JANICE L. YAN

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ACADEMIC APPOINTMENTS

NSERC Postdoctoral Fellow January 2026 - Present
University of Cambridge
Advisor: Dr. Christine W. Miller

Postdoctoral Associate January 2025 - November 2026
University of Florida
Advisor: Dr. Christine W. Miller

EDUCATION

Ph.D. Psychology 2019 - 2024
McMaster University
Advisor: Dr. Reuven Dukas
Thesis: Examining the interplay between sexual conflict, social networks, and polyandry
Nominated for a Governor General Award

B.Sc. Biology and Psychology, Neuroscience & Behaviour 2015 - 2019
McMaster University
Graduated summa cum laude and on the Provost Honour Roll
Minor: Philosophy

PEER-REVIEWED PUBLICATIONS

* Denotes undergraduate independent project or thesis students that I mentored for the project.

13. **Yan J.L.**, Sih A., Ruth Z.*, Szeligowski R.V. (2026). Fear generalization and behavioural responses to multiple dangers in a freshwater snail. *Journal of Animal Ecology,* 00, 1-12. https://doi.org/10.1111/1365-2656.70393
12. van Meer N.M.M.E, **Yan J.L.,** Salerno C.M., Dirks J., Miller C.W. (2026). Environmental impact on insect cuticle thickness. *Integrative and Comparative Biology*. 66. icag047. https://doi.org/10.1093/icb/icag047
11. **Yan J.L.**, Dobbin M.L.*, Chen J.*, Dukas R. (2026). The adaptive significance of polyandry: a meta-analysis. *Evolution*. 80(4), 838-853. https://doi.org/10.1093/evolut/qpag013
10. **Yan J.L.**, Rosenbaum J.R.*, Yang D.*, Dukas R. (2025). Optimal polyandry in fruit flies. *Evolution*. 79(2), 193–202. https://doi.org/10.1093/evolut/qpae148

9. **Yan J.L.**, Smith N.M.T, Filice D.C.S., Dukas R. (2024). Winner and loser effects: a meta-analysis. *Animal Behaviour*. 216, 15 – 22. **Editor's choice.** https://doi.org/10.1016/j.anbehav.2024.07.014

8. **Yan J.L.**, Dobbin M.L.*, Dukas R. (2024). Sexual conflict: the fitness cost of traumatic insemination, female avoidance, and male mate choice. *Proceedings of the Royal Society B*. 291:20232808. https://doi.org/10.1098/rspb.2023.2808

7. **Yan J.L.**, Rosenbaum J.R.*, Esteves S.*, Dobbin M.L.*, Dukas R. (2024). Sexual conflict in bed bugs: effects of social experience. *Behavioral Ecology*. 35(3), arae030. https://doi.org/10.1093/beheco/arae030

6. **Yan J.L.**, Prebus M. (2024). Variability of nest relocation behaviour among acorn ant species. *Insectes Sociaux*, 71(1), 49-60. https://doi.org/10.1007/s00040-024-00950-x

5. Kashetsky T., **Yan J.L.**, Doering, G.N., Skelton, T., Dukas, R. (2023). The effect of experience on collective decision-making. *Behavioural Processes*, 213, 104962. https://doi.org/10.1016/j.beproc.2023.104962

4. **Yan J.L.**, Dukas R. (2022). The social consequences of sexual conflict in bed bugs: social networks and sexual attraction. *Animal Behaviour*, 192, 109-117. **Editor's choice.** https://doi.org/10.1016/j.anbehav.2022.07.016

3. Scott A. M., **Yan J.L.**, Baxter C. M., Dworkin I., and Dukas R. (2022). The genetic basis of variation in sexual aggression: Evolution versus social plasticity. *Molecular Ecology*, 31(10), 2865-2881. https://doi.org/10.1111/mec.16437

2. Dukas R., **Yan J.L.**, Scott A.M., Sivaratnam S., and Baxter C.M. (2021). Artificial selection on forced copulation success: Correlated traits and trade-offs. *Evolution*, 74(6), 1112-1123. https://doi.org/10.1111/evo.13993

1. Baxter C.M., **Yan J.L.**, and Dukas R. (2019). Genetic variation in sexual aggression and the factors that determine forced-copulation success. *Animal Behaviour*, 158, 261-267. https://doi.org/10.1016/j.anbehav.2019.09.015

MANUSCRIPTS UNDER REVIEW

Yan J.L., Salerno C.M., van Meer N.M.M.E., Miller C.W. (*under review*). Misdirected sexual behaviour and aggression follow different temporal trajectories in leaf-footed bugs. *Philosophical Transactions of the Royal Society B*. RSTB-2026-0452.

