Arctic char near Ekalluk River*  
Co-leader (with Natasha Thorpe and Ekaluktitiak Hunters and Trappers Organization) -- support to interview elders and resource users -- **\$30,000**
- 2016 **Canadian Institute of Ecology and Evolution - Workshop funding**  
*Genomic data in ecology, evolution and conservation: the impacts of missing data in genotyping-by-sequencing datasets*  
Project leader -- support for three day workshop -- **\$9,980**
- 2016 **Polar Continental Shelf Project - Natural Resources Canada**  
*Migratory behaviour of anadromous Arctic char (grant # 661-16)*  
Applicant (via Dr. Aaron Fisk) -- floatplane support; approx. value **\$18,000**
- 2015 **Marine Environmental Observation Prediction and Response Network**  
*Observing and Responding to Pressures on Arctic Marine Ecosystem Services*  
Co-applicant (lead: Dr. Brent Else, U of Calgary) -- **\$312,000**
- 2015 **Polar Continental Shelf Project - Natural Resources Canada**  
*Migratory behaviour of anadromous Arctic char (grant # 107-15)*  
Applicant (via Dr. Aaron Fisk) -- floatplane support; approx. value **\$18,000**
- 2009 **Polar Continental Shelf Project - Natural Resources Canada**  
*Genetic population structure of Cumberland Sound Arctic char (grant #105-09)*  
Applicant (via Dr. Ross Tallman) -- helicopter support; approx. value **\$21,000**

## **AWARDS AND FELLOWSHIPS**

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- 2018 Professeur étoile, Université Laval, award recognizing teaching quality
- 2017 American Fisheries Society Genetics Section Early Career Professional Award
- 2016 Best post-doc talk, Colloque du Centre Interuniversitaire de Recherche sur le saumon atlantique (\$100)
- 2014 W. Garfield Weston Postdoctoral Fellowship in Northern Research (\$60,000/yr)
- 2012 Bourse de Recherche Postdoctorale, Fond Québécois de Recherche sur la Nature et les Technologies (\$30,000/yr)
- 2012 "Runner-up" for best PhD talk, UBC Zoology Graduate Student Association Symposium
- 2012 "Runner-up" for best oral presentation, Pacific Ecology and Evolution Conference, Bamfield, BC
- 2012 Government of Canada IPY 2012 Partial Travel Assistance Award (\$750)
- 2011 Best 'data blitz' (3-minute presentation), UBC-UVic-SFU Graduate Students Retreat
- 2011 Travel Award, Washington-British Columbia Chapter of the American Fisheries Society (\$900)
- 2011 Northern Scientific Training Program, Department of Aboriginal Affairs and Northern Development Canada (\$1,750)
- 2011 Canadian Northern Studies Trust Scholarship, Association of Canadian Universities for Northern Studies (\$5,000)

- 2011 Best PhD talk, UBC Zoology Graduate Student Association Symposium
- 2011 Kit Malkin Scholarship, University of British Columbia (\$500)
- 2010 Best talk, UBC-UVic-SFU Graduate Students Retreat
- 2010 Northern Scientific Training Program, Department of Indian and Northern Affairs Canada (\$4,000)
- 2010 Four-Year Fellowship, University of British Columbia (\$16,000)
- 2010 Zoology Graduate Student Travel Award, UBC (\$500)
- 2009 NSERC Northern Research Internship (\$5,500)
- 2009 Northern Scientific Training Program, Department of Indian and Northern Affairs Canada (\$4,000)
- 2008 UBC PhD Tuition Award (covers tuition fees)
- 2008 UBC Graduate Entrance Scholarship (\$3,000)
- 2007 NSERC Canada Graduate Scholarship (D) (\$35,000/yr)
- 2007 FQRNT Bourse de Doctorat en Recherche (\$21,000/yr)
- 2007 Society for the Study of Evolution student travel grant (\$750)
- 2007 Alma Mater Travel Grant, McGill University (\$750)
- 2006 Department of Biology Top-up Scholarship, McGill University (\$5,000)
- 2006 Alma Mater Travel Grant, McGill University (\$750)
- 2005 NSERC Canada Graduate Scholarship (M) (\$17,500/yr)
- 2005 FQRNT Bourse de Maîtrise en Recherche (B1), *Declined* (\$15,000/yr)
- 2004 McGill Biology Student Union Undergraduate Research Award (\$250)
- 2004 NSERC Undergraduate Summer Research Award (\$4,500)
- 2003 NSERC Undergraduate Summer Research Award (\$4,500)

