Background Information

Adam James Blake, Canadian Citizen
adam@ajblake.info ● 206-235-2935 (mobile) ● www.ajblake.info
Current Position: Postdoctoral Researcher
Affiliation: Department of Biology, University of Washington
Address: Box 351800, Seattle, WA, 98195-1800, USA

Education

PhD *December, 2020*

Dept. of Biological Sciences, Simon Fraser University, Burnaby, BC
Concentrations: Arthropod-Plant Interactions, Behavioral Ecology, Insect Vision
Thesis Title: Polarized light - host location and selection cue in phytophagous insects?
Supervisors: G. Gries

Master of Science, Ecology *September, 2010*

Dept. of Biological Sciences, University of Alberta, Edmonton, Alberta
Concentrations: Arthropod-Plant Interactions, Plant Nutrition, Spatial Ecology
Thesis Title: The effects of soil and plant nutrients on the oviposition preference, larval performance and the spatial dynamics of *Ceutorhynchus obstrictus* and its parasitoids
Co-Supervisors: B. A. Keddie & L. M. Dosdall

Bachelor of Science in Environmental and Conservation Sciences *April, 2006*

University of Alberta, Edmonton, Alberta
Major: Conservation Biology
Thesis Title: Arthropod Assemblages and Pipeline Development: Implications for Forest Songbirds?
Co-Supervisors: E. Bayne & H. Proctor

Research Experience

Postdoctoral Researcher *2022 - present*

J. Riffell, Dept. of Biology, University of Washington, Seattle, WA

- Areas of research included:
    - Olfactory-visual coupling in mosquitoes

Postdoctoral Researcher *2021 - 2022*

G. Gries, Dept. of Biological Sciences, Simon Fraser University, Burnaby, BC

- Areas of research included:
    - Vision in the host-finding and mating behaviors of biting flies (*Haematobia irritans*, *Stomoxys calcitrans*)
    - Visual ecology of other insects such as mosquitos and click beetles

Research Associate *2010 - 2012*
L. M. Dosdall, Dept. of Agriculture Food and Nutrition Science, University of Alberta
- Areas of research included:
    - Spatial distribution of canola pests and their parasitoids
    - Effect of plant nutrition on the preference, development and spatial distribution of canola pests
    - Mechanisms of *Delia* spp. resistance of plant material from *Sinapis alba* L. x *Brassica napus* L.
- Designed and executed field and laboratory studies
- Coordinated multiple simultaneous studies and supervised up to 4 research technicians

Remote Aquatic Technician *Summer 2007*
Alberta Biodiversity Monitoring Institute
- Worked and camped in remote locations only accessible by helicopter
- Sampled various aspects of wetlands including flora, fauna, and physical characteristics
- Utilized a variety of equipment including quads, chainsaws, and boats

Research Technician / B.Sc. Student *Summer 2005, 2006 - 2007*
E. M. Bayne, Dept. of Biological Sciences, University of Alberta
- Completed an undergraduate research project
- Performed air photo interpretation of forest cover along BBS routes
- Processed large numbers of arthropod samples
- Performed nest searching, arthropod sampling, as well as various types of vegetation sampling
- Completed worm transects, recorded bird vocalizations, and performed pairing observations on Ovenbirds
- Utilized quads and 4x4 trucks in a remote setting

Teaching Experience

Instructor *Summer 2017, 2018*
Brewing Sciences Laboratory (Brew 410)
Continuing Studies, Simon Fraser University
- Primary instructor for hybrid lab/lecture course (up to 25 students) concerning quality control and assessment procedures in the brewing industry
- Delivered lectures, supervised laboratory activities, and evaluated student presentations

Graduate Teaching Assistant *Spring 2018*
Introduction to Ecology (Bisc 204)
Dept. of Biological Sciences, Simon Fraser University
- Oversaw tutorial sections of up to 20 students
- Reviewed exams and assignments, answered students questions, and evaluated student presentations

