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## ANDREW EDWARD DEROCHER

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Born: Vancouver, British Columbia, Canada  
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<b>Impact Measures</b>	
Google Scholar May 6, 2021	
Total Citations Google Scholar	<b>15,043</b>
h-index Google Scholar	<b>66</b>
Total Citations Web of Science	<b>8,830</b>
h-index Web of Science	<b>50</b>
<b>Publications</b>	
Peer-reviewed Journal Articles	<b>204</b>
Other Publications	<b>74</b>
Books	<b>1</b>
<b>Funding</b>	
Research Grants (PI): past 15 years	<b>&gt;\$6,000,000</b>
<b>HQP Supervision</b>	
PDF	<b>6</b>
Ph.D.	<b>15</b>
M.Sc.	<b>33</b>
B.Sc.	<b>19</b>

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### Honours and Distinctions

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<b>2017-2022</b>	Faculty of Science Research Fellowship
<b>2018-2019</b>	Killam Annual Professorship
<b>2019</b>	Faculty of Science Learning and Innovation Award for Teaching Excellence
<b>2016</b>	William Rowan Distinguished Service Award, Alberta Chapter of the Wildlife Society
<b>2016</b>	Faculty of Science Graduate Mentoring Award
<b>2016-2017</b>	Faculty of Science Students' Choice Honour Roll for your excellence in teaching
<b>2012</b>	Capilano University Distinguished Alumni Award
<b>2012</b>	National Faculty of Science Teaching Honor Roll
<b>2012</b>	National Outdoor Book Award, Honorable Mention for Polar Bears: A complete guide to their biology and behavior
<b>2010</b>	University of Alberta Alumni Honour Award

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## Publications in Refereed Journals

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*Names of my students and PDFs are underlined*

1. Bohart AM, Lunn NJ, **Derocher AE**. 2021. Migration and movement dynamics of polar bears (*Ursus maritimus*) in western Hudson Bay. *Behavioral Ecology* doi:10.1093/beheco/araa140
2. Togunov RR, Derocher AE, Lunn NJ, Auger-Méthé M. Characterising menotatic behaviours in movement data using hidden Markov models. *Methods in Ecology and Evolution*
3. Thompson PR, **Derocher AE**, Edwards MA, Lewis MA. Describing spatiotemporal memory patterns using animal movement modelling. *Methods in Ecology and Evolution*
4. Heemskerk S, Johnson AC, Hedman D, Trim V, Lunn NJ, McGeachy D, **Derocher AE**. 2020. Temporal dynamics of human-polar bear interactions in Churchill, Manitoba. *Global Ecology and Conservation* 24: doi: 10.1016/j.gecco.2020.e01320.
5. Smereka CA, Frame PF, Edwards MA, **Derocher AE**. 2020. Seasonal habitat selection of cougars (*Puma concolor*) by sex and reproductive state in west-central Alberta, Canada. *Wildlife Biology* 2020: wlb.00735
6. Biddlecombe B, Lunn NJ, McGeachy D, Bayne E, **Derocher AE**. 2021. Effects of sea ice fragmentation on individual variation in polar bear movement in Hudson Bay. *Marine Ecology Progress Series*. in press.
7. Bechshoft T, Luo Y, Bohart AM, **Derocher AE**, Richardson ES, Lunn NJ, Pearson DG. 2020. Monitoring spatially resolved trace elements in polar bear hair using single spot laser ablation ICP-MS. *Ecological Indicators* 119:106822
8. Johnson AC, Reimer JR, Lunn NJ, Stirling I, McGeachy D, **Derocher AE**. 2020. Influence of sea ice dynamics on population energetics of Western Hudson Bay polar bears. *Conservation Physiology* 8: 10.1093/conphys/coaa1132
9. Henderson EM, **Derocher AE**, Lunn NJ, Montpetit, Merrill EH, Richardson ES. 2021. Polar bear (*Ursus maritimus*) use of the western Hudson Bay flaw lead. *Marine Ecology Progress Series* 644:227-242
10. Johnson AC, **Derocher AE**. 2020. Variation in habitat use of Beaufort Sea polar bears. *Polar Biology* 43:1247-1260
11. Shave JR, **Derocher AE**, Cherry SG, Fortin, D. 2020. Seasonal and inter-annual variation in diet for gray wolves (*Canis lupus*) in Prince Albert National Park, Saskatchewan. *Wildlife Research* 2020:wlb.00695
12. Togunov RR, Klappstein NJ, Lunn NJ, **Derocher AE**, Auger-Méthé M. 2020. Opportunistic evaluation of modelled sea ice drift using passively drifting telemetry collars in Hudson Bay, Canada. *The Cryosphere* 14:1937-1950
13. Boucher N, **Derocher AE**, Richardson E. 2020. Spatial and temporal variability in ringed seal (*Pusa hispida*) stable isotopes in the Beaufort Sea. *Ecology and Evolution* 10:4178-4192
14. Lippold A, Aars J, Andersen M, Aubail A, **Derocher AE**, Dietz R, Eulaers I, Sonne C, Welker J, Wiig Ø, Routti H. Two decades of mercury concentrations in Barents Sea polar bears in relation to dietary sulfur, carbon and nitrogen. *Environmental Sciences & Technology* 54:7388-7397
15. Florko KRN, Higdon JW, **Derocher AE**, Richardson ES, Sahanatien V, Petersen SD. 2020. Polar bear denning distribution in the Canadian Arctic. *Polar Biology* 43:617-621

