

# Spencer K. Monckton

1216-705 King St. W., Toronto, ON M5V 2W8

(647) 303-4093 – [s.monckton@gmail.com](mailto:s.monckton@gmail.com)

website: [skmonckton.com](http://skmonckton.com)

ORCID: [0000-0002-9879-9118](https://orcid.org/0000-0002-9879-9118)

## EDUCATION

### Ph.D. Biology

York University, Toronto ON

(Expected 2021)

### M.Sc. Biology

York University, Toronto ON

May 2015

### B.Sc. Hon. Biology

University of Ottawa, Ottawa ON

May 2011

## RESEARCH & WORK EXPERIENCE

- 2017 - present      **Ph.D. Thesis**, Dr. Laurence Packer, York University, Toronto ON  
Title: Systematics and biogeography of nearctic sawflies in the nematine genus *Pristiphora* Latreille (Hymenoptera: Tenthredinidae).  
Integrative systematic revision of nearctic species of *Pristiphora*, including a phylogeographic study of these insects across Northern North America.
- 2015-2016      **Ph.D. Student**, Dr. Terry A. Wheeler & Dr. Alex Smith, University of Guelph, Guelph, ON  
Systematics and community ecology of northern nematine sawflies, with special focus on the genus *Pristiphora* Latreille (Hymenoptera: Tenthredinidae).  
Withdrew from program following TAW's diagnosis with advanced cancer.
- 2012 - 2015      **M.Sc Thesis**, Dr. Laurence Packer, York University, Toronto ON  
Title: A revision of *Chilicola* (*Heteroediscelis*), a subgenus endemic to Chile.  
Systematics and biogeography of subgenus *Heteroediscelis* as main objective; conducted 6 months of fieldwork in Chile.
- 2012      **Assistant Curator**, Canadian National Collection of Insects, Agriculture and Agri-Food Canada, Ottawa ON  
Curated a large section of the Coleoptera collection.
- 2010 - 2011      **Honours Research Student**, Dr. Rees Kassen, University of Ottawa, ON  
Title: Testing local adaptation through time in soil bacterial isolates.
- 2009      **Field Assistant**, Dr. Risa Sargent, University of Ottawa, ON  
Assisted in field and laboratory work, including ongoing research projects.

## TEACHING EXPERIENCE

### Teaching Assistant, York University

Biodiversity (BIOL4255)	Lab Demonstrator	2018, '19, '20
<ul style="list-style-type: none"><li>- Fully responsible for lab portion of course (50% of student grade)</li><li>- Redesigned lab exercises, using student feedback to improve on each iteration</li></ul>		
General Entomology (BIOL4230)	Lab Demonstrator	2013, '14, '17, '19, '20
<ul style="list-style-type: none"><li>- Instruct students in insect collecting, preservation, and identification</li><li>- Assembled lab manual and adapted lab exercises for online delivery in 2020</li></ul>		
Conservation Biology (BIOL4245)	Lab Demonstrator	2019
Biology II (BIOL1001)	Lab Coordinator	2017
Biology II (BIOL1001)	Lab Demonstrator	2015
Animal Physiology (BIOL3060)	Lab Demonstrator	2014
Plants (BIOL2010)	Lab Demonstrator	2014
Animals (BIOL2030)	Lab Demonstrator	2012
Biology I (BIOL1000)	Marker	2012

### Teaching Assistant, University of Guelph

Evolution (BIOL2400)	Lecture TA	2016
Invert Morphology & Evolution (ZOO2700)	Lab Demonstrator	2016

### Teaching Assistant, University of Ottawa

Entomology (BIO3333)	Lab Demonstrator	2012
Animal Form and Function (BIO2135)	Marker	2011

## COURSES ATTENDED

- 2019 **Workshop on Molecular Evolution**, Marine Biological Laboratory, Woods Hole, MA  
Intensive ten-day workshop providing training in principles of molecular evolution, genomics, statistical methods, and hands-on experience, delivered by field leaders
- 2019 **RadCamp**, Málaga, Spain  
One-day workshop on RAD-seq data assembly and analysis using ipyrad, delivered by its developers (Deren Eaton & Isaac Overcast)