Graduate Teaching Assistant *Fall 2007, Winter 2008 - Winter 2010*
Introduction to Cell Biology (Biol 107)
Dept. of Biological Sciences, University of Alberta
- Instructed undergraduate introductory cell biology laboratory of up to 20 students
- Communicated course material, answered student questions and evaluated student performance

Graduate Teaching Assistant *Fall 2008*
Vertebrate Diversity (Zool 224)
Dept. of Biological Sciences, University of Alberta
- Myself and another TA Instructed undergraduate vertebrate diversity laboratory of up to 40 students
- Communicated course material and answered student questions
- Aided in the creation of exams and evaluated student performance

Undergraduate Teaching Assistant *Winter 2005 & 2006*
Wildlife Biodiversity and Ecology (ENCS 201)
Dept. of Renewable Resources, University of Alberta
- Aided a graduate teaching assistant in the instruction of an undergraduate wildlife biodiversity and ecology laboratory of up to 20 students
- Answered student questions and aided in the creation of exams

Scientific Publications

Preprints

3. Ko E, Lier C, **Blake AJ**, Takács S, Gries G (2021) Long- and short-range bimodal signals mediate mate location and recognition in yellow fever mosquitoes. bioRxiv doi:10.1101/2021.04.27.441577v2

2. **Blake AJ**, Couture C, Go MC, Gries G (2020) Approach trajectory and solar position affect host plant attractiveness to the small white butterfly. bioRxiv doi:10.1101/2020.10.04.325639
   - Published Vis Res (see 12 below)

1. **Blake AJ**, Hahn G, Grey H, Kwok SA, McIntosh D, Gries G (2020) Investigating mechanisms of polarized light sensitivity in the small white butterfly *Pieris rapae*. bioRxiv doi:10.1101/2019.12.19.883272
   - Published J Exp Biol (see 11 below)

Peer-reviewed Scientific Articles

15. **Blake AJ**, Hung E, To S, Ng G, Qian J, Gries G (2023) Stable flies sense and behaviorally respond to the polarization of light. J Comp Physiol A doi: 10.1007/s00359-023-01624-y

14. Peach DAH, **Blake AJ** (2023) Mosquito (Diptera: Culicidae) vision and associated electrophysiological techniques. Cold Spring Harbor Protocols doi: 10.1101/pdb.top107671

13. Peach DAH, **Blake AJ** (2023) Measuring mosquito spectral sensitivity using electroretinograms. Cold Spring Harbor Protocols doi: 10.1101/pdb.prot108190
12. **Blake AJ**, Couture S, Go MC, Gries G (2021) Approach trajectory and solar position affect host plant attractiveness to the small white butterfly. Vis Res 186:140–149. doi: 10.1016/j.visres.2021.04.007
11. **Blake AJ**, Hahn G, Grey H, Kwok SA, McIntosh D, Gries G (2020) Polarized light sensitivity in *Pieris rapae* is dependent on both color and intensity. J Exp Biol 223:jeb220350. doi:10.1242/jeb.220350
    - Cover Article
    - Editors' Choice
10. Fischer A, Goh XH, Varney J-LS, **Blake AJ**, Takács S, Gries G (2020) Multimodal and multifunctional signaling? – Web reduction courtship behavior in a North American population of the false black widow spider. PLoS ONE 15:e0228988. doi:10.1371/journal.pone.0228988
9. **Blake AJ**, Couture S, Go MC, Hahn G, Grey H, Gries G (2019) Use of polarized light by plant feeding insects as a cue for host plant location and selection. Proc Biol Sci B 286:20192198 doi:10.1098/rspb.2019.2198
8. Peach DAH, Ko E, **Blake AJ**, Gries G. (2019) Ultraviolet inflorescence cues enhance attractiveness of inflorescence odour to *Culex pipiens* mosquitoes. PLoS ONE 14:e0217484. doi:10.1371/journal.pone.0217484
7. **Blake AJ**, Pirih P, Qiu X, Stavenga DG, Arikawa K, Gries G (2019) Compound eyes of the small white butterfly *Pieris rapae* have three distinct classes of red photoreceptors. J Comp Physiol A 205:553–565 doi:10.1007/s00359-019-01330-8
6. Eichorn C, Hrabar M, Van Ryn EC, Brodie BS, **Blake AJ**, Gries G (2017) How flies are flirting on the fly. BMC Biology 15:2 doi:10.1186/s12915-016-0342-6
5. **Blake, AJ**, Tansey JA, and Dosdall LM (2014) Nutritional effects on the appearance of canola and its attractiveness to the cabbage seedpod weevil. J Insect Behav 27:759-775 doi:10.1007/s10905-014-9466-0
4. Tansey JA, Dosdall LM, Keddie BA, and **Blake AJ** (2012) A novel trapping system for monitoring insect flight heights. Can Entomol 144:1-4 doi:10.4039/tce.2012.59
3. **Blake AJ**, Dosdall LM, and Keddie BA (2011) Bottom-up effects of *Brassica napus* nutrition on the oviposition preference and larval performance of *Ceutorhynchus obstrictus* (Coleoptera: Curculionidae). Arthropod Plant Interact 5:39-48 doi:10.1007/s11829-010-9114-3
2. **Blake AJ**, Dosdall LM, and Keddie BA (2010) Plant nutrients and the spatiotemporal distribution dynamics of *Ceutorhynchus obstrictus* (Coleoptera: Curculionidae) and its parasitoids. Environ Entomol 39:1195-1205 doi:10.1603/EN09217
1. Sarfraz RM, Dosdall LM, **Blake AJ,** and Keddie BA (2010) Leaf nutrient levels and the spatio-temporal distributions of *Plutella xylostella* and its larval parasitoids *Diadegma insulare* and *Microplitis plutellae* in canola. Biocontrol 55:229-244 doi:10.1007/s10526-009-9252-7