16. Klappstein NJ, Togunov RR, Lunn NJ, **Derocher AE**. 2020. Going against the flow: spatiotemporal patterns of ice drift and polar bear (*Ursus maritimus*) movement in Hudson Bay. *Marine Ecology Progress Series* 641:227-240
17. Boonstra R, Bodner K, Bosson C, Delehanty B, Richardson ES, Lunn NJ, **Derocher AE**, Molnár PK. 2020. The stress of Arctic warming on polar bears. *Global Change Biology* doi.org/10.1111/gcb.1542
18. Biddlecombe B, Lunn NJ, McGeachy D, Bayne E, **Derocher AE**. 2020. Comparing sea ice habitat fragmentation metrics using integrated step selection analysis. *Ecology and Evolution* 10:4791-4800
19. Yurkowski DJ, Richardson E, Lunn NJ, Muir DCG, Johnson AC, **Derocher AE**, Ehrman AD, Houde M, Young BG, Debets CD, Sciallo L, Thiemann GW, Ferguson SH. 2020. Contrasting temporal patterns of mercury, niche dynamics, and body condition of polar bears and ringed seals in a melting icescape. *Environmental Science and Technology* 54:2780-2789
20. Richardson ES, Davis C, Stirling I, **Derocher AE**, Lunn NJ. 2020. Variance in lifetime reproductive success of male polar bears. *Behavioral Ecology* 31:1224-1232
21. Boucher N, **Derocher AE**, Richardson E. 2019. Variability in polar bear (*Ursus maritimus*) stable isotopes in relation to environmental change in the Canadian Beaufort Sea. *Marine Ecology Progress Series* 630:215-225
22. Stirling I, Laidre K, **Derocher AE**, van Meurs R. 2019. Observations of short-term food caching in polar bears. *Arctic Science* 6:41-52
23. Reimer JR, Mangel M, **Derocher AE**, Lewis MA. 2019. Matrix methods for stochastic dynamic programming in ecology and evolutionary biology. *Methods in Ecology and Evolution* 10:1952-1965
24. Boucher N, **Derocher AE**, Richardson E. 2019. Space-use patterns affect stable isotopes of polar bears (*Ursus maritimus*) in the Beaufort Sea. *Polar Biology* 42:1581-1593
25. Shave JR, **Derocher AE**, Cherry SG, Thiemann GW. 2019. Chronic stress and body condition of wolf-killed prey in Prince Albert National Park, Saskatchewan. *Conservation Physiology* 7:coz037
26. Johnson AC, Hobson KA, Lunn NJ, McGeachy D, Richardson E, **Derocher AE**. 2019. Temporal variation in the foraging ecology of polar bears in western Hudson Bay. *Marine Ecology Progress Series* 619:187-199
27. Lambert Koizumi C, **Derocher AE**. 2019. Effect of grizzly bear and wolf predation risk on the habitat use and sexual segregation of a northern alpine ungulate. *PLoS One* 14:e0215519
28. Biddlecombe B, **Derocher AE**, Richardson E, Stirling I. 2019. Mating ecology of polar bears in the Beaufort Sea, Canada. *Polar Biology* 42:919-929
29. Reimer JR, Mangel M, **Derocher AE**, Lewis MA. 2019. Modelling optimal responses and fitness consequences in a changing Arctic. *Global Change Biology* 25:3450-3461
30. Reimer JR, Caswell H, **Derocher AE**, Lewis M. 2019. Ringed seal demography in a changing climate. *Ecological Applications* 29:e01855
31. Folio DM, Aars J, Gimenez O, **Derocher AE**, Wiig Ø, Cubaynes S. 2019. How many cubs can a mum raise? Maternal age and size influence litter size in polar bears. *Biology Letters* 15:20190070
32. Bechshoft T, Dyck M, St Pierre KA, **Derocher AE**, St Louis V. 2019. The use of hair as a proxy for total and methylmercury burdens in polar bear muscle tissue. *Science of the Total Environment* 686:1120-1128
33. Hamilton SG, **Derocher AE**. 2019. Assessment of global polar bear abundance and vulnerability. *Animal Conservation* 22:83-95

34. Lippold A, Bourgeon S, Aars J, Andersen M, Polder A, Lyche JL, Bytingsvik J, Jenssen BM, **Derocher AE**, Welker J, Routti H. 2018. Temporal trends of persistent organic pollutants in Barents Sea polar bears (*Ursus maritimus*) in relation to changes in feeding habits and body condition. *Environmental Science and Technology* 53:984-995
35. Liu Y, Richardson ES, **Derocher AE**, Lunn NJ, Lehmler H-J, Li X, Zhang Y, Cui JY, Cheng L, Martin JW. 2018. Hundreds of unrecognized organohalogen contaminants discovered in polar bear blood. *Angewandte Chemie* 57:16401-16406
36. Yurkowski DJ, ... **Derocher, AE** et al. 2018. Abundance and species diversity hotspots of tracked marine predators across the North American Arctic. *Diversity and Distributions* 25:328-345
37. Tartu S, Aars J, Andersen M, Polder A, Bourgeon S, Merkel B, Lowther AD, Bytingsvik J, Welker JM, **Derocher AE**, Jenssen BM, Routti H. 2018. Choose your poison – Space-use strategy influences pollutant exposure in Barents Sea polar bears. *Environmental Science and Technology* 52:3211-3221
38. O'Donovan SA, Budge SM, Hobson KA, Kelly AP, **Derocher AE**. 2018. Stable isotopes and fatty acids reveal intrapopulation variability in wolf diet. *Ecosphere* 9:e02420
39. Vongraven D, **Derocher AE**, Bohart AM. 2018. Polar bear research – has science helped conservation? *Environmental Reviews* 26:358-368
40. Viengkone M, **Derocher AE**, Richardson ES, Obbard ME, Dyck MG, Lunn NJ, Sahanatien V, Robinson BG, Davis CS. 2018. Assessing spatial discreteness of Hudson Bay polar bear populations using telemetry and genetics. *Ecosphere* 9(7):e02364
41. Rode KD, Wilson RR, Douglas DC, Muhlenbruch V, Atwood TC, Regehr EV, Richardson E, Pilfold N, **Derocher AE**, Durner G, Stirling I, Peacock E, Amstrup S, St Martin M, Pagano A, Simac K. 2018. Spring fasting behavior among polar bears provides an index of ecosystem productivity. *Global Change Biology* 24:410-423
42. Bechshøft TO, **Derocher AE**, Viengkone M, Routti H, Aars J, Letcher RJ, Dietz R, Sonne C, Richardson E, Lunn NJ. 2018. On the integration of ecological and physiological variables in polar bear toxicology research: a systematic review. *Environmental Reviews* 26:1-12
43. Robinson BG, Franke A, Derocher AE. 2017. Stable isotope mixing models fail to estimate the diet of an avian predator. *The Auk* 135:60-70
44. Togunov RR, **Derocher AE**, Lunn NJ. 2017. Windscares and olfactory foraging in a large carnivore. *Scientific Reports* 7:46332
45. Johnson A, Pongracz J, **Derocher AE**. 2017. Long distance movement of a female polar bear from Canada to Russia. *Arctic* 70:121-128
46. Yee M, Reimer JM, Lunn NJ, Togunov RR, Pilfold NW, McCall AG, **Derocher AE**. 2017. Polar bear (*Ursus maritimus*) migration from maternal dens in western Hudson Bay. *Arctic* 70:319-327
47. Castro de la Guardia L, Myers PG, **Derocher AE**, Lunn NJ, Terwisscha van Scheltinga AD. 2017. Sea ice cycle in western Hudson Bay, Canada, from a polar bear perspective. *Marine Ecology Progress Series* 364:225-233
48. Robinson BG, Franke A, **Derocher AE**. 2017. Weather-mediated prey depletion causes food-limitation in a top avian predator. *Journal of Avian Biology* 48:1-11
49. Nguyen L, Pilfold NW, **Derocher AE**, Stirling I, Bohart AM, Richardson E. 2017. Ringed seal (*Pusa hispida*) tooth annuli as an index of reproduction in the Beaufort Sea. *Ecological Indicators* 77:286-292