## **PRESENTATIONS AND POSTERS**

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### *Invited*

- 2017 Arctic Science Assistant Deputy Ministers of Canada meeting, Ottawa, ON  
Invited panelist - Indigenous & Western Science: Gathering new knowledge through co-designed research
- 2017 Canadian Science Policy Conference, Ottawa, ON  
Invited panelist - Indigenous & Western Science: Gathering new knowledge through co-designed research
- 2016 Rendez-vous Génome Québec, Montréal, QC  
Enhancing sustainable production and conservation of Coho Salmon using genomics
- 2016 Canadian High Arctic Research Station Marine Experimental Reference Area planning meeting, Victoria, BC  
Integrating Genomic Data and Acoustic Telemetry to Understand Migratory Behaviour of Searun Arctic Char (*Salvelinus alpinus*)
- 2016 Nunavut Fisheries & Sealing Research & Planning Meeting, Montreal, QC  
Integrating Genomic Data and Acoustic Telemetry to Understand Migratory Behaviour of Searun Arctic Char (*Salvelinus alpinus*)
- 2016 Bard College, Biology Seminar Series, Annandale-On-Hudson, NY, USA  
Integrating Genomic Data and Acoustic Telemetry to Understand Migratory Behaviour of Searun Arctic Char (*Salvelinus alpinus*)
- 2014 Conservation of Arctic Flora and Fauna Board Meeting, Cambridge Bay, NU

- Integrating Genomic Data and Acoustic Telemetry to Understand Migratory Behaviour of Searun Arctic Char (*Salvelinus alpinus*)
- 2013 University of Alberta, Biological Sciences Seminar Series, Edmonton, AB  
Patterns and consequences of dispersal for Arctic char (*Salvelinus alpinus*) in the Canadian Arctic
- 2012 Fisheries and Oceans Canada, Freshwater Institute Seminar Series, Winnipeg, MB  
Patterns and consequences of dispersal for Arctic char (*Salvelinus alpinus*) in the Canadian Arctic
- 2011 American Fisheries Society, Char symposium, Seattle, USA.  
Dispersal without Gene Flow: Can Arctic Char Have Their Cake and Eat It Too?

### *Contributed*

- 2018 Nunavut Fisheries & Sealing Research & Planning Meeting, Ottawa, ON (25 Apr)  
Genomics and the management of Arctic Char fisheries in Nunavut
- 2018 Colloque 2018 du Centre d'étude Nordiques, Sherbrooke, QC (15 Feb)  
*INTÉGRER LA GÉNOMIQUE ET LA TÉLÉMÉTRIE ACOUSTIQUE POUR COMPRENDRE LE COMPORTEMENT MIGRATOIRE DE L'OMBLE CHEVALIER AU NUNAVUT*
- 2017 Réunion Annuelle de Ressources Aquatiques Québec, Québec, QC (28 Nov)  
*INTÉGRER LA GÉNOMIQUE ET LA TÉLÉMÉTRIE ACOUSTIQUE POUR COMPRENDRE LE COMPORTEMENT MIGRATOIRE DE L'OMBLE CHEVALIER AU NUNAVUT*
- 2017 Arctic Change Conference, Québec, QC (12 Dec)  
Learning together : comparison of Inuit Qaujimagatuqangit and scientific evidence yields insights into Arctic char biology in the Kitikmeot region of Nunavut
- 2016 Ocean Tracking Network Annual Symposium, Halifax, NS  
Salmonids in the North - Species transition zones and beyond, predicting impacts of climate change
- 2016 Centre Interuniversitaire de Recherche sur le Saumon Atlantique, Québec, QC *\*Best talk award*  
Génomique de la conservation du saumon Atlantique à travers son aire de répartition nord-américaine
- 2015 ArcticNet Annual Scientific Meeting, Vancouver, BC  
Integrating Genomic Data and Acoustic Telemetry to Understand Migratory Behaviour of Searun Arctic Char (*Salvelinus alpinus*)
- 2014 Arctic Change conference, Ottawa, ON  
Marine Migrations and Habitat Use of Commercially Exploited Anadromous Arctic Char in the Cambridge Bay Region and Implications for Fisheries Management
- 2014 Canadian Society of Ecology and Evolution, Montréal, Québec,
- 2013 ArcticNet Annual Scientific Meeting, Halifax, NS
- 2013 *Poster*, Ocean Tracking Network Annual Meeting, Halifax, NS
- 2013 *Poster*, ACFAS, Colloque Génomique et Développement Durable, Québec, QC
- 2013 Centre Interuniversitaire de Recherche sur le Saumon Atlantique, Québec, QC
- 2013 Canadian Conference For Fisheries Research, Windsor, ON
- 2012 UBC-SFU-UVic Graduate Students retreat, Brackendale, Canada.
- 2012 Exit seminar, UBC Dept. of Zoology, Vancouver, BC
- 2012 *Poster*, International Polar Year meeting 2012, Montréal, Canada.
- 2012 UBC Zoology Graduate Student Association Symposium, UBC, Canada. *\*Runner-up for best PhD talk award*
- 2012 Pacific Ecology and Evolution Conference, Bamfield, Canada. *\*Runner-up for best talk award*
- 2011 UBC-SFU-UVic Graduate Students retreat, Brackendale, Canada. *\*Best short presentation award*

