

Joshua Johnstone Amiel

801-1005 Beach Avenue Vancouver, BC V6E 3W2

✉: amieljj@gmail.com ☎: 1 (604) 230 7450

Summary of Qualifications:

- BCTF and IB-DP certified.
- Excellent interpersonal skills.
- Strong community involvement.
- Extensive knowledge of subject areas.

Education:

- *B.Ed.* – The University of British Columbia, Canada, expected August 2013 (secondary biology and International Baccalaureate specialization).
- *Ph.D.* – The University of Sydney, Australia, November 2013. Thesis title: Developmental and evolutionary determinants of brain properties and intelligence in amphibians and reptiles.
- *B.Sc.* (honours) Dalhousie University, May 2009. Thesis title: “Physiological and behavioural adaptations of the eastern ribbon snake (*Thamnophis sauritus*) to cold climates.” GPA: 4.16 (4.3 scale).

Teaching Experience:

- *West Point Grey Academy* (field experience placement) – April-May 2015
 - Outdoor education
 - Junior and senior school lessons
- *West Vancouver Secondary School* (practicum) – February-April 2015
 - Science 10: Biology Unit.
 - Biology 12: Nervous, circulatory, and respiratory systems.
 - Standard Level IB Biology: Nervous and reproductive systems.
 - Higher Level IB Biology: Nervous and reproductive systems.
- *University of Sydney* – January-December 2013
 - S.T.E.M. high school outreach demonstrator.
 - Kickstart high school outreach science communicator.
 - Tropical wildlife and biology management field course demonstrator.

Research Experience:

- *University of British Columbia* – January 2015-present
 - Actively researching an extension for Variation Theory, which I developed.
- *University of Sydney* – March 2010-November 2013
 - Completed three long-term herpetological research projects.
 - Published six research papers in top academic journals.
 - Interviewed by BBC, ABC, and German Public Radio.
 - Acted as media review editor for the Canadian Herpetologist.
 - Supervised junior researchers.

Community Involvement:

- *West Vancouver Secondary*: senior tennis team assistant – Apr 2015
- *Make-a-wish BC and Yukon*: volunteer – Aug 2014-present

Professional Development:

- I am currently delivering a series of invited lectures exploring the effects of hormones on gender-stereotyped behaviours in the classroom.
- In 2015, I have attended professional development workshops on the IB curriculum, play, use of technology, LGBTQ rights and mental health.

Academic accomplishments:

Publications

1. **Amiel, JJ**, Bao, S and Shine, R (under review) The effects of incubation temperature on forebrain development in a lizard (*Bassiana duperreyi*). *PLoS Biology*.
2. Shine, R, **Amiel, JJ**, Munn, A, Stewart, M, Vyssotski, A and Lesku, J (in press) To kill an ectotherm: freezing is a humane method of euthanasia for most amphibians and reptiles. *Biology Open*.
3. **Amiel** JJ, Bezzina, C and Shine R 2014 Does invasion success reflect superior cognitive ability? A case study using two congeneric lizard species (*Lampropholis*, Scincidae). *PLoS ONE*.
4. **Amiel**, JJ, Lindström, T and Shine, R 2014 Egg incubation effects generate positive correlations between size, speed and learning ability in young lizards. *Animal Cognition*: 1-11.
5. Clark, BF, **Amiel**, JJ, Noble, DWA, Shine, R and Whiting, M 2014 Colour discrimination and associative learning in hatchling lizards incubated at 'hot' and 'cold' temperatures. *Behavioural Ecology and Sociobiology*: 1-9.
6. **Amiel**, JJ and Shine R 2012 Hotter nests produce smarter young lizards. *Biology Letters*, **8**, 372-374. Coverage by ABC, BBC, Science NOW, COSMOS, Wired.com, Livescience.com and New Scientist.
7. **Amiel**, JJ, Tingley, R and Shine, R 2011 Smart moves: effects of relative brain size on establishment success of invasive amphibians and reptiles. *PLoS ONE*, **6**:e18277. Coverage by Conservation Magazine.
8. **Amiel**, J, Chua, B, Jones, D and Wassersug R 2011 Temperature-dependent regulation of blood distribution in snakes. *Journal of Experimental Biology*, **214**, 1458-1462. Coverage by Herpetological Review.
9. Lockhart, J and **Amiel**, J 2011 A case of tail pseudoautotomy in the water snake (*Nerodia sipedon*). *Herpetological Review*, **42**, 296-297.
10. **Amiel**, JJ and Wassersug, R 2010 Temperature differentials between the bodies and tails of ribbon snakes (*Thamnophis sauritus*): ecological and physiological implications. *Amphibia-Reptilia*, **31**, 257-263.
11. Todd, J, **Amiel**, JJ and Wassersug, R 2010 Factors influencing the emergence of a northern population of eastern ribbon snakes (*Thamnophis sauritus*) from artificial hibernacula. *Canadian Journal of Zoology*, **87**, 1221, 1226.

