

Ron Ronald Togunov

Born: Jerusalem, Israel

Canadian Citizen

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Education

2017-2022	Ph.D. candidate in Zoology, University of British Columbia. Dissertation: Behavioural ecology of a vulnerable Arctic predator in a dynamic and changing environment. Supervisor: Marie Auger-Méthé.
2014-2016	M.Sc. in ecology. University of Alberta. Thesis: Windscares and olfactory foraging among polar bears (<i>Ursus maritimus</i>). Supervisor: Andrew E. Derocher.
2015	M.Sc. course in biotelemetric methods. The University Centre in Svalbard, Svalbard, Norway.
2009-2014	B.Sc. (Honours) in biology, York University. Thesis: Changes in age-ratios suggest decrease survivorship during migration among juvenile Neotropical passerines. Supervisors: Alexander Mills and Bridget Stutchbury
2011-2012	University exchange program. Uppsala University, Uppsala, Sweden.

Lab, field, and other research experience

2018, 2019	Summer. Sampling, tagging, and monitoring, of narwhal, Greenland shark, ringed seals, char. Tremblay Sound, Nunavut.
2017-2018	Research assistant management of polar bear tracking database. Andrew Derocher Lab. University of Alberta.
2017	Summer. Ungulate pellet count and identification, Ya Ha Tinda, Alberta.
2015, 2017	Fall and spring. Polar bear tagging and sampling in Churchill, Manitoba.
2015	Spring. Tagging and sampling Ringed seals and Fish. Svalbard, Norway.
2009-2014	700+ hrs. lab and field experience. Animal sampling, identification, and genetic sequencing, environmental monitoring. York University and Uppsala University.

2013-2014	Lab technician. Assist in crane fly larvae. Arthur Forer lab. York University.
2009-2013	Research volunteer. Data collection, management, and analysis part of eight research projects. St. Johns Rehab Hospital, Toronto, Ontario.

Funding

2019	CGS D. Natural Sciences and Engineering Research Council of Canada.	\$135,000
2018	Northern Scientific Training Program. Government of Canada.	\$3000
2017	Four Year Doctoral Fellowship. University of British Columbia.	\$72,800
2017	PhD Recruitment Scholarship (Declined). University of Alberta.	\$15,000
2016	Queen Elizabeth II Graduate Scholarship. University of Alberta.	\$5,400
2016	Graduate Travel Award. University of Alberta.	\$1,400
2015	ArcticNet Training Fund. ArcticNet.	\$2,980
2015	EnviroNorth Northern research field schools Fellowship. EnviroNorth.	\$1,000
2014	Queen Elizabeth II Graduate Scholarship. University of Alberta.	\$10,800
2011	Ontario international education opportunity scholarship. Government of Ontario.	\$2,500
2009	York University entrance scholarship. York University.	\$1,500

Publications

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1. **Togunov RR**, Derocher AE, Lunn NJ, Auger-Méthé M. 2021. Characterising menotatic behaviours in movement data using hidden Markov models. *Methods in Ecology and Evolution*. 12(10):1984–1998.
 2. **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.
 3. Yurkowski DJ, Lunn NJ, Auger-Méthé M, Hussey NE, Mallory ML, Wong SNP, Gilchrist G, Derocher AE, Fisk AT, Harwood LA, Dietz R, Born EW, Mosbech A, Fort J, Richardson E, Marcoux M, **Togunov RR**, Loseto L, Richard PR, ... Ferguson SH (2019). Abundance and species diversity hotspots of tracked marine predators across the North American Arctic. *Diversity and Distributions* 25(3):328–345.
 4. Klappstein, NJ, **Togunov RR**, Lunn NJ, Derocher AE. 2019. Patterns of ice drift and polar bear (*Ursus maritimus*) movement in Hudson Bay. *Marine Ecology Progress Series* 641:227–240.

5. Yee M, Pilfold NW, Lunn NJ, McCall A, **Togunov RR**, Reimer J, Derocher AE. 2017. Polar bear (*Ursus maritimus*) Migration from Maternal Dens in Western Hudson. *Arctic* 7(30):319-327.
6. **Togunov RR**, Derocher AE, Lunn NJ. 2017. Windscares and olfactory foraging in a large carnivore. *Scientific Reports* 7:46332.

In review

7. **Togunov RR**, Derocher AE, Lunn NJ, Auger-Méthé M. 2022. Drivers of polar bear behavior and the possible effects of prey availability on foraging strategy.