Datasets

6. **Blake AJ**, Hung E, To S, Ng G, Qian J, Gries G (2023) Data, code, and output files associated with: Polarization-sensitive photoreceptors inform host-seeking in stable flies, v2. Mendeley Data. doi: 10.17632/7n2h8w3464.2
5. **Blake AJ**, Hung E, Peach DAH (2023) Electroretinogram analysis code from: Measuring mosquito spectral sensitivity using electroretinograms, Mendeley Data, v1. doi: 10.17632/tzfyx575m6.1
4. Ko E, **Blake AJ,** Lier C, Takács S, Gries G (2021) R modeling code, high-speed video, sound files and other data from: Long- and short-range bimodal signals mediate mate location and recognition in yellow fever mosquitoes, v3. Mendeley Data. doi: 10.17632/6gvs94p6r2.3
3. **Blake AJ,** Couture C, Go MC, Gries G (2020) Polarimetry data, ImageJ/FIJI macros, R modeling code, and other data from: Approach trajectory and solar position affect host plant attractiveness to the small white butterfly, v2, Mendeley Data doi: 10.17632/5bh5mhmvrk.2
2. **Blake AJ**, Hahn G, Grey H, Kwok SA, McIntosh D, Gries G (2020) Spectral data and R modeling code from: Polarized light sensitivity in *Pieris rapae* is dependent on both color and intensity, Dryad doi: 10.5061/dryad.kd51c5b39
1. **Blake AJ**, Couture S, Go MC, Hahn G, Grey H, Gries G. (2019) λ/4 retarder film measurement from: Polarization of foliar reflectance – novel host plant cue for insect herbivores, v7, Dryad doi: 10.5061/dryad.xgxd254bs

Patents

1. Gries GJ, Hrabar MG, Stepanovic LC, Eichorn CE, Van Ryn EC, Brodie BS, **Blake AJ**, Thandi R. (2018) Systems and methods for attracting insects by simulating wing flash. U.S. Patent Application No. 15/773, 985.