Presentations and Invited Seminars

1. **Amiel**, JJ 2015 Gender, sex, and behaviour in the classroom (invited seminar). University of the Fraser Valley, Abbotsford, BC, Canada.
2. **Amiel**, JJ 2015 Gender, sex and behaviour. WestCAST, University of Saskatchewan, Saskatoon, SK, Canada.
3. **Amiel**, JJ 2013 Developmental and evolutionary determinants of brain properties and intelligence in amphibians and reptiles (invited seminar). LaTrobe University, Melbourne, VIC, Australia.
4. **Amiel**, JJ 2011 Variations in learning behaviour in amphibians and reptiles (oral presentation). Departmental Seminar, University of Sydney, Sydney, NSW, Australia.
5. **Amiel**, JJ 2011 Temperature-dependant control of blood distribution in snakes (oral presentation). Joint Meeting of Ichthyologists and Herpetologists, Minnesota, MN, United States of America.
6. **Amiel**, JJ 2010 Herps in the frozen north: thermoregulatory strategies of cold climate species (invited seminar). Royal Zoological Society of Southern Australia, Sydney, NSW, Australia.

7. **Amiel, JJ** 2009. Physiological and behavioural adaptations of the ribbon snakes (*Thamnophis sauritus*) to cold climates (oral presentation). Society for Integrative and Comparative Biology Annual Meeting, Boston, MAS, United States of America.

Awards

- | | |
|--|---------|
| 1. University of British Columbia, Mary A Bryant Scholarship. | 2014 |
| 2. University of Sydney, Jabez King Heydon Award (most meritorious PhD thesis). | 2014 |
| 3. Natural Sciences and Engineering Research Council of Canada, Postgraduate Research Scholarship (PGS-D). | 2011-13 |
| 4. Australian National Imaging Foundation, Subsidy Grant. | 2011-12 |
| 5. University of Sydney, Postgraduate Research Support Scheme Travel Grant. | 2011-12 |
| 6. Natural Sciences and Engineering Research Council of Canada, Postgraduate Research Scholarship (PGS-M). | 2010 |
| 7. University of Sydney, International Postgraduate Student Research Scholarship. | 2010-13 |
| 8. University of Sydney, International Postgraduate Award. | 2010-13 |
| 9. Canada Millennium Scholarship. | 2009 |
| 10. Constance I. MacFarlane Scholarship. | 2009 |
| 11. Dalhousie University, In-course Scholarship. | 2008 |
| 12. University of British Columbia, Rising Stars of Research National Poster Competition, Runner-up, Discovery Division. | 2008 |
| 13. Natural Sciences and Engineering Research Council of Canada, Undergraduate Student Research Award. | 2008 |
| 14. Dalhousie University, Developmental Biology Award. | 2008 |
| 15. Natural Sciences and Engineering Research Council of Canada, Undergraduate Student Research Award. | 2007 |
| 16. Dalhousie University, David Andrew Dougall Bursary. | 2007 |