WORKS IN PROGRESS

Yan J.L., Salerno C.M., van Meer N.M.M.E., Miller C.W. (*draft in preparation*). The influence of diet on signal reliability in a weapon-bearing insect.

Yan J.L., van Meer N.M.M.E., Salerno C.M., Miller C.W. (*data collection ongoing*). Sexual selection on functional weapon attributes of a leaf-footed bug.

AWARDS AND FELLOWSHIPS

International Society of Behavioral Ecology Early Career Award	2026
Nominee for the Society for the Study of Evolution's Best Dissertation Paper Award	2026
Animal Behaviour Society Warder Clyde Allee Award for Best Student Paper	2025
NSERC Postdoctoral Fellowship ($140,000 CAD)	2025
Society of Integrative and Comparative Biology Marlene Zuk Award for Best Student Talk	2025
NSERC Michael Smith Foreign Study Supplement ($6000 CAD)	2024
Animal Behavior Society Student Research Grant ($1500 USD)	2023
McMaster Graduate Student Association Travel Assistance Award ($500 CAD)	2022
Animal Behaviour Society Graduate Travel Award ($300 USD)	2022
NSERC Alexander Graham Bell Canada Graduate Scholarship – Doctoral ($105,000 CAD)	2021
NSERC Canada Graduate Scholarship – Master's ($17,500 CAD)	2020
McMaster Psychology, Neuroscience & Behaviour Graduate Scholarship ($17,500 CAD)	2019
NSERC Undergraduate Student Research Award ($4500 CAD)	2019
McMaster Provost's Honour Roll	2019
McMaster University Senate Scholarship ($800 CAD)	2018

SELECTED PRESENTATIONS

I have given 15 talks at institutional, provincial, and international conferences and have been a contributing author on an additional 18 presentations. Below are some selected presentations:

Yan J.L., Salerno C.M., van Meer N.M.M.E, Miller C.W. (2026). The behavioural consequences of diet induced variation in functional weapon attributes. **Early Career Awards Session,** International Society for Behavioral Ecology Congress, Turin, Italy. (Talk).

Yan J.L., Salerno C.M., van Meer N.M.M.E, Miller C.W. (2026). The behavioural consequences of diet induced variation in functional weapon attributes. Annual Conference of the Animal Behaviour Society, Cincinnati, Ohio, USA. (Talk).

Yan J.L., Salerno C.M., van Meer N.M.M.E, Miller C.W. (2026). The influence of diet on signal reliability in a weapon-bearing insect. Society for Integrative and Comparative Biology Annual Meeting, Portland, Oregon, USA. (Talk).

Haremza M., van Meer N.M.M.E, Salerno C.M., Miller C.W., **Yan. J.L.** (2026). The relationship between weapon and body size predicts signaling behavior in a weapon-bearing insect. Society for Integrative and Comparative Biology Annual Meeting, Portland, Oregon, USA. (Poster).

van Meer N.M.M.E, Salerno C.M., **Yan J.L.,** Miller C.W. (2026) Diet impacts weapon and armour quality in a puncture-weapon-bearing bug. Society for Integrative and Comparative Biology Annual Meeting, Portland, Oregon, USA. (Talk).

Yan J.L., Dobbin M.L., Rosenbaum J.R., Yang D., Chen J., Dukas R. (2025). Sexual conflict, social networks, and the fitness consequences of female multiple mating. Annual Conference of the Animal Behaviour Society, Baltimore, Maryland, USA. (Talk). **Awarded the Warder Clyde Allee Award for Best Student Paper.**

Yan J.L., Dukas R. (2025). Sexual conflict, social networks, and the fitness consequences of female multiple matings. Society for Integrative and Comparative Biology Annual Meeting, Atlanta, Georgia, USA. (Talk). **Awarded the Marlene Zuk Award for Best Talk in the Division of Animal Behaviour.**

Yan J.L., Rosenbaum J.R., Yang D., Dukas R. (2024) Optimal polyandry: the effects of multiple mating on female fitness. Annual Conference of the Animal Behaviour Society, London, Ontario, Canada (Talk).

Dukas R, Bailey N., **Yan J.L.** (2024). Evolutionary biology of social expertise. Annual Conference of the Animal Behaviour Society, London, Ontario, Canada (Talk).