50. Auger-Méthé M, Albertsen CM, Jonsen ID, Derocher AE, Lidgard DC, Studholme KR, Bowen WD, Crossin GT, Mills Flemming J. 2017. Spatiotemporal modelling of marine movement data using Template Model Builder (TMB). *Marine Ecology Progress Series* 565:237-249
51. Bechshøft TO, **Derocher AE**, Richardson E, Lunn NJ, St Louis V. 2016. Hair mercury concentrations in polar bear family groups. *Environmental Science and Technology* 50:5313-5319
52. Pilfold NW, Hedman D, Stirling I, **Derocher AE**, Lunn NJ, Richardson E. 2016. Mass loss rates of fasting polar bears. *Physiological and Biochemical Zoology* 89:377–388
53. Viengkone M, **Derocher AE**, Richardson E, Malenfant R, Miller J, Obbard M, Dyck M, Sahanatien V, Lunn N, Davis C. 2016. Comparing two genetic marker systems for assessing polar bear (*Ursus maritimus*) population structure in the Hudson Bay region. *Ecology and Evolution* 6:8474-8484
54. Smereka CS, Edwards MA, Pongracz J, Branigan M, Pilfold N, **Derocher AE**. 2016. Barren-ground grizzly bear den selection, Mackenzie Delta, Northwest Territories. *Polar Biology* 40:503-516
55. Auger-Méthé M, Field C, Moesgaard Albertsen C, **Derocher AE**, Lewis MA, Jonsen ID, Mills Flemming J. 2016. State-space models' dirty little secrets: even simple linear Gaussian models can have parameter and state estimation problems. *Scientific Reports* 6:26677
56. Pilfold NW, McCall A, **Derocher AE**, Lunn NJ, Richardson E. 2016. Migratory response of polar bears to sea ice loss: to swim or not to swim. *Ecography* 40:189–199
57. Mislan P, **Derocher AE**, St Louis VL, Richardson E, Lunn NJ, Janz DM. 2016. Assessing stress in western Hudson Bay polar bears using hair cortisol concentration as a biomarker. *Ecological Indicators* 71:47-54
58. Pongracz J, **Derocher AE**. 2016. Summer refugia of polar bears (*Ursus maritimus*) in the southern Beaufort Sea. *Polar Biology* 40:753-763
59. McCall AG, Pilfold NW, **Derocher AE**, Lunn NJ. 2016. Seasonal habitat selection by adult female polar bears in western Hudson Bay. *Population Ecology* 58:407-419
60. Auger-Méthé M, **Derocher AE**, DeMars CA, Plank MJ, Codling EA, Lewis MA. 2016. Evaluating random search strategies for three mammals from distinct guilds. *Journal of Animal Ecology* 85:1411-1421
61. Cullingham C, Thiessen CD, **Derocher AE**, Paquet PC, Miller JM, Hamilton JA, Coltman DW. 2016. Population structure and dispersal of wolves in the Canadian Rocky Mountains. *Journal of Mammalogy* 97:839-851
62. Cherry SG, **Derocher AE**, Lunn NJ. 2016. Habitat-mediated timing of migration in polar bears: an individual perspective. *Ecology and Evolution* 6:5032-5042
63. Sahanatien VS, Peacock E, **Derocher AE**. 2015. Spatial ecology of polar bears in a seasonal sea ice ecozone. *Ecology and Evolution* 5:2851-2864
64. Pilfold NW, **Derocher AE**, Stirling I, Richardson E. 2015. Multi-temporal drivers of spring predation events for polar bears in a changing climate. *Oikos* 124:1098-1107
65. Auger-Méthé M, Lewis MA, **Derocher AE**. 2015. Home ranges in moving habitats: polar bears and sea ice. *Ecography* 39:26-35
66. Bechshøft TO, **Derocher AE**, Richardson E, Mislan P, Lunn NJ, Sonne C, Dietz R, Janz D, St Louis V. 2015. Cortisol and mercury in western Hudson Bay polar bear hair: is there a link? *Ecotoxicology* 24:1315-1321
67. Robinson BG, Franke A, **Derocher AE**. 2015. Estimating nestling diet with cameras: quantifying uncertainty from unidentifiable food deliveries. *Wildlife Biology* 21:277-282

68. McCall AG, **Derocher AE**, Lunn NJ. 2015. Home range distribution of polar bears in western Hudson Bay. *Polar Biology* 38:343-355
69. Edwards MA, **Derocher AE**. 2015. Mating-related behaviour of grizzly bears inhabiting marginal habitat at the periphery of their North American range. *Biological Processes* 111:75-83
70. Auger-Méthé M, **Derocher AE**, Plank MJ, Codling EA, DeMars CA, Lewis MA. 2015. Differentiating between the Lévy and the intermittent search strategies. *Methods in Ecology and Evolution* 6:1179-1189
71. Peacock E, Sonsthagen AS, Obbard ME, Boltunov A, Regehr EV, Ovsayanikov N, Aars J, Atkinson S, Sage GK, Zeyl E, Bachmann L, Ehrich D, Scribner KT, Amstrup SC, Belikov S, Born E, **Derocher AE**, Stirling I, Taylor MK, Wiig Ø, Paetkau D, Talbot SL. 2015. Implications of the circumpolar genetic structure of polar bears for their ecology, evolution and conservation biology. *PLoS One* 10:e112021
72. Bromaghin JF, Amstrup SC, McDonald TL, Stirling I, **Derocher AE**, Richardson ES, Regehr EV, Douglas DC, Durner GM. 2014. Polar bear population dynamics in the southern Beaufort Sea during a period of sea ice decline. *Ecological Applications* 25:634-651
73. Barker OE, **Derocher AE**, Edwards MA. 2014. Use of Arctic ground (*Urocitellus parryii*) by brown bears (*Ursus arctos*). *Polar Biology* 38:369-379
74. Hamilton SG, Castro de la Guardia L, **Derocher AE**, Sahanatien V, Tremblay B, Huard D. 2014. Projected polar bear sea ice habitat in the Canadian Arctic Archipelago. *PLoS One* 9:e113746
75. Robinson B, Franke A, **Derocher AE**. 2014. The influence of weather and lemmings on spatiotemporal in the abundance of multiple avian guilds in the Arctic. *PLoS One* 9:e101495
76. Pilfold NW, **Derocher AE**, Richardson E. 2014. Influence of interference competition on the distribution of a wide-ranging, non-territorial carnivore. *Global Ecology and Biogeography* 23:425-435
77. Pilfold NW, **Derocher AE**, Stirling I, Richardson E. 2013. Polar bear predatory behaviour reveals seascape distribution of ringed seal lairs. *Population Ecology* 56:129-136
78. Molnár PK, Lewis MA, **Derocher AE**. 2013. Estimating Allee dynamics before they can be observed: polar bears as a case study. *PLoS One* 9:e85410
79. Rode KD, Regehr EV, Douglas D, Durner G, **Derocher AE**, Thiemann GW, Budge S. 2013. Variation in the response of an Arctic top predator experiencing habitat loss: feeding and reproductive ecology of two polar bear populations. *Global Change Biology* 20:76-88
80. Castro de la Guardia L, **Derocher AE**, Myers P, Terwisscha van Scheltinga AD, Lunn NJ. 2013. Future sea ice conditions in western Hudson Bay and consequences for polar bears in the 21<sup>st</sup> century. *Global Change Biology* 19:2675-2687
81. Dietz R, Sonne C, Basu N, Braune B, O'Hara T, Letcher RJ, Scheuhammer T, Andersen M, Andreasen C, Andriashek D, Asmund G, Aubail A, Baagøe H, Born EW, Chan HM, **Derocher AE**, Grandjean P, Knott K, Kirkegaard M, Krey A, Lunn N, Messier F, Obbard M, Olsen MT, Ostertag S, Peacock E, Renzoni A, Rigét FF, Skaare JU, Stern G, Stirling I, Taylor M, Wiig Ø, Wilson S, Aars J. 2013. What are the toxicological effects of mercury in Arctic biota? *Science of the Total Environment* 443:775-790
82. Bytingsvik J, Simon E, Leonards PEB, Lamoree M, Lie E, Aars J, **Derocher AE**, Wiig Ø, Jenssen BM, Hamers T. 2013. Transthyretin-binding activity of contaminants in blood from polar bears (*Ursus maritimus*) cubs. *Environmental Science and Technology* 47:4778-4786

