

# 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

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

## PROGRAMMING EXPERIENCE

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- R:** Population Genomics - admixture mapping, spatial genetics  
Phylogenetics - ancestral reconstruction, trait coevolution  
Network Modeling - subsampling vertices and quantifying features  
Frequentist & Bayesian statistics
- UNIX:** Regular expressions related to parsing sequences  
SAS - Structural Equation Modeling
- Python:** 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

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### *Community Service*

- 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.