## PUBLICATIONS

1. **Monckton S.K.**, Johal S., Packer L. (2020). Inadequate treatment of taxonomic information prevents replicability of most zoological research. *Canadian Journal of Zoology*. [doi:10.1139/cjz-2020-0027](https://doi.org/10.1139/cjz-2020-0027)
2. Kankaanpää T., Vesterinen E., Hardwick B., Schmidt N., Andersson T., Aspholm P., Barrio, I.C., Beckers N., Bêty J., Birkemoe T., Desiervo M., Drotos K., Ehrich D., Gilg O., Gilg G., Hein N., Hoye T., Jakobsen K., Jodouin C., Jorna J., Kozlov M.V., Kresse J-C., Leandri-Breton D-J., Lecomte N., Loonen M., Marr P.,

**Monckton S.K.**, Olsen M., Otis J-A., Pyle M., Roos R., Raundrup K., Rozhkova D., Sabard B., Sokolov A., Sokolova N., Solecki A., Urbanowicz C., Villeneuve C., Vyguzova E., Zverev V., Roslin T. (in press). Parasitoids indicate major climate-induced shifts in Arctic communities. *Global Change Biology*. [doi:10.1111/gcb.15297](https://doi.org/10.1111/gcb.15297)

3. Ferrari R.R., Onuferko T.M., **Monckton S.K.**, Packer L. (2020). The evolutionary history of the cellophane bee genus *Colletes* Latreille (Hymenoptera: Colletidae): molecular phylogeny, biogeography and implications for a global infrageneric classification. *Molecular Phylogenetics and Evolution*, 106750. [doi:10.1016/j.ympev.2020.106750](https://doi.org/10.1016/j.ympev.2020.106750)
4. Packer L., **Monckton S.K.**, Onuferko T.M., Ferrari R.R. (2018). Validating Taxonomic Identifications in Entomological Research. *Insect Conservation and Diversity*, 11:1-12. [doi:10.1111/icad.12284](https://doi.org/10.1111/icad.12284)
5. **Monckton S.K.** (2016). A revision of *Chilicola* (*Heteroediscelis*), a subgenus of xeromelissine bees (Hymenoptera, Colletidae) endemic to Chile, taxonomy, phylogeny, and biogeography, with descriptions of eight new species. *ZooKeys*, 591: 1-144. [doi:10.3897/zookeys.591.7731](https://doi.org/10.3897/zookeys.591.7731)
6. **Monckton S.K.** (2014). Case 3670 - *Chilicola vicugna* Toro & Moldenke, 1979 (Insecta, Hymenoptera, COLLETIDAE): proposed replacement of the holotype by a neotype. *Bulletin of Zoological Nomenclature*, 71(4): 234-236. [doi:10.21805/bzn.v71i4.a13](https://doi.org/10.21805/bzn.v71i4.a13)
7. Valenta K., Miller C.N., **Monckton S.K.**, Melin, A.D., Lehman, S.M., Styler, S.A., Chapman, C.A., Lawes, M.J. (2016). Fruit ripening signals and cues in a Madagascan dry forest: haptic indicators reliably indicate fruit ripeness to dichromatic lemurs. *Evolutionary Biology*. [doi:10.1007/s11692-016-9374-7](https://doi.org/10.1007/s11692-016-9374-7)
8. Valenta K., Brown K.A., Melin A.D., **Monckton S.K.**, Styler, S.A. Jackson, D.A., Chapman, C.A. (2015). It's not easy being blue: a cost analysis of plant signal trade-offs. *PLoS ONE*, 10(6): e0131725. [doi:10.1371/journal.pone.0131725](https://doi.org/10.1371/journal.pone.0131725)