Scientific Communications

International Conferences

36. **Blake AJ**, To S, Hung E, Ng, G, Qian J, Gries G (2022) Polarization-sensitive photoreceptors affect the visual choices of stable flies. Oral Presentation, The Joint Meeting of the Entomological Society of America and The Entomological Society of Canada, Vancouver, British Columbia, November 13–16, 2022.
35. Hennig S, Hung E, Timmath S, **Blake AJ**, Gries G (2022) Investigating the relative importance of reflective intensity, colour, and polarization characteristics of visual cues for stable fly, *Stomoxys calcitrans*, attraction. Oral Presentation, The Joint Meeting of the Entomological Society of America and The Entomological Society of Canada, Vancouver, British Columbia, November 13–16, 2022.
34. Singleton K, **Blake AJ**, Furtado K, van Herk W, Gries G (2022) Spectral sensitivity of North American pest click beetle species (Coleoptera: Elateridae) and their behavioural responses to different wavelengths of light. Oral Presentation, The

Joint Meeting of the Entomological Society of America and The Entomological Society of Canada, Vancouver, British Columbia, November 13–16, 2022.

33. Hung E, Sanghera G, **Blake AJ**, MacGregor M, Gries G (2022) Sexually dimorphic flicker fusion and wing flash frequencies in stable flies and horn flies: A potential basis for augmenting light traps. Oral Presentation, The Joint Meeting of the Entomological Society of America and The Entomological Society of Canada, Vancouver, British Columbia, November 13–16, 2022.

32. **Blake AJ**, Couture S, Go MC, Hahn G, Grey H, Kwok S, McIntosh D, Gries G (2021) Polarized light and host plant foraging in the small white butterfly. Oral Presentation, Living Light Online Early Career Researcher Conference, September 22–23, 2021
    - Also presented at Les Ecologistes 2020, Dept. of Biol. Sci., SFU (see 5 below)

31. Singleton K, **Blake AJ**, van Herk W, Gries G (2021) Spectral sensitivity of North American pest click beetle species (Coleoptera: Elateridae). Flash Presentation, Living Light Online Early Career Researcher Conference, September 22–23, 2021
    - Also presented at Entomol Soc Am 2020, and Entomol Soc BC 2020 (see 4 and 20 below)

30. Hung E, **Blake AJ,** Gries G (2021) Fast and sexually dimorphic photoreceptors – sensory tools for mate recognition systems in horn flies and stable flies? Flash Presentation, Living Light Online Early Career Researcher Conference, September 22–23, 2021
    - Also presented at Entomol Soc Am 2021 (see 22 below)

29. **Blake AJ**, Kwok S, Couture S, Hahn G, Qiu X, Arikawa K, Gries G (2018) Investigations into the mechanism of polarized light sensitivity in *Pieris rapae*. Oral Presentation, The Joint Meeting of the Entomological Society of America and The Entomological Society of Canada, Vancouver, British Columbia, November 11–14, 2018.

28. Ko E, Peach DAH, Gries G, **Blake AJ** (2018) Floral ultraviolet cues affect foraging behaviour of *Culex* mosquitoes. Oral Presentation, The Joint Meeting of the Entomological Society of America and the Entomological Society of Canada, Vancouver, British Columbia, November 11–14, 2018.

27. Peach, DAH, Young, N, Ko, E, **Blake, AJ**, Zhai, H, Alamsetti, S, Gries, R, Gries, G (2018) Do multi-modal foraging cues attract mosquitoes (Diptera: Culicidae) to flowers? Oral Presentation, The Joint Meeting of the Entomological Societies of America, Canada, and British Columbia, Vancouver, BC, November 11–14, 2018.
    - "Graduate Student Showcase" presentation (competitive application process)

26. Peach DAH, Ko E, **Blake AJ**, Gries R, Gries G (2018) The attraction of *Culex pipiens* to avian odours and associated visual cues. Poster Presentation, The Joint Meeting of the Entomological Societies of America, Canada, and British Columbia, Vancouver, British Columbia, November 11–14, 2018.

25. Brodie BS, Eichorn CE, Hrabar M, Van Ryn EC, **Blake AJ**, Gries G (2018) Harnessing sight communication pathways for fly management. Oral Presentation, The Joint

Meeting of the Entomological Society of America and the Entomological Society of Canada, Vancouver, British Columbia, November 11–14, 2018.

