**SILU WANG**

Department of Zoology , UBC

6270 University Blvd.

Vancouver BC,

V6T 1Z4, Canada

<http://siluwang.weebly.com>

**EDUCATION**

**PhD Zoology**

University of British Columbia (UBC), expected 2019. Advisor: Darren Irwin

**MA**      **Ecology, Evolution & Behavior**;Computer Science (minor)

University of Texas at Austin (UT Austin), 2014

**BS**      **Behavior, Genetics & Neurobiology**; Applied Statistics(minor)

University of Toronto, *high distinction*, 2011

**PUBLICATION**

**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](https://repositories.lib.utexas.edu/bitstream/handle/2152/31853/WANG-THESIS-2014.pdf?sequence=1" \t "_blank)). 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. Delmore K. Irwin D. E. Cross-decades stability of an avian hybrid zone. *In review.*

**Wang S.** Rohwer S., de Zwaan D. R. Mackenzie J. Irwin D. E. Stable selection on a pleiotropic locus

maintaining plumage variation in a warbler hybrid zone. *[Approved by advisor waiting to*

*submit]*.

**Wang S.** Ore M. Mikklesen E. Rohwer S. Irwin D. E. Isolation, ancient hybridization, mitochondrial-

nuclear concordance in coastal warbler populations. *[2nd round of editing]*.

**Wang S.** de Zwaan D. R. Mackenzie J., IrwinD. E. Badges of status fades in a *Setophaga* hybrid zone.

*[3rd round of editing]*.

**Wang S.**\* MacPherson A.\* Otto S. P. Rieseberg L. Yamaguchi R. Irwin D. E. Parental population

isolation and range expansion before secondary contact leads to greater hybrid relative fitness. (\*these authors contributed equally to the project). *[outline completed]*.

**CONFERENCE PRESENTATIONS**

**Wang S.** Mitochondrial-nuclear genetic concordance explains coastal-inland Townsend’s Warbler

population differentiation. 2019. *Eco-Evo Retreat*, Brackendale, BC, Canada. [Best Talk]

**Wang S.** Rohwer S. MacPherson A. Irwin D. E. 2018. Admixture mapping identifies a candidate gene,

RALY, for warbler plumage. *International Ornithological Congress*, Vancouver, BC, Canada.

**Wang S.** & Irwin, D. E. 2017. The footprints of a moving *Setophaga* warbler hybrid zone. *The Society for*

*the Study of Evolution*. Portland, OR. USA.

**Wang S.**& Irwin, D. E. 2017. Tracing the footprints of a moving *Setophaga* warbler hybrid zone.

*Canadian Society for Ecology and Evolution*, Victoria, BC. Canada.

**Wang S.** & Irwin, D. E. 2016. The footprints of a moving *Setophaga* warbler hybrid zone: an analysis of

plumage and behavior over space and time. *North American Ornithological Congress*. Washington, DC.

USA.

**Wang S.** Kenyon H. Alcaide M. Delmore K. Toews D. & Irwin D. E. 2015. Comparative population

genomics in three *Setophaga* species: A revisit of ice-age speciation hypothesis. *American*

*Ornithologists’ Union & Cooper’s Ornithological Society*, Norman, Oklahoma, USA.

**Wang S.** 2014.Breeding habitats and song structures shed light on evolutionary mechanisms of

tinamou (Tinamidae, Tinamiformes) sexual dimorphisms. *International Ornithological Congress*. Tokyo, Japan.

**Wang S.** Cummings M. E. & Kirkpatrick M. 2014. Coevolution of male courtship and sexual conflict

characters in mosquitofish. *American Society of Naturalists*. Pacific Grove, California, USA.

**Wang S.** Ramsey M. & Cummings M. E. 2014. Plasticity of the mate choice: a courter male evokes

choice-like brain response in a coercive female. *Society for Integrative and Comparative Biology*, Austin, Texas, USA.

Schumer M. E. **Wang S.** & Cummings M. E. 2014. Influences of mate preference behavior on

patterns of brain gene expression in the sailfin molly *Poecilia latipinna. Society for Integrative and Comparative Biology*, Austin, Texas, USA.

**Wang S.** Peden A. & Cummings M. E. 2012. On coevolution of male courtship sequence and

female mating characters in "coercive" *Gambusia*. *The Society for the Study of Evolution*,

Ottawa, Ontario, Canada.

**Wang S.** & Cummings M. E. 2012. Evoking preference in female mosquito fish (*Gambusia Affinis*)

by a novel male stimuli. *Animal Behavior Society*, Albuquerque, New Mexico, USA.

**Wang S.** 2011. Investigating Habitat Selection Hypothesis with three *Dendroica* warbler species.

*American Ornithologists’ Union*, Jacksonville, Florida, USA.

**POSTERS**

**Wang** **S.** Wang A. & Havelka M. 2010. *Ontario Biology Day*, Toronto, ON, Canada.

[Dionyssiou](https://webmail.utoronto.ca/imp/message.php?index=3055) S. **Wang** **S.** &Weir A. 2010. *Crime Prevention Conference*, Missisauga, ON, Canada.

Mikkelsen E. **Wang** **S.**& Irwin D. E. 2017. *Zoology Graduate Symposium*. Vancouver, BC, Canada.