## RESEARCH PRESENTED

9. **Monckton S.K.** (2019) Combining integrative systematics and comparative phylogeography to better understand patterns of nearctic sawfly diversity. Presented at the 9<sup>th</sup> Biennial Conference of the International Biogeography Society, Málaga, Spain, 10 January
10. **Monckton S.K.** (2018) Systematics and biogeography of nearctic sawflies in the nematine genus *Pristiphora* (Hymenoptera: Tenthredinidae). Presented at the 2018 ESA, ESC, and ESBC Joint Annual Meeting, Vancouver, BC, 14 November
11. **Monckton S.K.** (2018) Systematics and biogeography of nearctic sawflies in the nematine genus *Pristiphora* (Hymenoptera: Tenthredinidae). Presented at XXXVII Annual Meeting of the Willi Hennig Society, Barcelona, Spain, 17 September
12. **Monckton S.K.** (2017) Systematics and biogeography of the sawfly genus *Pristiphora* in the Nearctic. Presented at Toronto Entomologists' Association, Toronto, ON, 25 March
13. **Monckton S.K.** (2015) *Chilicola* (*Heteroediscelis*): A revised group of Chilean bees. Presented at ESC-SEQ JAM 2015: Entomology in the Anthropocene, Montreal, QC, 9 November

14. **Monckton S.K.** (2014) Describing a group of Chilean bees, *Chilicola (Heteroediscelis)*. Presented at Ontario Ecology, Ethology, and Evolution Colloquium (OE3C), University of Guelph, 9 May
15. **Monckton S.K.** (2014) Describing a group of Chilean bees, *Chilicola (Heteroediscelis)*. Invited talk at Biodiversity Institute of Ontario, University of Guelph, 24 April
16. **Monckton S.K.** (2012) Systematics of a subgenus of Chilean bees, *Chilicola (Heteroediscelis)*. Presented at Southern Ontario Bee Researchers Symposium, Toronto, 23 November

## OTHER CONTRIBUTIONS

17. **Monckton S.K.** “How British Columbia and Washington state are stopping the spread of Asian giant hornets.” *The Conversation*, 7 July 2020, <https://theconversation.com/how-british-columbia-and-washington-state-are-stopping-the-spread-of-asian-giant-hornets-140518>.
18. **Monckton S.K.** “Our fear of giant hornets is oversized — and threatens native insects.” *The Conversation*, 20 May 2020, <https://theconversation.com/our-fear-of-giant-hornets-is-oversized-and-threatens-native-insects-138508>.
19. **Monckton S.K.** (2020) Hornet. In *The Canadian Encyclopedia*. Online: <https://www.thecanadianencyclopedia.ca/en/article/hornet>
20. **Monckton S.K.**, Brust R.A. (2020) Black Fly. In *The Canadian Encyclopedia*. Online: <https://thecanadianencyclopedia.ca/en/article/black-fly>
21. Kevan P.G., **Monckton S.K.** (2017) Bee. In *The Canadian Encyclopedia*. Online: <https://www.thecanadianencyclopedia.ca/en/article/bee>
22. Campbell B., Campbell J.M., **Monckton S.K.** (2017) Beetle. In *The Canadian Encyclopedia*. Online: <https://www.thecanadianencyclopedia.ca/en/article/beetle>
23. Haufe W.O., **Monckton S.K.** (2016) Flea. In *The Canadian Encyclopedia*. Online: <https://www.thecanadianencyclopedia.ca/en/article/flea>
24. McEwan Kevan D.K., **Monckton S.K.** (2016) Termite. In *The Canadian Encyclopedia*. Online: <https://www.thecanadianencyclopedia.ca/en/article/termite>
25. Brust R.A., **Monckton S.K.** (2016) Mosquito. In *The Canadian Encyclopedia*. Online: <https://www.thecanadianencyclopedia.ca/en/article/mosquito>
26. Pritchard G., **Monckton S.K.** (2016) Mayfly. In *The Canadian Encyclopedia*. Online: <https://www.thecanadianencyclopedia.ca/en/article/mayfly>

## HONOURS AND AWARDS

2018	Willi Hennig Society Kurt Milton Pickett Award	York University	<b>\$1,200</b>
2015-18	NSERC Postgrad. Scholarship PGS-D	York University	<b>\$63,000</b>

2017	Northern Scientific Training Program	Declined	<b>\$2,400</b>
2016	Northern Scientific Training Program	University of Guelph	<b>\$2,521</b>
2013	NSERC Alexander Graham Bell CGS-M	York University	<b>\$17,500</b>
2013	Ontario Graduate Scholarship	Declined	<b>\$15,000</b>
2012-13	Graduate Scholarship	York University	<b>\$21,000 / yr.</b>
2012	C.D Fowle Scholarship in Ecology	York University	<b>\$12,500</b>