

KIERAN SAMUK

citizenship Canadian
email ksamuk@gmail.com
website ksamuk.github.io
twitter [@ksamuk](https://twitter.com/ksamuk)

CURRENT POSITION

Postdoc 2016– Duke University
Mentor: Dr. Mohamed Noor
Project: *Adaptive evolution of recombination rate in Drosophila pseudoobscura*

EDUCATION

PhD 2016 University of British Columbia
Advisor: Dr. Dolph Schluter
Thesis: *The genomics of adaptation and speciation in threespine stickleback*

MSc 2011 University of British Columbia
Advisor: Dr. Leticia Avilés
Thesis: *Sociality in cobweb spiders: evolutionary consequences and the role of pre-existing traits*

HBSc 2008 University of Toronto
Honors Advisor: Dr. James Thomson
Thesis: *The ontogeny of social networks and division of labour in bumble bee colonies.*

PUBLICATIONS

- 2019 Owens, G.L., **Samuk, K.** Adaptive introgression during environmental change can weaken reproductive isolation. *bioRxiv*, <https://doi.org/10.1101/553230>
- 2018 Miller, S.E., Legan, A.W., Henshaw, M., Ostevik, K.L., **Samuk, K.**, Uy, F.M., Reeve, H.K. and Sheehan, M.J., Evolutionary dynamics of recent selection for enhanced social cognition. *bioRxiv*, <https://doi.org/10.1101/425215>
- 2018 **Samuk, K.***, Xue, J.* and Rennison, D. J. 2018. Exposure to predators does not lead to the evolution of larger brains in experimental populations of threespine stickleback. *Evolution*, 72: 916–929. doi: 10.1111/evo.13444. Equal co-authorship with J. Xue.
- 2017 **Samuk, K.**, Owens, G. L., Delmore, K. E., Miller, S., Rennison, D. J. and Schluter, D. 2017. Gene flow and selection interact to promote adaptive divergence in regions of low recombination. *Molecular Ecology*, 26: 4378–4390.
 - Featured as a "From the Cover" article
 - Recommended on Faculty of 1000 (2017)
- 2016 **Samuk, K.** 2016. Perspective: Inversions and the origin of behavioral differences in cod.

Molecular Ecology, 25(10):2111–2113.

- 2016 Miller, S.E., **Samuk, K.**, and Rennison, D.J., 2016. An experimental test of the effect of predation upon behaviour and trait correlations in the threespine stickleback. *Biological Journal of the Linnean Society*, 119(1): 117–125.
- 2014 **Samuk, K.**, Iritani, D. and Schluter, D. 2014. Reversed brain size sexual dimorphism accompanies loss of parental care in white sticklebacks. *Ecology and Evolution*, 4(16): 3236–3243.
- 2013 **Samuk, K.** and Avilés, L. 2013. Indiscriminate care of offspring predates the evolution of sociality in alloparenting social spiders. *Behavioral Ecology and Sociobiology*, 67(8): 1275–1284.
- 2011 **Samuk, K.**, LeDue, E.E., and Avilés, L. 2011. Sister clade comparisons reveal reduced maternal care behavior in social cobweb spiders (*Anelosimus* spp.). *Behavioral Ecology*, 23(1): 35–43.

SCHOLARSHIPS & AWARDS

- 2018 NSERC Postdoctoral Fellowship – \$90 000
- 2018 NSF BIO Research Grant: "An experimental test of the role of chromosomal inversions in adaptive evolution" Formal PI: M Noor. Conceived of and authored by K Samuk– \$200 000
- 2017 Duke Core Facility Research Award – \$6500
- 2016 SSE Hamilton Symposium Travel Award – \$500
- 2015 Society for Integrative and Comparative Biology Research Award – \$1000
- 2014 University of British Columbia Four Year Fellowship – \$20 000
- 2011 NSERC Canada Graduate Scholarship (3 years) – \$105 000
- 2010 Royal Society Publishing prize for Best Poster at IUSSI – \$500
- 2009 NSERC Alexander Graham Bell Canada Graduate Scholarship – \$84 000
- 2008 NSERC Undergraduate Research Award – \$9 000
- 2008 Dr. James A. and Connie P. Dixon Award – \$500

PRESENTATIONS & CONTRIBUTIONS

- 2018 Adaptive evolution of recombination rate in *Drosophila pseudoobscura*
Talk · *South Eastern Population Ecology and Evolutionary Genetics 2018*
- 2018 The role of gene flow in shaping evolutionary processes
Invited Seminar · *East Carolina University RIP Seminar Series*
- 2017 The evolution and consequences of recombination rate variation
Invited Seminar · *University of North Carolina BioPop Seminar Series*
- 2017 Incipient speciation without trophic specialization in the white stickleback
Talk · *Evolution*

- 2017 Natural selection and diversification in the threespine stickleback
Invited Seminar · *Duke University PopBio Seminar Series*
- 2016 Clustering of adaptive alleles is favored by gene flow in a globally distributed species
Talk · *Evolution*
- 2015 Selection with gene flow favours reduced recombination in adaptive genomic regions in global stickleback populations
Talk · *Evolution*
- 2013 Genomic signatures of reproductive isolation in the white stickleback.
Poster · *European Society for Evolution Biology*
- 2010 The origin and consequences of cooperative breeding in social cobweb spiders.
Talk · *EcoEvo Retreat*
- 2010 The origin of alloparental care in social cobweb spiders.
Poster · *International Union for the Study of Social Insects*
- 2009 The Evolution of Alloparental Care in Social Comb-Footed Spiders.
Talk · *EcoEvo Retreat*
- 2008 Bumble Bee Social Networks Correlate with Division of Labour.
Poster · *Canadian Society for Evolution and Ecology*
- 2008 Horizontal Transmission of a Parasitic Mite in Bumble Bee Colonies.
Poster · *University of Toronto USRA Research Fair*

TEACHING

- 2019 Certified Software Carpentry Instructor
- 2015 Head TA – Data Wrangling, Exploration, and Analysis with R
 - *Aided in developing course material*
 - *Guest lectured "Regular Expressions in R"*
- 2014 TA – Evolutionary Ecology
- 2011 TA – Fundamentals of Evolutionary Biology
- 2010 TA – Introduction to Entomology
- 2010 TA – Animal Behaviour
- 2009 TA – Animal Behaviour
- 2008 TA – Introduction to Saltwater Ecosystems

PROFESSIONAL SERVICE & OUTREACH

- Reviewing* Biological Journal of the Linnean Society, Ecology and Evolution, Genetics, Molecular Ecology, Molecular Biology and Evolution, PLoS Genetics, Proceedings of the Royal Society B., PNAS
- 2016 Invited speaker at Elder U (senior-citizen science outreach) at Capilano University
- 2016 Volunteer Instructor & Guru for UBC's "R Club"

2015	Facilitator & organizer for the UBC Biodiversity Seminar series
2013	Student Mentor for UBC Zoology Graduate Mentorship Program
2011	Volunteer for the UBC/SFU/UVic EcoEvo Retreat
2011	Student organizer for UBC Biodiversity Internal Seminar Series

Last updated 05-07-2019