83. Edwards MA, **Derocher AE**, Nagy JA. 2013. Home range size variation in female Arctic grizzly bears relative to reproductive status and resource availability. *PLoS One* 8: e68130
84. Thiemann GW, **Derocher AE**, Cherry SG, Lunn NJ, Peacock E, Sahanatien V. 2013. Effects of chemical immobilization on the movement rates of free-ranging polar bears. *Journal of Mammalogy* 94:386-397
85. **Derocher AE**, Aars J, Amstrup SC, Cutting A, Lunn NJ, Molnár PK, Obbard ME, Stirling I, Thiemann GW, Vongraven D, Wiig Ø, York G. 2013. Rapid ecosystem change and polar bear management. *Conservation Letters* 6:368-375
86. Cherry SG, **Derocher AE**, Thiemann GW, Lunn NJ. 2013. Polar bear migratory patterns and seasonal fidelity in relation to sea ice dynamics. *Journal of Animal Ecology* 82:912-921
87. Miller SD, McLellan BN, **Derocher AE**. 2013. Large carnivore management in North America. *International Journal of Environmental Science* 70:383-398
88. Stirling I, **Derocher AE**. 2012. Effects of climate warming on polar bears: a review of the evidence. *Global Change Biology* 18:2694-2706
89. Pilfold NW, **Derocher AE**, Stirling I, Richardson ES, Andriashek DS. 2012. Age and sex composition of seals killed by polar bears in the eastern Beaufort Sea. *PLoS One* 7:e41429
90. Bytingsvik J, Leeuwen SPJ, Hamers T, Swart K, Aars J, Lie E, Nilsen EME, Wiig Ø, **Derocher AE**, Jenssen BM. 2012. Perfluoralkyl substances in polar bear mother-cub pairs: A comparative study based on plasma levels in 1998 and 2008. *Environment International* 49:92-99
91. Vongraven D, Aars, J, Amstrup S, Atkinson SN, Belikov S, Born EW, DeBruyn TD, **Derocher AE**, Durner G, Gill M, Lunn N, Obbard ME, Omelak J, Ovsyanikov N, Peacock E, Richardson E, Sahanatien V, Stirling I, Wiig Ø. 2012. A circumpolar monitoring plan for polar bears. *Ursus Monograph* 5:1-66
92. Sahanatien V, **Derocher AE**. 2012. Monitoring sea ice habitat fragmentation for polar bear conservation. *Animal Conservation* 15:397-406
93. Andersen M, **Derocher AE**, Wiig Ø, Aars J. 2012. Polar bear (*Ursus maritimus*) maternity den distribution in Svalbard, Norway. *Polar Biology* 35:499-508
94. Bytingsvik J, Lie E, Aars J, Wiig Ø, **Derocher AE**, Jenssen BM. 2012. PCBs and OH-PCBs in polar bear mother-cub pairs: A comparative study based on plasma levels in 1998 and 2008. *Science of the Total Environment* 417-418:117-128
95. **Derocher AE**, Andersen M, Wiig Ø, Aars J, Hansen E, Biuw M. 2011. Sea ice dynamics affects polar bear den ecology at Hopen Island, Svalbard, Norway. *Marine Ecology Progress Series* 441:273-279
96. Auger-Méthé M, Cassidy St Clair C, Lewis MA, **Derocher AE**. 2011. Sampling rate and misidentification of Lévy and non-Lévy movement paths: comment. *Ecology* 92:1699-1701
97. St Louis VL, **Derocher AE**, Stirling I, Graydon JA, Lee C, Jocksch E, Richardson E, Ghorpade S, Kwan AK, Kirk JL, Lehnerr I, Swanson HK. 2011. Differences in mercury bioaccumulation between polar bears (*Ursus maritimus*) from the Canadian high and sub Arctic. *Environmental Sciences and Technology* 45:5922-5928
98. **Derocher AE**. 2010. The prospect for polar bears. *Nature* 468:905-906
99. Hedberg GE, **Derocher AE**, Andersen M, Rogers QR, DePeters EJ, Lønnerdal B, Mazzaro L, Chesney RW, Hollis B. 2011. Milk composition in free-ranging polar bears (*Ursus maritimus*) from Svalbard, Norway as a model for captive rearing milk formula. *Zoo Biology* 29:1-16
100. Molnár PK, **Derocher AE**, Klanjscek T, Lewis MA. 2011. Predicting climate change impacts on polar bear litter size. *Nature Communications* 2:186