24. **Blake AJ**, Go MC, and Gries G (2016) Polarized light cues affect host selection in *Pieris rapae*. Virtual Poster Presentation, 25th International Congress of Entomology, Orlando, Florida, September 25–30, 2016. doi:10.1603/ICE.2016.117672
    - Winner best Graduate Student Virtual Poster

23. **Blake, AJ**, Tansey JA*, and Dosdall LM (2011) Nutritional effects on the visual appearance of oilseed rape as a causal mechanism to explain differences in its attractiveness to *Ceutorhynchus obstrictus* (Coleoptera: Curculionidae). Poster Presentation, Proceedings of the 13th International GCIRC Rapeseed Congress, Prague, Czech Republic, 5–9 June, pp. 1256-1261.
    - *Presenting author

National Conferences

22. Hung E, **Blake AJ,** Gries G (2021) Fast and sexually dimorphic photoreceptors – sensory tools for mate recognition systems in horn flies and stable flies? Annual Meeting of the Entomological Society of America, Denver, Colorado, October 31–November 1, 2021
    - Also presented at Living Light 2021 (see 29 above)

21. **Blake AJ,** Couture S, Go MC, Gries G (2020) Direction of approach and solar position affect host plant recognition by small white butterflies. Poster Presentation, 2020 Entomology, Virtual Annual Meeting of the Entomological Society of America, November 11–25, 2020.

20. Singleton K, **Blake AJ**, van Herk W, Gries G (2020) Spectral sensitivity of North American pest click beetle species (Coleoptera: Elateridae). Oral Presentation, 2020 Entomology, Virtual Annual Meeting of the Entomological Society of America, November 11–25, 2020.
    - Also presented at Living Light 2021, and Entomol Soc BC 2020 (see 30 above and 4 below)

19. Peach DAH, Gries R, Young N, Ko E, **Blake AJ**, Zhai H, Gries G (2020) Multi-modal foraging cues attract mosquito pollinators (Diptera: Culidae) to flowers. Oral Presentation, 2020 Entomology, Virtual Annual Meeting of the Entomological Society of America, November 11–25, 2020.

18. **Blake AJ,** Ko E, Peach DAH, Gries G (2020) Survey of spectral sensitivities among west coast mosquitos. Oral Presentation (**Invited**), Canadian Entomology, Ecology and Evolution Virtual Seminar Series, May 4, 2020.
    - Also presented at Entomol Soc Am Pac Branch 2020 (see 16 below)

17. Ko E, Peach DAH, **Blake AJ**, Gries G (2020) *Culex* mosquitoes exploit ultraviolet inflorescence cues during nectar-foraging behaviour. Oral Presentation (**Invited**), Canadian Entomology, Ecology and Evolution Virtual Seminar Series, May 4, 2020.
    - Also presented at Entomol Soc Am Pac Branch 2020 (see 15 below)

