

# SILU WANG

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## CURRENT POSITION

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**Postdoc** Jan. 2020 - *present* University of California, Berkeley (UC Berkeley)  
Mentor: Dr. Doris Bachtrog  
Project: *Speciation genomics in Drosophila hybrid swarms*

## EDUCATION

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**PhD Zoology**  
University of British Columbia (UBC), defended in December 2019. Advisor: Darren Irwin  
**MA Ecology, Evolution & Behavior; Computer Science (minor)**  
University of Texas at Austin (UT Austin), 2014. Advisor: Molly Cummings  
**BS Behavior, Genetics & Neurobiology; Applied Statistics (minor)**  
University of Toronto (U of T), *high distinction*, 2011. Advisor: Marla Sokolowski

## PUBLICATIONS

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Price S. Schumer M. Young R.L. **Wang S.** & Cummings M. 2020. Immune genomic response associated with preference behavior: an examination in a freshwater fish. *Journal of Immunology*. 204: 92.34.  
**Wang S.** Rohwer S. Delmore K. Irwin DE. 2019. Cross-decades stability of an avian hybrid zone. *Journal of Evolutionary Biology*. 32: 1242-1251.  
**Wang S.** & Sokolowski M. B. 2017. Aggressive behaviours, food-deprivation and the *foraging* gene. *Royal Society Open Science*. 4:170042.  
**Wang S.** Cummings M. E. & Kirkpatrick M. A. 2015. Coevolution of male courtship and sexual conflict characters in mosquitofish. *Behavioral Ecology*. 26:1013-1020.  
**Wang S.** 2014. Mating evolution in *Gambusia* (Poeciliidae): an integration of behavior, molecules and morphology (Master's Thesis). University of Texas, Austin, TX.  
**Wang S.M.T.** Ramsey M. & Cummings M. E. 2014. Plasticity of the mate choice mind: courtship evokes choice-like brain responses in females from a coercive mating system. *Genes, Brain and Behavior*. 13:365-375.

### Manuscripts

**Wang S.** Rohwer S., de Zwaan D. R. Mackenzie J. Irwin DE. Selection on a pleiotropic plumage gene region underpins early differentiation between two warbler species. [In review](#).  
**Wang S.** Ore M. Mikkelsen E. Lee-Yaw, J. Rohwer S. Irwin DE. Signatures of mito-nuclear climate adaptation in a warbler species complex. [In review](#).  
**Wang S.** Coevolution of song and egg coloration: multimodal mating signals? [Submitted](#).  
**Wang S.** de Zwaan D. R. Mackenzie J., Irwin DE. Badges of status fades in a *Setophaga* hybrid zone. *In prep*.  
MacPherson A. **Wang S.** P. Rieseberg L. Yamaguchi R. Otto S. Parental population isolation and range expansion before secondary contact leads to greater hybrid relative fitness. *In prep*.

## ORAL PRESENTATIONS (\*best talk)

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- 2019** The Society for the Study of Evolution meeting, Providence, Rhode Island, USA.  
**2019\*** Eco-Evo Retreat, Brackendale, BC, Canada.  
**2018** International Ornithological Congress meeting, Vancouver, BC, Canada.  
**2017** The Society for the Study of Evolution meeting, Portland, OR, USA.  
**2017** Canadian Society for Ecology and Evolution meeting, Victoria, BC, Canada.  
**2016** North American Ornithological Congress, Washington, DC, USA.  
**2015** American Ornithologists' Union & Cooper's Ornithological Society meeting, OK, USA.  
**2014** International Ornithological Congress, Tokyo, Japan.  
**2014** American Society of Naturalists meeting, Pacific Grove, CA, USA.  
**2014** Society for Integrative and Comparative Biology Meeting, Austin, TX, USA.  
**2012** The Society for the Study of Evolution, Ottawa, ON, Canada.  
**2012** Animal Behavior Society meeting, Albuquerque, NM, USA.  
**2011** American Ornithologists' Union, Jacksonville, FL, USA.

### POSTERS (\*best poster)

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- 2019\*** The Society for the Study of Evolution, Providence, RI, USA.  
**2018** Evo-Wibo Conference, Port Townsend, WA, USA.  
**2018** Evo-Eco Department Retreat, Blackendale, BC, Canada.  
**2018\*** UBC Zoology Graduate Spring Symposium, Vancouver, BC, Canada.  
**2017** The Society for the Study of Evolution Meeting, Portland, OR, USA.  
**2017\*** UBC Zoology Graduate Symposium, Vancouver, BC, Canada.  
**2010** Ontario Biology Day, Toronto, ON, Canada.  
**2010** Crime Prevention Conference, Mississauga, ON, Canada.

### INVITED PRESENTATION

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- 2019** Center of Theoretical Evolutionary Genomics seminar, UC Berkeley.  
**2013** Lunch seminar, School of Geological Science, UT Austin.  
**2013** Brain, Behavior & Evolution (BBE) Seminar, UT Austin.  
**2013** Department Seminar, University of Oklahoma.  
**2012** BBE Seminar, UT Austin.  
**2012** Integrative Biology Graduate Symposium, UT Austin.