101. Peacock L, **Derocher AE**, Thiemann GW, Stirling I. 2011. Conservation of Canada's polar bears in a changing world. *Canadian Journal of Zoology* 89:371-384
102. Nagy JA, Johnson DL, Larter NC, Campbell MW, **Derocher AE**, Kelly A, Dumond M, Allaire D, Croft B. 2011. Subpopulation structure of caribou (*Rangifer tarandus* L.) in arctic and sub-arctic Canada. *Ecological Applications* 21:2334-2348
103. Hoffman M,... **Derocher AE**, et al. 2010. The impact of conservation on the status of the world's vertebrates. *Science* 330:1503-1509
104. Barker OE, **Derocher AE**. 2010. Habitat selection by Arctic ground squirrels (*Spermophilus parryii*). *Journal of Mammalogy* 91:1251-1260
105. Åsbakk K, Aars J, **Derocher AE**, Wiig Ø, Oksanen A, Born EW, Dietz R Sonne C, Tryland M, Godfroid J, Kapel CM. 2010. Serosurvey for *Trichinella* in polar bears (*Ursus maritimus*) from Svalbard and the Barents Sea. *Veterinary Parasitology* 172:256-263
106. Peacock L, **Derocher AE**, Lunn N, Obbard M. 2010. Polar bear ecology and management in Hudson Bay in the face of climate change. Page 93-115, In Ferguson S, Loseto L, Mallory M. (eds.) *A little less Arctic: top predators in the world's largest northern inland sea, Hudson Bay*. Springer
107. Edwards MA, **Derocher AE**, Hobson KA, Branigan M, Nagy JA. 2011. Fast carnivores and slow herbivores: differential foraging strategies among grizzly bears in the Canadian Arctic. *Oecologia* 165:877-889
108. Lambert Koizumi C, **Derocher AE**. 2011. Spatial overlap of Dall sheep, grizzly bears and wolves in the Richardson Mountains. *Galemys* 22:31-42
109. **Derocher AE**, Andersen M, Wiig Ø, Aars J. 2010. Sexual dimorphism and the mating ecology of polar bears (*Ursus maritimus*) at Svalbard. *Behavioural Ecology and Sociobiology* 64:939-946
110. **Derocher AE**, Wiig Ø, Van Parijs SM. 2010. Nursing vocalisations of a polar bear cub. *Ursus* 21:189-191
111. Molnár PK, **Derocher AE**, Thiemann GW, Lewis MA. 2010. Predicting survival, reproduction and abundance of polar bears under climate change. *Biological Conservation* 143:1612-1622
112. Towns L, **Derocher AE**, Stirling I, Lunn NJ. 2010. Changes in land distribution of polar bears in western Hudson Bay. *Arctic* 63:206-212
113. Cherry SG, **Derocher AE**, Hobson KA, Stirling I, Thiemann GW. 2010. Quantifying dietary pathways of proteins and lipids to tissues of polar bears. *Journal of Applied Ecology* 48:373-381
114. Medill S, **Derocher AE**, Stirling I, Lunn NJ. 2010. Reconstructing reproductive histories of female polar bears (*Ursus maritimus*) using cementum patterns in premolar teeth. *Polar Biology* 33:115-124
115. Medill S, **Derocher AE**, Stirling I, Lunn NJ, Moses R. 2009. Estimating cementum annuli width in polar bears: identifying sources variation and error. *Journal of Mammalogy* 90:1256-1264
116. Chesney RW, Hedberg GE, Rogers QR, Dierenfeld ES, Hollis BE, **Derocher A**, Andersen M. 2009. Does taurine deficiency cause metabolic bone disease and rickets in polar bear cubs raised in captivity? *Taurine 7, Advances in Experimental Medicine and Biology* 643:325-331
117. Towns L, **Derocher AE**, Stirling I, Lunn NJ, Hedman D. 2009. Spatial and temporal patterns of problem polar bears in Churchill, Manitoba. *Polar Biology* 32:1529-1537
118. Molnár PK, Klanjscek T, **Derocher AE**, Obbard ME, Lewis MA. 2009. A body composition model to estimate mammalian energy stores and metabolic rates from body mass and body length, with application to polar bears. *Journal of Experimental Biology* 212:2313-2323



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**Book**

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1. Derocher AE. 2012. Polar bears: A complete guide to their biology and behavior. Johns Hopkins University Press, Baltimore, MD. 249 pp

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**Other Publications**

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1. Rode KD, Obbard M, Belikov SE, **Derocher AE**, Durner GM, Thiemann GW, Tryland M, Letcher RJ, Meyersen R, Sonne C, Jenssen BM, Dietz R, Vongraven D. 2020. Polar bears *Ursus maritimus*. Pages 196-211. *in* Bears of the World. *Edited by* Penteriani V, Melletti M. Cambridge University Press, Cambridge, UK
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30. **Derocher AE.** 2004. Narwhal. Pp. 1361-1362. *In* Encyclopedia of the Arctic. *Edited by* Nuttall M. Rutledge, New York
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39. Lie E, **Derocher AE**, Wiig Ø, Skaare JU. 2000. Polychlorinated biphenyls in mother/offspring pairs of polar bears (*Ursus maritimus*) at Svalbard. *Organohalogen Compounds* 49:457-460
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50. **Derocher AE**, Garner GW, Lunn NJ, Wiig Ø. (Editors) 1998. Polar bears: Proceedings of the 12<sup>th</sup> Working Meeting of the IUCN/SSC Polar Bear Specialist Group; February 3-7, 1997; Oslo, Norway. Gland, Switzerland and Cambridge, UK: IUCN
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- Columbia (1995). CWS/NSERC Wildlife Ecology Chair Technical Report No. 001. CWS/NSERC Wildlife Ecology Chair, Simon Fraser University, Burnaby, BC. 39 pp
52. Øritsland NA, **Derocher AE**, Stirling I. 1998. A view on computer modeling for polar bear population management. *In* Polar bears: Proceedings of the 12<sup>th</sup> Working Meeting of the IUCN/SSC Polar Bear Specialist Group; February 3-7, 1997; Oslo, Norway Gland, Switzerland and Cambridge, UK: IUCN.
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  54. Wiig Ø, **Derocher AE**, Belikov SE. 1998. Ringed seals (*Phoca hispida*) breeding in the drifting pack-ice of the Barents Sea. The World Marine Mammal Science Conference, Monaco, 20-24 January 1998 Abstracts. pp. 148-149
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  57. **Derocher AE**. 1997. Polar bears: living with the white bear. Nikita Ovsyanikov: book review. *Polar Record* 33:246-247
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  61. **Derocher AE**, Kaiser GW, Cooke F, Manley IA, Gill MJ. 1996. Research on Marbled Murrelets in the Desolation Sound area during the 1994 breeding season. *Canadian Wildlife Service Technical Report Series* No. 257. 54 pp
  62. **Derocher AE**. 1995. Wildlife diversity and habitat relationships. *in* A Field Guide for Site Identification and Interpretation for the Vancouver Forest Region. *Edited by* R. N. Green. Ministry of Forests, 4595 Canada Way, Burnaby, BC, Canada
  63. Stirling I, **Derocher, A E**. 1993. Behavior of bears. *In* I. Stirling (ed.). Bears: majestic creatures of the wild. Weldon Owen Publishing, Sydney, Australia. Pages 70-85
  64. **Derocher AE**, Stirling, I. 1993. Studying bears. *In* I. Stirling (ed.). Bears: majestic creatures of the wild. Weldon Owen Publishing, Sydney, Australia. Pages 206-211
  65. **Derocher AE**. 1993. Coloring of black bears. *In* I. Stirling (ed.). Bears: majestic creatures of the wild. Weldon Owen Publishing, Sydney, Australia. Pages 112-113
  66. **Derocher AE**. 1993. Grizzly Adams. *In* I. Stirling (ed.). Bears: majestic creatures of the wild. Weldon Owen Publishing, Sydney, Australia. Page 220
  67. **Derocher AE**. 1993. Bear milk. *In* I. Stirling (ed.). Bears: majestic creatures of the wild. Weldon Owen Publishing, Sydney, Australia. Page 66
  68. **Derocher AE**. 1993. Why are bears so vulnerable. *In* I. Stirling (ed.). Bears: majestic creatures of the wild. Weldon Owen Publishing, Sydney, Australia. Pages 216-217
  69. **Derocher AE**. 1993. A slouthe of beerys. *In* I. Stirling (ed.). Bears: majestic creatures of the wild. Weldon Owen Publishing, Sydney, Australia. Page 74
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- Action Program. Canadian Wildlife Service, 5320 122 Street, Edmonton, Alberta. T6H 3S5. 30 pp
71. Adams AK, Nelson RA, Stirling I, **Derocher A.** 1988. Heat loss patterns in the polar bear, *Ursus maritimus*. FASEB 2: A747
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  73. **Derocher AE,** Miller SJ. 1986. Twelve gauge ferret shell tests on polar bears, Cape Churchill, Manitoba, 1984. Northwest Territories Department of Renewable Resources, Yellowknife. File Report No. 54. 40 pp
  74. **Derocher AE.** 1984. Telemetry: comments and suggestions from the coastal grizzly project 1983. British Columbia Ministry of Environment, Wildlife Branch, Wildlife Working Report WR 3