Matthey-Doret R. & **Wang, S**. 2017. *Evolution Meeting*. Portland, OR, USA.

**Wang S.** Macpherson A., & Yamaguchi R. 2018. *Evo-Eco Retreat*. Blackendale, BC, Canada.

**Wang S.** Rohwer S. McPherson A. Mikklesen E. Delmore K. & Irwin D.E. 2018. *Zoology Graduate Spring*

*Symposium*. Vancouver, BC, Canada. [Best Poster]

**Wang S.** Rohwer S. McPherson A. Mikklesen E. Delmore K. & Irwin D.E. 2018. *Evo-Wibo*. Port

Townsend, WA, USA.

**INVITED PRESENTATION**

**Wang S.** 2013.Detecting coevolution between sexually-conflicting morphologies and courtship display

in livebearer fish. Lunch seminar, School of Geological Science, UT Austin.

**Wang S.** Ramsey, M. & Cummings M. E. 2013. Plasticity of female mating bias. Brain, Behavior

& Evolution (BBE) Seminar, UT Austin.

**Wang S.** 2013. Coercion, courtship and preference in livebearer fishes: two evolutionary secrets under

neurogenetics and reproductive morphologies. Department Seminar, Oklahoma University.

**Wang S.** Cummings M. E. & Kirkpatrick M. 2012. The potential behavior byproduct of Sexually

Antagonistic Coevolution (SAC): a case study in *Gambusia*. BBE Seminar, UT Austin.

**Wang S.** 2012. Food & “Ritual”: Aggressive Behavioral Transition Network in Fruit Flies. Integrative

Biology Graduate Symposium, UT Austin.

**AWARDS, GRANTS AND HONORS**

**2019** Zoology Travel Award, Department of Zoology, UBC ($500)

**2019** Best Talk Award, Eco-Evo Retreat, Brackendale, BC

**2018-2019** Zoology Graduate Fellowship, UBC ($16,000)

**2018** Gibson’s citation, Green College, UBC

**2018** Best Poster Award, Zoology Graduate Spring Symposium

**2018** Graduate Student Travel Fund, UBC ($500)

**2017** Best Poster Award, Zoology Graduate Spring Symposium

**2016** Werner and Hildegard Hesse Research Award in Ornithology ($2500)

**2015-2018** Postgraduate Scholar ship D (PGS D)

Natural Sciences and Engineering Research Council of Canada (NSERC) $63,000

**2015** Werner and Hildegard Hesse Research Award in Ornithology ($3500)

**2014** Biodiversity Research: Integrative Training & Education Grant, UBC ($4000)

**2014** R Howard Webster Foundation Fellowship, UBC ($2500)

**2014-2018** Four Year Doctoral Fellowship, UBC ($18000)

**2014** Student Travel grant, International Ornithological Congress ($500)

**2014** Travel grant, Ecology, Evolution and Behavior, University of Texas, Austin ($1000)

**2012**-**2013** Texas Ecolab Research Grant ($3000)

**2011** Student Travel Award, American Ornithologists’ Union ($600)

**2011** Ontario Graduate Scholarship, Ministry of Training,

Colleges and Universities of Ontario ($6000)

**2011** University of Toronto Excellence Award in the Natural Sciences and Engineering ($5600)

**2010**-**2011** Honor Roll in Department of Mathematical and Computational Sciences,

University of Toronto

**2010** Student Membership Award, American Ornithologists’ Union ($28)

**PROGRAMMING EXPERIENCE**

•**R**: Population Genomics, Phylogenetics, Network Modeling, Frequentist & Bayesian statistics. •**UNIX**: Structural Equation Modeling with SAS; Genomic Analysis. •**Python**: Frequentist & Bayesian statistics related to bioinformatics.

**TEACH-ASSISTANCE EXPERIENCE**

• BIOL336: **Fundamentals of** **Evolution Biology**, UBC (Jan. - May 2018; Sep. - Dec. 2018).

• BIO321: **Introduction to Computational Biology**, UT Austin (Jan. - May 2014)

• BIO370: **Evolution**, UT Austin (Jan. - May 2012; June - Dec. 2013).

• BIO311: **Introductory Biology**, UT Austin (Sept. - Dec. 2012).

• BIO206: **Structure & Function of Organisms**, UT Austin (July - Sept. 2012).

• BIO318: **Biostatistics**, UT Austin (Sept. - Dec. 2011).

• STA257: **Probability and Statistics I**, University of Toronto (Sept. - Dec. 2010).

• BIO329: **Mammalian Biology** (BIO329) field section, University of Toronto (Sept. - Dec. 2009).

**MENTORING EXPERIENCE**

Korey Conley Fall 2013

Ruth Midgley Summer 2015

Else Mikklesen Summer 2016-Summer 2017

Jacqueline Mackenzie Summer 2017

**OUTREACH**

***Community Service***

2015-18 Biodiversity Birding Group, Group Coordinator, Biodiversity Research Center, UBC

2015-16 Art Committee, Co-chairing, 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, **May11th 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. 16th 2015**. UBC.
* The Hermits’ Expeditions: Stories About The Habitat, Flora, Fauna And People In Northwest America. **Sep 26th 2016**. Green College. UBC.
* On the Speciation of Species: the fantastic process underlying biodiversity, **Mar. 26th 2018**. Green College, UBC.