Presentations

1. **Togunov RR**, Derocher AE, Lunn NJ, Auger-Méthé M. 2021. Identifying behaviours with orientation bias using hidden Markov models. The Wildlife Society. Held virtually.
2. **Togunov RR**, Derocher AE, Lunn NJ, Auger-Méthé M. 2021. Identifying Behaviours with Orientation Bias Using Hidden Markov Models. Bio-Logging Science Symposium. Held virtually.
3. **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. *Arctic Change*. Held virtually.
4. **Togunov RR**, Derocher AE, Lunn NJ, Auger-Méthé M. 2018. Modelling polar bear habitat selection using a behaviour-centric approach. *ArcticNet*. Ottawa, ON.
5. **Togunov RR**, Derocher AE, Lunn NJ, Auger-Méthé M. 2018. Windscares and olfactory foraging in polar bear (*Ursus maritimus*). 26th Annual British Columbia Marine Mammal Symposium. Vancouver, BC.
6. **Togunov RR**, Derocher AE, Lunn NJ. 2017. Windscares and olfactory foraging in polar bear (*Ursus maritimus*). Conference on the Biology of Marine Mammals. Halifax, NS.
7. **Togunov RR**, Derocher AE, Lunn NJ. 2016. Windscares and olfactory foraging in a large carnivore. International Conference on Bear Research and Management. Anchorage, AK.
8. **Togunov RR**, Derocher AE. 2016. Windscares shape polar bear foraging and travelling behaviour. Northern Research Day. Edmonton, AB.
9. **Togunov RR**, Mills AM. 2014. Changes in age-ratios suggest decrease survivorship during migration among juvenile Neotropical passerines. Ontario Biology Day. Mississauga, ON.

Students

2019-2020	Mentorship for Joanna Wong. Thesis: Arctic tern migration: from individual variation to common flyways of trans-equatorial seabirds.
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2016-2017	Mentorship for Natasha Klappstein. Thesis: Going against the flow: ice drift and polar bear population decline in western Hudson Bay.
2015-2016	Mentorship for Alexandra Beatty. Thesis: Terrestrial movement rate of polar bears in response to ambient temperature.

Teaching

2022	Workshop presenter. Hidden Markov model analysis of animal movement data. Department of Fisheries and Oceans Canada. Held virtually.
2021	Workshop presenter. Introduction to GIS and spatial analysis in R. University of British Columbia. Held virtually.
2020	Teaching assistant. Intermediate statistics for applications. University of British Columbia. Vancouver, BC.
2018	Teaching assistant. Zoogeography. University of British Columbia. Vancouver, BC.
2017	Lead organizer. Animal movement animation workshop. University of British Columbia. Vancouver, BC.
2014-2016	Senior teaching assistant. Ecology. University of Alberta. Edmonton. AB.
2016	Teaching assistant. Northern ecology. University of Alberta. Edmonton. AB.

Outreach

1. "Ron Togunov - Arctic Researcher". Treading Better podcast. Interview. 2021.
2. "Polar Bear Questions: Kids Ask, Scientists Answer!" Polar Bears International. Held Virtually. 2016 & 2021.
3. "The Basics of Polar Bear denning" blog posts for Polar Bears International. 2020 <https://polarbearsinternational.org/news/article-polar-bears/the-basics-of-polar-bear-denning/>
4. Invited polar bear expert guide representing Polar Bears International on the Quark Expedition cruise, "Northwest Passage: Epic High Arctic". Nunavut and Greenland. 2019.
5. Facebook Live presentations for Polar Bears International. 2017 and 2019.
6. "Polar Bear Tundra Connections". Polar Bears International. Invited speaker in Churchill, MB. 2017.
7. "Family nature nights". Nature Alberta. Invited speaker in Edmonton, AB. 2016, and 2017.

Review work

1. Journal of Applied Ecology, 2022.

2. OIKOS, 2021.
3. Scientific Reports, 2021.
4. Proceedings of the Royal Society B: Biological Sciences, 2021.
5. Marine Ecology Progress Series, 2019.
6. Biological Conservation, 2017.

Other

Leadership

1. Chair of the Institute for the Oceans and Fisheries Graduate Student Society (IOFGSS). University of British Columbia, Vancouver, BC. 2020-2021.
2. Various IOFGSS positions: Faculty representative, Equity, diversity, and inclusion committee, social committee. University of British Columbia, Vancouver, BC. 2017-2021.
3. Executive on the Undergraduate Biology Society at York University. York University, Toronto, ON. 2010-2014.
4. Camp Naorca (Nature Oriented Camp) youth program leader. Toronto Parks and Recreation, Toronto, ON. 2005-2013.
5. Meals on wheels. Downsview Services for seniors. Toronto, ON. 2012.
6. Cinema coordinator. Uppsala Short Film Festival, Uppsala, Sweden. 2011.
7. Co-op placement: Victim/Witness Assistance Program. Ministry of the Attorney General. Owen Sound, ON. 2008.
8. Co-op placement: teacher's assistant. Dufferin Elementary School. Owen Sound, ON. 2008.

Awards

1. Excellence in Teaching. Interdepartmental Science Students' Society, University of Alberta. Edmonton, AB. 2017.
2. Letter of commendation. Department of Biological Sciences, University of Alberta. Edmonton, AB. 2015.
3. Certificate of excellence. National Volunteer Week awarded on behalf of Prime Minister Stephen Harper. St. Johns Rehab Hospital, Toronto, ON. 2013

Selected Media Interviews

BBC TWO – Arctic Live
Canadian Geographic
Canadian Press
Corus Talk Radio
Nunatsiaq

Post Canada
RadioActive - CBC Radio Live
Radio Canada
Scientific American