16. **Blake AJ,** Ko E, Peach DAH, Gries G (2020) Survey of spectral sensitivities among west coast mosquitos. Oral Presentation (**Invited**), Entomological Society of America Pacific Branch, Virtual Symposium: Mosquito Sensory Ecology, April 21, 2020.
    - Also presented at Can Entomol Ecol Evol 2020 (see 18 above)
15. Ko E, Peach DAH, **Blake AJ**, Gries G (2020) *Culex* mosquitoes exploit ultraviolet inflorescence cues during nectar-foraging behaviour. Oral Presentation (**Invited**), Entomological Society of America Pacific Branch, Virtual Symposium: Mosquito Sensory Ecology, April 21, 2020.
    - Also presented at Can Entomol Ecol Evol 2020 (see 17 above)
14. **Blake AJ**, Couture S, Go MC, Hahn G, Grey H, Arikawa K, Gries G (2017) Polarized light and host selection in *Pieris rapae*. Oral Presentation, Annual Meeting of the Entomological Society of Canada, Winnipeg, Manitoba, November 22–25, 2017.
    - "Graduate Student Showcase" presentation (competitive application process)
13. Ko E, Peach DAH, Gries G, **Blake AJ** (2017) Floral ultraviolet cues affect foraging behaviour of *Culex* mosquitoes. Oral Presentation, Annual Meeting of the Entomological Society of Canada, Winnipeg, Manitoba, November 22–25, 2017.
    - Runner up for President's Prize for best student presentation
12. **Blake AJ**, Go MC, Gries G (2015) The role of polarized light in host selection by *Pieris rapae*. Oral Presentation, Annual Meeting of the Entomological Society of Canada, Montreal, Quebec, November 8–11, 2015.
11. **Blake AJ**, Rajput S, Dosdall LM, Tansey JA (2012) Nutritional effects on the glucosinolate composition of canola and its olfactory attractiveness to the cabbage seedpod weevil. Oral Presentation, Annual Meeting of the Entomological Society of Canada, Edmonton, Alberta, November 4–7, 2012.
10. **Blake AJ**, Dosdall LM, Tansey JA (2011) Nutritional effects on the visual appearance of canola and its attractiveness to the cabbage seedpod weevil. Oral Presentation, Annual Meeting of the Entomological Society of Canada, Halifax, Nova Scotia, November 6–9, 2011.
9. **Blake AJ**, Dosdall LM, Keddie BA (2010) Systemic spatial relationships among soil and plant characteristics and the distribution of *Ceutorhynchus obstrictus* (Coleoptera: Curculionidae) and its parasitoids. Oral Presentation, Annual Meeting of the Entomological Society of Canada, Vancouver, British Columbia, October 31–November 3, 2010.
8. **Blake AJ**, Dosdall LM, Keddie BA (2009) The influence of canola nutrition on the oviposition choice and larval development parameters of the cabbage seedpod weevil. Oral Presentation, Annual Meeting of the Entomological Society of Canada, Winnipeg, Manitoba, October 18–21, 2009.
    - Winner of a President's Prize for best student presentation

Provincial and Institutional Conferences

7. Furtado K, Singleton K, **Blake AJ**, van Herk W, Gries G Testing attraction of click beetles (Coleoptera: Elateridae) to greenand UV light. (2021) Entomological

Society of British Columbia Virtual Conference and Annual Meeting, October 19–21, 2021

6. Ko E, Lier C, **Blake AJ**, Takács S, Gries G (2021) Long- and short-range bimodal signals mediate mate location and recognition in yellow fever mosquitoes. Oral Presentation, Entomological Society of British Columbia Virtual Conference and Annual Meeting, October 19–21, 2021

5. **Blake AJ**, Couture S, Go MC, Hahn G, Grey H, Kwok S, McIntosh D, Gries G (2021) Polarized light - host location and selection cue in phytophagous insects. Oral Presentation (**Invited**), Les Ecologistes Seminar Series, Department of Biological Sciences, Simon Fraser University, January 28, 2021
   - Also presented at Living Light 2021 (see 31 above)

4. Singleton K, **Blake AJ**, van Herk W, Gries G (2020) Spectral sensitivity of North American pest click beetle species (Coleoptera: Elateridae). Oral Presentation, Entomological Society of British Columbia Virtual Conference and Annual Meeting, October 26–28, 2020
   - Also presented at Living Light 2021, and Entomol Soc Am 2020 (see 30 and 20 above)

3. Hung E, Stewart J, **Blake AJ**, Peach DAH (2020) Larval escape response induced by UV and visible light in *Aedes aegypti* and *Culex pipiens* mosquitoes. Oral Presentation, Entomological Society of British Columbia Virtual Conference and Annual Meeting, October 26–28, 2020

2. **Blake AJ**, Dosdall LM, Keddie BA (2010) Artificial nutrient hotspots and their effects on the appearance of *Brassica napus* and the abundance of *Ceutorhynchus obstrictus*. Oral Presentation, Annual Meeting of the Entomological Society of Alberta, Lethbridge, Alberta, October 15–16, 2010.