- 2011 Canadian Society for Ecology and Evolution, Banff, Canada.
- 2011 UBC Zoology Graduate Student Association Symposium. *\*Best PhD talk award*
- 2010 UBC-SFU-UVic Graduate Students retreat, Brackendale, Canada. *\*Best talk award*
- 2010 Canadian Society for Ecology and Evolution, Québec City, Canada
- 2009 ArcticNet 6<sup>th</sup> Annual Scientific Meeting, Victoria, Canada.
- 2009 *Poster*, UBC-SFU-UVic Graduate Students retreat.
- 2009 *Poster*, UBC Zoology Graduate Student Symposium.
- 2008 *Poster*, Arctic change conference, Québec, Canada.
- 2008 Pacific Ecology and Evolution Conference, Bamfield, Canada.
- 2007 Society for Study of Evolution 2007, Christchurch, New Zealand.
- 2006 *Poster*, Canadian Conference for Fisheries Research, Montréal, Canada.
- 2006 Society for the Study of Evolution, Stony Brook, New York.
- 2006 *Poster*, Canadian Society of Ecology and Evolution, Montréal, Canada.
- 2006 Departmental seminar, Biology Department, McGill University, Montréal, Canada.
- 2004 Society for the Study of Evolution, Fort Collins, USA.

## TEACHING

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- 2017 **Professor** (2 lectures) – Limnologie; Dynamique des écosystèmes d’eau douce, Biology Department, Laval University, Québec, Dr. Warwick Vincent
- 2017 **Professor** (1 of 5) – Méthodes d’échantillonnage en écologie et conservation, Laval University, Québec
- 2016 **Guest lecturer** (1 lecture) – Limnologie; Dynamique des écosystèmes d’eau douce, Biology Department, Laval University, Québec, Dr. Warwick Vincent
- 2016 **Guest lecturer** (1 lecture) – Environmental Technology Program, Nunavut Arctic College, Cambridge Bay Nunavut, Erin Hamilton
- 2016 **Guest lecturer** (1 lecture) – Experimental Evolution and Genomics Tutorial, Department of Biology, Bard College, Dr. Gabriel Guimond-Perron
- 2016 **Guest lecturer** (3 lectures) – Molecular Ecology, Department of Biology, Laval University, Dr. Louis Bernatchez
- 2011 **Guest lecturer** (3 lectures) – Zoogeography, Department of Zoology, University of British Columbia, Dr. Jonathan Mee
- 2010 **Teaching assistant** – Evolutionary Genetics, Department of Zoology, University of British Columbia, Dr. Jeannette Whitton
- 2008 **Guest lecturer** (1 lecture) – Diversity and Evolution of Fishes, Department of Zoology, University of British Columbia, BC, Dr. Eric B. Taylor
- 2007 **Teaching assistant** – Methods in Biology of Organisms, Department of Biology, McGill University, QC, Dr. Andrew Gonzalez
- 2007 **Teaching assistant** – Basic Genetics, Department of Biology, McGill University, Dr. Daniel Schoen
- 2005 **Teaching assistant** – Biostatistics, Department of Biology, McGill University, QC, Dr. Brian Leung