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### Peer Review of Manuscripts

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<i>Animal Behaviour</i>	<i>Journal of Animal Ecology</i>
<i>Arctic</i>	<i>Journal of Avian Biology</i>
<i>Arctic Science</i>	<i>Journal of Biogeography</i>
<i>Behavioural Ecology and Sociobiology</i>	<i>Journal of Fish and Wildlife Management</i>
<i>Biological Conservation</i>	<i>Journal of Mammalogy</i>
<i>Biology Letters</i>	<i>Journal of Wildlife Management</i>
<i>BMC Biology</i>	<i>Journal of Zoology</i>
<i>BMC Veterinary Research</i>	<i>Mammal Review</i>
<i>Canadian Field-Naturalist</i>	<i>Marine Ecology Progress Series</i>
<i>Canadian Geographer</i>	<i>Marine Mammal Science</i>
<i>Canadian Journal of Zoology</i>	<i>Marine Pollution Bulletin</i>
<i>Conservation Biology</i>	<i>Nature</i>
<i>Conservation Physiology</i>	<i>Nature Climate Change</i>
<i>Diversity and Distributions</i>	<i>Nature Ecology and Evolution</i>
<i>Ecography</i>	<i>North Atlantic Marine Mammal Commission Scientific Publications</i>
<i>Ecohealth</i>	<i>Oecologia</i>
<i>Ecology</i>	<i>Oikos</i>
<i>Ecology and Evolution</i>	<i>PLoS One</i>
<i>Ecoscience</i>	<i>Polar Biology</i>
<i>Ecosphere</i>	<i>Polar Record</i>
<i>Ecotoxicology and Environmental Safety</i>	<i>Polar Research</i>
<i>Environmental Conservation</i>	<i>Rapid Communications in Mass Spectrometry</i>
<i>Environmental Pollution</i>	<i>Royal Society Open Science</i>
<i>Environmental Research</i>	<i>Sarsia</i>
<i>Forestry Chronicle</i>	<i>Science</i>
<i>Folia Zoologica</i>	<i>Science Advances</i>
<i>Forest Ecology and Management</i>	<i>Scientific Reports</i>
<i>Frontiers in Ecology and the Environment</i>	<i>The Cryosphere</i>
<i>Frontiers in Ecology and Evolution</i>	<i>Trends in Ecology and Evolution</i>
<i>General and Comparative Endocrinology</i>	<i>Ursus</i>
<i>Global Change Biology</i>	<i>Wildlife Biology</i>
<i>Global Ecology and Conservation</i>	<i>Wildlife Research</i>

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## Education

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- 1991** Ph.D., Zoology, University of Alberta. Dissertation: Population dynamics and ecology of polar bears in western Hudson Bay.
- 1987** M.Sc., Zoology, University of Alberta. Thesis: The distribution and abundance of polar bears (*Ursus maritimus* Phipps) during the ice-free period in Western Hudson Bay.
- 1983** B.S.F. (Honours), Forest Biology, University of British Columbia. Thesis title: A sensitivity analysis of a population model for three species of bears.

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## Positions Held Since Doctoral Degree

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- 2002-present** Professor, Department of Biological Sciences, University of Alberta, Edmonton, Alberta, Canada
- 1999-2002** Section Head, Terrestrial Ecology Program, Norwegian Polar Institute, Tromsø, Norway
- 1996-2002** Senior Research Scientist in Mammalogy Section Head of the Terrestrial Ecology Program, Norwegian Polar Institute, Tromsø, Norway
- 1993-1996** Research Wildlife Ecologist, Ministry of Forests, Nanaimo, British Columbia, Canada
- 1993-1996** Adjunct Professor, Centre for Applied Conservation Biology, University of British Columbia, Vancouver, British Columbia, Canada
- 1991-1993** Biologist, Canadian Wildlife Service, Edmonton, Alberta, Canada

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## Research Projects

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- 1984-1992, 2004-present** Churchill, Manitoba: polar bears
- 1985-1987, 1992, 2003-2014** Northwest Territories: polar bears, grizzly bears, Dall sheep, caribou, wolves
- 2006-2019** Nunavut: polar bears, peregrine falcons, caribou
- 1996-2002** Svalbard, Norway: polar bears
- 1988** Antarctica: seals, penguins
- 1983** Yukon Territory: peregrine falcons, gyrfalcons
- 1981-1996** British Columbia: marbled murrelets, Stone's sheep, grizzly bears, Haida Gwaii ermine, black-tailed deer

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## Professional Activities

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- Natural Sciences and Engineering Research Council of Canada, Review committee member, Northern Research Supplement Grant, 2020-ongoing
- Editorial Board, Arctic (journal of the Arctic Institute of North America), 2018-ongoing
- IUCN/SSC Polar Bear Specialist Group, Member (1996-ongoing, Chair 2005-2009)
- Conservation and Science Committee of the Board of Directors of WWF-Canada (2005-2015)