### AWARDS GRANTS & HONORS

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|------------------|---|----------|
| <b>2019</b>      | Ruth Patrick Student Poster Award, American Society of Naturalists  | \$1,000  |
| <b>2019</b>      | Zoology Travel Award, Department of Zoology, UBC                    | \$500    |
| <b>2019</b>      | Best Talk Award, Eco-Evo Retreat, Brackendale, BC                   |          |
| <b>2018-2019</b> | Zoology Graduate Fellowship, UBC                                    | \$16,000 |
| <b>2018</b>      | Gibson's citation, Green College, UBC                               |          |
| <b>2018</b>      | Best Poster Award, Zoology Graduate Spring Symposium                |          |
| <b>2018</b>      | Graduate Student Travel Fund, UBC                                   | \$500    |
| <b>2017</b>      | Best Poster Award, Zoology Graduate Spring Symposium                |          |
| <b>2016</b>      | Werner and Hildegard Hesse Research Award in Ornithology            | \$2,500  |
| <b>2015-2018</b> | Postgraduate Scholarship D (PGS D)                                  |          |
|                  | Natural Sciences and Engineering Research Council of Canada (NSERC) | \$63,000 |

2015	Werner and Hildegard Hesse Research Award in Ornithology	\$3,500
2014	Biodiversity Research: Integrative Training & Education Grant, UBC	\$4,000
2014	R Howard Webster Foundation Fellowship, UBC	\$2,500
2014-2018	Four Year Doctoral Fellowship, UBC	\$18,000
2014	Student Travel grant, International Ornithological Congress	\$500
2014	Travel grant, Ecology, Evolution and Behavior, UT Austin	\$1,000
2012-2013	Texas Ecolab Research Grant	\$3,000
2011	Student Travel Award, American Ornithologists' Union	\$600
2011	Ontario Graduate Scholarship, Ministry of Training, Colleges and Universities of Ontario	\$6,000
2011	Excellence Award in the Natural Sciences and Engineering, U of T	\$5,600
2010-2011	Honor Roll in Department of Mathematical and Computational Sciences, U of T	
2010	Student Membership Award, American Ornithologists' Union	

## PROGRAMMING EXPERIENCE

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• <b>R:</b>	Population Genomics - admixture mapping, spatial genetics Phylogenetics - ancestral reconstruction, trait coevolution Network Modeling - subsampling vertices and quantifying features Frequentist & Bayesian statistics
• <b>UNIX:</b>	Regular expressions related to parsing sequences SAS - Structural Equation Modeling
• <b>Python:</b>	Sequence processing & alignment Maximum likelihood estimates search

## TEACH-ASSISTANCE EXPERIENCE

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• BIOL336:	Fundamentals of Evolution Biology, UBC	2018 Spring and Fall
• BIO321:	Introduction to Computational Biology, UT Austin	2014 Spring
• BIO370:	Evolution, UT Austin	2012 Spring, 2013 Fall
• BIO311:	Introductory Biology, UT Austin	2012 Fall
• BIO206:	Structure & Function of Organisms, UT Austin	2012 Summer
• BIO318:	Biostatistics, UT Austin	2011 Fall
• STA257:	Probability and Statistics I, U of T	2010 Fall
• BIO329:	Mammalian Biology field section, U of T	2009 Fall

## MENTORING EXPERIENCE

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Korey Conley: Fall 2013; Ruth Midgley: Summer 2015; Else Mikklesen: Summer 2016-Summer 2017; Jacqueline Mackenzie: Summer 2017.

## OUTREACH

### *Community Service*

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2020-present	Speciation & Introgression Genomics Discussion Group, coordinator, IB, UCB
2015-18	Biodiversity Birding Group Coordinator, Biodiversity Research Center, UBC
2015-16	Art Committee, Co-Chair, Green College, UBC
2017-18	Sustainability Committee, Co-Chair, Green College, UBC
2017-19	Biodiversity Seminar Committee, A/V coordinator, Biodiversity Research Center, UBC
2018	Dining Society Treasurer, Green College, UBC
2019	Nature Illustration Club Coordinator, Biodiversity Research Center, UBC

2019 Girls in Science Technology Engineering and Math (STEM), mentor, Templeton Secondary School, Vancouver

***Public lectures***

- Sassy tastes or sexy traits: stories about coevolution of female preference and male traits. Darwin's 203rd Birthday, **May 11<sup>th</sup> 2012**, Texas Memorial Museum.
- The Scales of Existence: A Journey from Population to Molecules (Collaborated with Isobel Mouat, Microbiology and Immunology; Kelsey Huus, Microbiology and Immunology; J. Andrew Alexander, Biochemistry and Molecular Biology), **Nov. 16<sup>th</sup> 2015**, UBC.
- The Hermits' Expeditions: Stories About The Habitat, Flora, Fauna And People In Northwest America, **Sep. 26<sup>th</sup> 2016**, Green College, UBC.
- On the Speciation of Species: the fantastic process underlying biodiversity, **Mar. 26<sup>th</sup> 2018**, Green College, UBC.