1. **Blake AJ**, Dosdall LM, Keddie BA (2008). The effect of plant nutrient composition on the spatio-temporal dynamics of the cabbage seedpod weevil, *Ceutorhynchus obstrictus* (Marsham) (Coleoptera: Curculionidae), and its parasitoids. Oral Presentation, Annual Meeting of the Entomological Society of Alberta, Edmonton, Alberta, November 6–8, 2008.

Extension Meeting Presentations

2. CanoLAB, Presented a poster entitled "Canola Nutrition and the Cabbage Seedpod Weevil" as well as serving as one of several entomologist instructors, Canola Council of Canada, St. Albert, Alberta, February 20-21, 2013.

1. CanoLAB, Served as one of several entomologist instructors, Canola Council of Canada, St. Albert, Alberta, March 5-6, 2012.

Awards and Honors

10. Graduate Student Research Prize, Canadian Council of University Biology Chairs *2020*

9. Dan Johnson Award in Insect Ecology, Entomological Society of British Columbia *2020*
8. Editor's Choice and Issue Cover, Journal of Experimental Biology, for manuscript entitled "Polarized light sensitivity in *Pieris rapae* is dependent on both color and intensity" (see 11 in Scientific Publications) *2020*
7. Student Virtual Poster: Graduate, Entomological Society of America (ICE 2016) *2016*
6. Graduate Fellowship, Simon Fraser University *2015, 2016*
5. Alexander Graham Bell Canadian Graduate Scholarship, NSERC *2012-2014*
4. Provost's Prize of Distinction, Simon Fraser University *2012-2014*
3. President's Prize, Entomology Society of Canada *2009*
2. Alberta Learning Graduate Student Scholarship, Government of Alberta *2009*
1. Queen Elizabeth II, University of Alberta *2008, 2009*

Manuscript Review

Current Biology *2023*

Science Advances, Journal of Comparative Physiology A *2022*

Frontiers in Ecology and Evolution, Scientific Reports, Journal of Experimental Biology, European Journal of Entomology, The Canadian Entomologist *2021*

Agricultural and Forest Entomology *2017*

Biological Control *2016*

Journal of Applied Entomology *2011*

Arthropod-Plant Interactions, Journal of Insect Science *2010*

Project Supervision and Mentorship

Simon Fraser University *2012 - Present*

Supervised and provided membership for 9 undergraduate, 2 master of pest management students, and 1 PhD student including experimental design, data collections and statistical analysis, which resulted in the coauthoring of 15 scientific communications, 5 peer-reviewed scientific articles, and 3 preprints, (See Scientific Publications" and "Scientific Communications").

12. Stephanie To — Undergraduate thesis project *Fall 2021*
11. James Qian — Undergraduate summer research assistant *Summer 2021*
10. Kendal Singleton — Undergraduate thesis project, MPM Student *2020 - Present*

9.	Emmanuel Hung	Undergraduate summer research assistant undergraduate thesis project, PhD Student	*2019 - Present*
8.	Deby McIntosh	Undergraduate summer research assistant	*Summer 2019*
7.	Shelby Kwok	Undergraduate summer research assistant	*Summer 2018*
6.	Elton Ko	Undergraduate summer research assistant, undergraduate thesis project, MPM Student	*2017 - Present*
5.	Xiang Hao Goh	Undergraduate thesis project	*2017-2018*
4.	Hailey Grey	Undergraduate summer research assistant	*Summer 2017*
3.	Gina Hahn	Undergraduate summer research assistant	*Summer 2016*
2.	Matthew C. Go	Undergraduate summer research assistant	*Summer 2015*
1.	Samuel Couture	Undergraduate summer research assistant & undergraduate thesis project	*Summer 2014*

Community Service

Entomological Society of British Columbia *2021-Present*
- Served as webmaster and maintained the societies web presence

Biological Sciences Graduate Student Caucus *2019-2020*
- Served as webmaster and maintained the caucus website

Entomological Society of Alberta *2011*
- Served as treasurer on the groups executive
- Maintained financial records and membership list for the society
- Filed the society's yearly registration with the province

Professional Membership

Entomological Society of America *2010-2023*
Entomological Society of Canada *2009-2023*
Entomological Society of British Columbia *2014-2023*