- Curator of Mammalogy, Zoology Museum, University of Alberta (2003-ongoing)
- Federal-Provincial Polar Bear Technical Committee (2002-2010)
- International Association for Bear Research and Management, Council Member (2000-2007, 2 terms)
- Arctic Institute of North America, Member
- Society for Conservation Biology, Member
- Marine Mammal Society, Member
- American Society of Mammalogists, Member
- Wild Bear Advisory Committee, Polar Bears International (2004-ongoing)
- Polar Continental Shelf Project, Science Steering Committee, Natural Resources Canada (2003-2007)
- Polar Continental Shelf Project Advisory Committee, Natural Resources Canada (2004-2007)
- Associate Editor, *Wildlife Biology*, 2005-2009
- Associate Editor, *Ursus*, 2001-2003

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### **Training and Mentoring**

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#### **Post-doctoral Fellow Supervision**

1. Kylee Dunham, 2019-ongoing.
2. Jessica Haines, 2017-2018. Current position: Assistant Professor, MacEwan University, Edmonton, AB
3. Thea Bechshoft, 2013-2016. Current position: Research Associate, Aarhus University, Denmark
4. Nick Pilfold, 2015. Current position: Research Scientist, San Diego Zoo Conservation Research Center
5. Ane Eriksen, 2012-2014. Current position: Associate Professor, Inland Norway University of Applied Sciences, Norway
6. Gregory Thiemann, 2010-2011. Current position: Associate Professor, York University, Toronto

#### **Ph.D. Supervisor**

1. David McGeachy, 2021-ongoing.
2. Stephen Hamilton, 2010-ongoing.
3. Amy Johnson, 2015-2020. Polar bear (*Ursus maritimus*) foraging, spatial, and energetics ecology in the changing Arctic. Current position: Research Ecologist, Ecofish Research Ltd., Courtney, BC
4. Jody Reimer, 2013- 2019. Predator and prey, past, present, and projected: Modelling polar bears and ringed seals in a dynamic Arctic. Supervised with M Lewis. Current position: Assistant Professor / PDF, University of Utah, Salt Lake City, UT
5. Barry Robinson, 2009-2015. Population demographics of peregrine falcons in Nunavut in relation to climate. Current position: Habitat Biologist, Environment and Climate Change Canada, Edmonton, AB
6. Vicki Sahanatien, 2005-2015. Polar bear (*Ursus maritimus*) habitat, space use, and movements in a seasonal sea ice ecoregion. Current position: Central Coast Indigenous Resource Alliance, BC
7. Nick Pilfold, 2010-2014. Polar bear (*Ursus maritimus*) foraging ecology in spring. Current position: Research Scientist, San Diego Zoo Global, San Diego, CA

8. Marie Auger-Méthé, 2009-2014. Supervised with M Lewis. Mathematical modelling of polar bear movement ecology. Current position: Assistant Professor, University of British Columbia, Vancouver, BC
9. Evan Richardson, 2007-2013. The mating system and life history of the polar bear. Current position: Research Scientist, Environment and Climate Change Canada, Winnipeg, MB
10. Catherine Lambert-Koizumi, 2006-2012. Dall sheep (*Ovis dalli dalli*), grizzly bear (*Ursus arctos*) and wolf (*Canis lupus*) interactions in the Northern Richardson Mountains, Canada. Current position: Executive Director, Mi'kmaq Maliseet Aboriginal Fisheries Management Association, New Richmond, QC
11. John Nagy, 2005-2011. Population ecology of caribou in northern Canada: distribution, migration, and herd structure. Current position: Private consulting biologist, Edmonton, AB
12. Peter Molnar, 2004-2009. Co-supervisor. Modelling the population dynamics and ecology of polar bears. Supervised with M Lewis. Current position: Assistant Professor, University of Toronto (Scarborough), ON
13. Mark Edwards, 2002-2009. Ecology of grizzly bears (*Ursus arctos*) in the northwestern NWT, Canada. Current position: Curator of Mammalogy, Royal Alberta Museum, Edmonton, AB
14. Seth Cherry, 2004-2010. The ecology of polar bears in relation to sea ice dynamics. Parks Canada, Ecologist Team Leader, Invermere, BC
15. Mette Mauritzen, 1996-2001. Movement patterns, habitat selection, and space use patterns of polar bears (*Ursus maritimus*) in the Barents Sea. University of Oslo. Ø Wiig, co-supervisor. Current position: Research Scientist, Marine Research Centre, Bergen, Norway

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### **M.Sc. Supervisor**

1. Carter Littlefair, 2020-ongoing.
2. Steven Andriashek, 2020-ongoing.
3. Erin Miller, 2019-ongoing.
4. Peter Thompson, 2019-ongoing.
5. Anna Jovtoulia, 2019-ongoing.
6. Kimberley Barrett, 2019-ongoing.
7. Delaney Frame, 2019-ongoing.
8. Larissa Thelin, 2019-ongoing.
9. Camille Jodouin, 2019-ongoing.
10. Ashton Bradley, 2018-ongoing.
11. Alexa MacPherson, 2018-ongoing.
12. Sofia Karabatsos, 2018-2020.
13. Natasha Klappstein, 2018-2020.
14. Alyssa Bohart, 2016-2020. Migration dynamics of polar bears (*Ursus maritimus*) in western Hudson Bay. Current position: Grizzly bear field technician, AB
15. Allicia Kelly, 2013-2020. Current position: Regional Biologist, Ft. Smith, NWT
16. Alexandra Beatty, 2016-2020. Habitat use and movement ecology of polar bears (*Ursus maritimus*) in western Hudson Bay.
17. Erin Henderson, 2016-2020. Polar bear (*Ursus maritimus*) use of the western Hudson Bay flaw lead polynya. Current position: Research Assistant, University of Alberta
18. Brooke Biddlecombe, 2017-2019. Using spatial autocorrelation to quantify the effects of sea ice fragmentation on polar bear movement in Hudson Bay. Current position: Ph.D. candidate, University of Manitoba