N.M.T. Smith, **Yan J.L.**, Filice D.C.S., Dukas R. (2024). Winner and loser effects: A meta-analysis. Annual Conference of the Animal Behaviour Society, London, Ontario, Canada (Talk).

Yan J.L., Dobbin M.L., Dukas R. (2023). Costly traumatic insemination in bed bugs (*Cimex lectularius*) and the factors influencing female avoidance. Annual Conference of the Animal Behaviour Society, Portland, Oregon, USA. (Talk).

Yan J.L., Dobbin M.L., Dukas R. (2023). Costly traumatic insemination in bed bugs (*Cimex lectularius*) and the factors influencing female avoidance. Ontario Ecology, Ethology, and Evolution Colloquium, London, Ontario, Canada. (Talk). **Awarded Best Talk in Ethology and People's Choice Award.**

Yan J.L., Dukas R. (2022). Sexual networks and the dynamics of traumatic inseminations in bed bugs. Annual Conference of the Animal Behaviour Society, San Jose, Costa Rica. (Talk).

Yan J.L., Dukas R. (2022). Sexual networks and the dynamics of traumatic inseminations in bed bugs. Ontario Ecology, Ethology, and Evolution Colloquium, Kingston, Ontario, Canada. (Talk). **Awarded Best Talk in Ethology.**

Yan J.L., Dukas R. (2022). Sexual networks and the dynamics of traumatic inseminations in bed bugs. Department of Psychology, Neuroscience, and Behaviour Graduate Research Day, Virtual Conference. (Talk). **Awarded 2nd Best Talk.**

Kashetsky T., Doering G., **Yan J.L.,** Skelton T., Dukas R. (2022). Group expertise: The effect of experience on collective decision-making. Ecological Society of America and Canadian Society for Ecology and Evolution Joint Meeting, Montreal, Quebec, Canada. (Talk).

Yan J.L., Dukas R. (2021). Exploring the social consequences of sexual conflict through bedbug social networks. Annual Conference of the Animal Behaviour Society, Virtual Conference. (Talk).

Yan J.L., Dukas R. (2021). Exploring the social consequences of sexual conflict through bedbug social networks. Department of Psychology, Neuroscience, and Behaviour Graduate Research Day, Virtual Conference. (Talk). **Awarded Best Lightning Talk.**

Yan J.L., Baxter C.M., and Dukas R. (2019). Artificial selection on forced copulation success. Ontario Ecology, Ethology, and Evolution Colloquium, Hamilton, Ontario, Canada. (Talk).

Yan J.L., Baxter C.M., and Dukas R. (2019). Artificial selection on forced copulation success. McMaster Biology Undergraduate Symposium, Hamilton, Ontario, Canada. (Talk). **Awarded Best Talk in Psychology, Neuroscience & Behaviour.**

INVITED TALKS

Yan J.L. (2026). The behavioural and fitness consequences of polyandry: insights from bed bugs and beyond. Brain & Behaviour Seminar Series, Bielefeld University, Bielefeld, Germany.

Yan J.L., Salerno C.M., van Meer N.M.M.E., Miller C.W. (2025) Effects of diet on signal reliability and contest outcomes in a weapon-bearing insect. Behavioural Ecology Lunchtime Talk, Department of Zoology, University of Cambridge, Cambridge, UK.

Yan J.L. (2024). Examining the interplay between sexual conflict, social networks, and polyandry. Department of Psychology, Neuroscience & Behaviour Colloquium Seminar Series, McMaster University, Hamilton, Ontario, Canada.

Yan J.L., Dukas R. (2022). Sexual conflict and sexual networks in bed bugs: Mate choice, sperm competition, and the fitness cost of traumatic insemination. Evolution, Ecology & Behaviour Seminar, McMaster University, Hamilton, Ontario, Canada.

RESEARCH VISITS

Visiting Graduate Student Researcher April - June 2024
University of California, Davis
Project: Fear generalization in freshwater snails
Advisor: Dr. Andrew Sih

INVITED GUEST LECTURES

Title: Network analysis in behavioural ecology research 2026
Course: Applied Behavioural Ecology (WIS 4934), *University of Florida*
Instructor: Dr. Kelly O'Neil

Title: Sexual selection, social networks, and the adaptive significance of polyandry 2024
Course: Lectures in Animal Behaviour (BIO 328H5), *University of Toronto, Mississauga*
Instructor: Dr. Rosalind Murray

Title: A glimpse of PNB's modern animal behaviour research 2024
Course: Perspectives in Psychology, Neuroscience, & Behaviour (PNB 2XF3), *McMaster University*
Instructor: Dr. Sonia Kong