2004 **Teaching assistant** – Essential Biology (for non-major), Department of Biology, McGill University, Dr. Yutaka Nishioka

## **OTHER EMPLOYMENT**

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- 2012 **Intern** – Minimal flow requirements for fish habitat in British Columbia Streams, BC Ministry of the Environment, Dr. Jordan Rosenfeld
- 2012 **Consultant** – Sylvia Grinnell River Arctic char population genetics, Part 2, Client: Department of Fisheries and Oceans, Iqaluit, supervisor: Chris Lewis
- 2012 **Statistical consultant** – Department of Family Medicine, UBC, Victoria Residency Program, Dr. Eric Shafonsky
- 2011 **Consultant** – Book chapter on climate and Arctic aquatic ecosystems, Client: International Polar Year and Department of Fisheries and Oceans, Winnipeg, Dr. Ross Tallman
- 2011 **Consultant** – Status Report for the Channel Darter (*Percina copelandi*), Client: Committee On the Status of Endangered Wildlife in Canada (COSEWIC)
- 2011 **Consultant** – Sylvia Grinnell River Arctic char population genetics, Part 1, Client: Department of Fisheries and Oceans, Iqaluit, Chris Lewis
- 2010 **Translator** – Translated the website and program of the Canadian Society of Zoology meeting from English to French, Vancouver, Dr. Trish Schulte
- 2007 **Field assistant** – work on Trinidadian guppies, Trinidad and Tobago, Dr. Amy Schwartz
- 2005 **Field assistant** – work on Darwin’s finches, Galapagos Islands, Charles Darwin Research Station, Ecuador, Dr. Jeffrey Podos
- 2004 **Lab technician** – *Arabidopsis* developmental genetics, Department of Biology, McGill University, Dr. Tamara Western
- 2004 **Lab technician** – Morphological studies of threespine stickleback, Department of Biology, McGill University, Dr. Andrew Hendry
- 2004 **Summer undergraduate intern** – Genotyping fish samples (microsatellite loci), Zoology Department, University of British Columbia, BC, Dr. Eric Taylor
- 2004 **Summer intern** – Care of lab-raised threespine stickleback & field work, Zoology Department, University of British Columbia, Dr. Dolph Schluter

## **REVIEWING**

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Reviewer for:

*American Naturalist, Canadian Journal of Fisheries and Aquatic Sciences, Chilean National Science and Technology Commission (CONICYT), Conservation Physiology, Ecology of Freshwater Fishes, Ecosphere, Environmental Biotechnology, Evolution, Evolutionary Ecology Research, Great Lakes Fisheries Trust, ICES Journal of Marine Sciences, Journal of Biogeography, Journal of Fish Biology, Marine Policy, Molecular Ecology, Oikos, PLoS ONE, Proceedings of the Royal Society B, Philosophical Transactions of the Royal Society B, Transactions of the American Fisheries Society*

## **MENTORING**

- 2016-present Matthew Gilbert, Ph.D. candidate, University of British Columbia
- 2015-present Marianne Falardeau-Coté, PhD. Candidate, McGill University
- 2015-present Maria Eugenia Lopez Dinamarca, Ph.D. Candidate, Université Laval



2014-present    Brendan Malley, Undergraduate summer student, U. of Manitoba  
 2013            Chris McDermid, Undergraduate summer student, U. of Manitoba  
 2012            Carita Chan, Undergraduate lab intern, UBC  
 2010-2012      UBC, Zoology Mentorship program participant  
 2009            Science Tri-mentoring program, UBC, participant in 2009

## PROFESSIONAL MEMBERSHIPS

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American Fisheries Society, Arctic Institute of North America, Association of Polar Early Career Scientists, Canadian Society for Ecology and Evolution, Society for the Study of Evolution