19. Corey Smereka, 2017-2019. Space use dynamics and habitat selection of cougars in west-central Alberta, Canada. Current position: Contract Biologist to Province of Alberta
20. Nicole Boucher, 2016-2019. monitoring ecosystem dynamics in the beaufort sea using stable isotopes in polar bears (*Ursus maritimus*) and ringed seals (*Pusa hispida*). Current position: Ph.D. candidate, University of Victoria
21. Sean O'Donovan, 2015-2018. Intrapopulation variability in wolf diet revealed using a combined stable isotope and fatty acid approach. Current position: Wildlife Biologist, Government of British Columbia, Kamloops, BC
22. Justin Shave, 2016-2018. Diet composition and prey selectivity of gray wolves (*Canis lupus*) in Prince Albert National Park, Saskatchewan. Current position: Advisian, WorleyParsons Canada Ltd., Calgary, AB
23. Ron Togunov, 2014-2016. Windscares and olfactory foraging among polar bears (*Ursus maritimus*). Current position: Ph.D. candidate, University of British Columbia, Vancouver, BC
24. Patrick Mislan, 2011-2015. Microanalysis of isotopes to assess polar bear ecology in western Hudson Bay. Current position: private consultant, ON
25. Michelle Viengkone, 2012-2015. Population structure and space-use of polar bears (*Ursus maritimus*) in Hudson Bay. Co-supervised with Dr. Corey Davis. Current position: rehabilitation medicine student
26. Jodie Pongracz, 2009-2014. Polar bear habitat use in the Southern Beaufort Sea. Current position: Carnivore Biologist, Yukon Government, Whitehorse, YK
27. Alysa McCall, 2010-2013. Polar bear habitat use in western Hudson Bay. Current position: Director of Conservation Outreach for Polar Bears International, Yellowknife, NT
28. Laura Castro de la Guardia, 2010-2012. (supervised with Paul Myers Earth and Atmospheric Sciences). Predictive modelling of polar bear sea ice habitat in the Hudson Bay ecosystem. Current position: PDF, University of Manitoba, Winnipeg, MB
29. Oliver Barker, 2007-2011. Grizzly bear and Arctic ground squirrel relationships. Current position: Fisheries Biologist, Yukon Government, Whitehorse, YK
30. Sarah Medill, M.Sc. 2006-2008. Reconstructing life histories using cementum: information recorded in premolars of polar bears (*Ursus maritimus*). Current position: Parks Ecologist, NS
31. Conrad Thiessen, 2003-2006. Dispersal of wolves in the Central Rockies. Current position: Regional Biologist, BC Ministry of Environment, Smithers, BC
32. Lindsay Towns, 2003-2006. Long-term patterns of polar bear distribution in western Hudson Bay. Current position: The Fauna Foundation, Montréal, QC
33. Emily Parks, 2003-2005. Habitat use of female polar bears in Hudson Bay relative to climate change. High school teacher, Halifax, NS

### Undergraduate Supervisor

1. Caitlan Morganson, 2020-2021
2. Gary Elaschuk, 2020-2021
3. Claudia Gauk, 2019-2020
4. Steven Andriashek, 2019-2019
5. Taylor Boyd, 2018-2019
6. Keenan Guillas, 2018
7. Morgan Dobroski, 2017-2018
8. Sarah Heemskerk, 2017-2018\*
9. Natasha Klappstein, 2017-2018\*

10. Aaron Moizis, 2017-2018
11. Brooke Biddlecombe, 2016-2017\*
12. Meredith Yee, 2015-2016\*
13. Linda Nguyen, 2015-2016\*
14. Alexandra Beatty, 2015-2016
15. Corey Smereka, 2014-2015\*
16. Kerri Krawchuk, 2012-2013
17. Kristen Peck, 2012-2012
18. Sean Haughian, 2004-2005
19. Sarah Downey, 2004-2005

\* senior authored a peer-reviewed paper from their research project

## Research Support

2019-2025	NSERC Discovery - \$210,000
2019-2025	NSERC Northern Supplement - \$110,000
2019-2020	The Ocean Foundation - \$5,000
2009-2025	Polar Bears International - \$800,000
2019-2025	San Diego Zoo Global - \$150,000
2013-2021	Environment and Climate Change Canada - \$525,000
2017-2012	Faculty of Science Research Fellowship - \$100,000
2008-2019	World Wildlife Fund Canada - \$390,000
2018-2019	Alberta Conservation Association - \$8,000
2004-2019	Polar Continental Shelf Project - \$800,000
2008-2015	ArcticNet - \$260,000
2002-2018	NSERC Discovery, Northern Supplement, RTI - \$843,075
2008-2009	NSERC International Polar Year - \$15,000
2014-2015	Pittsburgh Zoo and PPG Aquarium - \$3,000
2014-2015	Kansas City Zoo - \$5,000
2012-2014	Hauser Bears - \$30,000
2013-2014	Aquarium du Québec Conservation Fund - \$3,000
2010-2015	Quark Expeditions - \$100,000
2008-2011	Canadian Wildlife Federation - \$70,000
2004-2013	U.S. Department of the Interior - \$1,300,000
2004-2007	Government of the Northwest Territories - \$60,000
2002-2019	Northern Science Training Program - \$135,000

## Selected Notable Lectures

2018	International Association for Bear Research and Management, Public Presentation – Ljubljana, Slovenia
2018	One Health Conference, Stanford University, Palo Alto, California
2016	Annual Paul L. Errington Memorial Lecture, Iowa State University, Ames, Iowa
2014	The 13 <sup>th</sup> Leading Special Lecture, Hokkaido University, Sapporo, Japan
2014	International Conference on Animal Care, Kobe, Japan
2013	Bellarmino University, Louisville, Kentucky
2012	Departmental Lecture, Brigham Young University, Provo, Utah
2012	Oceanographic Institute, Paris, France
2011	Dennis H. Chitty Lecture, University of British Columbia, Vancouver, BC



2011 Aarhus University, Aarhus, Denmark  
2011 Wildlife Disease Society Keynote, Québec City, QC

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**Selected Media Interviews**

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<i>Alaska Public Radio</i>	<i>Mother Jones Magazine</i>
<i>Arctic Deeply</i>	<i>National Geographic</i>
<i>Australian Broadcasting Corporation</i>	<i>National Post</i>
<i>BBC 2</i>	<i>Nature News</i>
<i>BBC Radio 1</i>	<i>NBC News</i>
<i>BBC Wildlife</i>	<i>New Scientist</i>
<i>Buzzfeed</i>	<i>New York Times</i>
<i>Canadian Geographic</i>	<i>Nunutsiaq News</i>
<i>Carbon Brief</i>	<i>Poland Radio 1</i>
<i>CBC North</i>	<i>Radio Canada International</i>
<i>CBC Quirks and Quarks</i>	<i>Radio Slovenia</i>
<i>CBC The Current</i>	<i>Science News</i>
<i>Charles Adler Radio Show</i>	<i>Slate</i>
<i>CNN</i>	<i>Southern California Public Radio</i>
<i>CTV Alberta Primetime</i>	<i>The Atlantic</i>
<i>Edmonton Journal</i>	<i>The Guardian</i>
<i>Globe and Mail</i>	<i>The Observer</i>
<i>Hakai Magazine</i>	<i>The Times of London</i>
<i>Inside Climate News</i>	<i>Toronto Star</i>
<i>Iowa Public Radio</i>	<i>Up Here Magazine</i>
<i>Le Soleil</i>	<i>Washington Post</i>
<i>Los Angeles Times</i>	<i>WFPL Radio Kentucky</i>
<i>Macleans</i>	<i>Winnipeg Free Press</i>