Title: Contemporary research in animal behaviour 2021
Course: Perspectives in Psychology, Neuroscience, & Behaviour (PNB 2XF3), *McMaster University*
Instructor: Dr. Sukhvinder Obhi

Title: Sexual conflict and artificial selection of sexual aggression in fruit flies 2020
Course: Special Topics in Animal Behaviour (PSYCH 4R03), *McMaster University*
Instructor: Dr. Sigal Balshine

STUDENT MENTORSHIP

I have trained over two dozen undergraduate students in laboratory skills, scientific writing, data analysis, science communication, and critical thinking across McMaster University, UC Davis, and the University of Florida. Below are individuals I spent extended time mentoring:

Year(s)	*Name*	*Position(s)*	*Post-Lab*
2026	Connor France	Independent project	Applying to medical school
2025 - 2026	Isabella Flores	NSF REU	MS in Entomology
2025 – 2026	Grace Bane	NSF REU	Applying to graduate school
2025	Cyrus Nielson	NSF REU	MS in Entomology
2025	Mollie Haremza	NSF REU	Applying to graduate school
2024 – 2025	Jacqueline Chen	NSERC USRA	Applying to medical school
2021 – 2024	Maggie Dobbin	Senior thesis, NSERC USRA, and three independent projects	Medical school
2022 – 2024	Jack Rosenbaum	Senior thesis, three independent projects	PhD in Behavioural Neuroscience
2023 – 2024	Dan Yang	Senior thesis	PhD in Ecology & Evolutionary Biology
2022 – 2023	Selena Esteves	Senior thesis	PhD in Clinical Psychology
2023	Robert Belikov	Independent project	Medical school
2022	Rishitha Garapati	Independent project	Dental school
2021	Yatharth Patel	Independent project	Medical school

TEACHING ASSISTANTSHIPS

All teaching assistantships occurred at McMaster University.

Term	*Course code*	*Course name*	*Instructor*
Winter 2024	PSYCH 3R03	Animal Behaviour Lab Course	Dr. Reuven Dukas
Fall 2023	PNB 2XC3	Animal Behaviour & Evolution (head TA)	Dr. Reuven Dukas
Winter 2023	PSYCH 3AC3	Human Sexuality	Dr. Jennifer Ostovich
Fall 2022	PNB 2XC3	Animal Behaviour & Evolution (head TA)	Dr. Reuven Dukas
Winter 2022	PSYCH 3R03	Animal Behaviour Lab Course	Dr. Reuven Dukas
Fall 2021	PNB 2XC3	Animal Behaviour & Evolution	Dr. Reuven Dukas
Winter 2021	PNB 2XE3	Descriptive Statistics and Research Methods	Dr. Ali Hashemi
Fall 2020	PNB 2XC3	Animal Behaviour & Evolution	Dr. Reuven Dukas
Winter 2019	LIFESCI 3E03	Reproductive Endocrinology	Dr. Katarina Marcinko
Fall 2019	PNB 2XC3	Animal Behaviour & Evolution	Dr. Reuven Dukas

SOCIETY MEMBERSHIPS

Animal Behaviour Society (ABS)
Society of Integrative and Comparative Biology (SICB)
International Society for Behavioral Ecology (ISBE)
Society for Open, Reliable, and Transparent Ecology and Evolutionary Biology (SORTEE)
Royal Entomological Society (RES)

SERVICE AND OUTREACH

Guest Speaker at Wembley High Technology College	2025
Guest Speaker at Hills Road Sixth Form College's Bug Society	2025
Streaming Science Electronic Field Trip Presenter	2025
Animal Behaviour Society Annual Meeting Ally	2025
Animal Behaviour Society Turner Mentor	2025
Volunteer Scientist for the Skype a Scientist Classroom Program	2024 - 2025
Volunteer Judge for McMaster PNB Undergraduate Poster Session	2022 - 2024
Volunteer Judge for the Animal Behaviour Society's Genesis Poster Competition	2023
Co-captain of Departmental Softball Team	2023
McMaster Science Society Student Mentor	2022 - 2023
McMaster PNB Graduate Student Representative	2020 - 2021
Mentor for the McMaster STEM Fellowship Competition	2021
Mentor for The Undergraduate Research in Natural and Clinical Science and Technology (URNCST) Journal	2022

PEER-REVIEW SERVICE

External journal reviewer for:
Biology Letters
Trends in Ecology and Evolution
Ecology and Evolution
Behavioural Ecology and Sociobiology
Insect Science