## PROFESSIONAL SERVICE AND OUTREACH

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2018-now        **Associate Editor**, Canadian Journal of Fisheries and Aquatic Sciences  
 2015-2016       **Ex Officio member of the Executive Committee** - Association of Polar Early Career Scientists  
 2015            **Classroom presentations** for “*Semaine Polaire Francophone*” – webinar presentations to ~10 classrooms for kids age 8-12  
 2014-2015       **President** – Association of Polar Early Career Scientists  
 2013-2014       **Vice President** – Association of Polar Early Career Scientists  
 2012-2014       **Board member** – Association of Polar Early Career Scientists, Canadian chapter  
 2014            **Observer** – Conservation of Arctic Flora and Fauna board meeting, Cambridge Bay, Canada  
 2014            **Student volunteer** – Arctic Frontiers Conference 2014, Tromso, Norway.  
 2013            **Classroom presentations** – Kiilinik High School, Cambridge Bay, Nunavut  
 2013            **Observer** – Conservation of Arctic Flora and Fauna board meeting, Yellowknife, Canada  
 2012-2013       **Council member** – Association of Polar Early Career Scientists  
 2012            **Nomination team member** – nomination of the *Arctic Eider Society* for the Arctic Inspiration Prize  
 2012            **Student volunteer** – International Polar Year Conference 2012, Montréal.  
 2011            **Translation** to French of the feature length film *People of a Feather*, a documentary on the effects of environmental change on Hudson’s Bay eider ducks and the Inuit people that rely on them (Dr. Joel Heath)  
 2011            **Invited expert** – Regional Advisory Process for Qasigiyat Arctic char commercial fishery, Department of Fisheries and Oceans, Iqaluit, NU, Dr. Ross Tallman  
 2010            **Invited expert** – Regional Advisory Process for Isuituq Arctic char commercial fishery, Department of Fisheries and Oceans, Pangnirtung, NU, Les N. Harris  
 2011            **Student volunteer** – American Fisheries Society Annual Meeting, Seattle.  
 2009-2011       **Webmaster** – Maintenance of a website to communicate my research results to the community of Pangnirtung where I conduct field work  
 2010            **Organizer** for weekly UBC Zoology Department social  
 2010            **Vancouver Aquarium** – contributed material for their Arctic exhibit

- 2009            **Impossible 2 possible** – an organization taking students on remote expeditions to promote environmental awareness. I contributed material for the educational package for their Baffin Island expedition.
- 2009            **Petition campaign organizer** - protesting the cuts to NSERC funding for Masters students. The petition garnered over 2,000 signatures and the Montreal newspaper *Le Devoir* interviewed me regarding this issue.
- 2008-09        **Vice-president** - UBC Zoology Graduate Student Association
- 2008-10        **Let's Talk Science (UBC)** – Tutoring inner city students for their science fair project – *one group won a gold medal at the regional competition!*
- 2008-09        **UBC Tri-mentoring program** – mentor to final-year undergrads
- 2005-07        **Marble River Hatchery** – conservation oriented salmon hatchery on Vancouver Island (smolt tagging, fin-clipping, tank cleaning)
- 2007            **Let's Talk Science (McGill)** – Presentation on scientific research; tutoring students for science fair project; evaluation of science fair projects

## **SYMPOSIA ORGANIZED**

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- 2016    Genomic data in ecology and evolution: the impacts of missing data in genotyping by sequencing datasets, Canadian Institute of Ecology and Evolution, Université Laval, Canada, main organizer, 20 participants from throughout Canada and the USA
- 2014    Promoting Public Education and Outreach for Improved Arctic Conservation, Arctic Biodiversity Congress, Trondheim, Norway, Session co-convener
- 2012    Impacts of change and development on biodiversity and polar ecosystem services, International Polar Year conference: From knowledge to action, Montreal, Canada, Session co-convener (with Dr. Louis Fortier)
- 2009    UBC Zoology Graduate Student Association Symposium – Member of the organizing committee
- 2007    McGill Biology Graduate Student Symposium – Member of the organizing committee
- 2006    Robert Henry Peters symposium, McGill University – Organized to commemorate the tenth anniversary of R.H. Peters' passing. I initiated this event, and was the main organizer. 5 speakers, ~70 participants.

## **OTHER SKILLS**

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The Experimental Fish online training program – University of PEI  
 Electrofishing – Crew Supervisor level certification from Vancouver Island University  
 Project management – Completed a 3h workshop with Robyn Roscoe, PMP, BSc  
 Pleasure Craft Operator  
 PADI Open Water Diver (dry suit specialty)  
 Canadian Firearms Safety Course – PAL for restricted firearms  
 Standard first aid with CPR “C”  
 Ethics training of the Canadian Council on Animal Care – Certificate # 4987-11

**Languages:** French (mother tongue); English (fluent); Spanish (beginner)

## REFERENCES

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