## **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. Advisor: Molly Cummings
- **BS** Behavior, Genetics & Neurobiology; Applied Statistics (minor)
  University of Toronto (U of T), high distinction, 2011. Advisor: Marla Sokolowski

#### **PUBLICATIONS**

- **Wang S.** Rohwer S. Delmore K. Irwin DE. Cross-decades stability of an avian hybrid zone. *Accepted. Journal of Evolutionary Biology*.
- **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 (\*equal contribution).

- **Wang S.** Rohwer S., de Zwaan D. R. Mackenzie J. Irwin DE. Stable selection on a pleiotropic locus underlying divergent plumage traits between two warbler species. *In revision*.
- **Wang S.** Ore M. Mikklesen E. Rohwer S. Irwin DE. Mito-nuclear complexes in ancient hybrid warbler populations. *In prep.*
- **Wang S.** de Zwaan D. R. Mackenzie J., Irwin DE. Badges of status fades in a *Setophaga* hybrid zone. *In prep*.
- **Wang S.\*** MacPherson A.\* Otto S. P. Rieseberg L. Yamaguchi R. Irwin DE. Parental population isolation and range expansion before secondary contact leads to greater hybrid relative fitness. *In prep.*

## **ORAL PRESENTATIONS** (\*best talk)

- 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)

- 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, Missisauga, ON, Canada.

#### INVITED PRESENTATION

- 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**

Ruth Patrick Student Poster Award, American Society of Naturalists	\$1,000
Zoology Travel Award, Department of Zoology, UBC	\$500
Best Talk Award, Eco-Evo Retreat, Brackendale, BC	
Zoology Graduate Fellowship, UBC	\$16,000
Gibson's citation, Green College, UBC	
Best Poster Award, Zoology Graduate Spring Symposium	
Graduate Student Travel Fund, UBC	\$500
Best Poster Award, Zoology Graduate Spring Symposium	
Werner and Hildegard Hesse Research Award in Ornithology	\$2,500
Postgraduate Scholar ship D (PGS D)	
Natural Sciences and Engineering Research Council of Canada (NSERC)	\$63,000
Werner and Hildegard Hesse Research Award in Ornithology	\$3,500
Biodiversity Research: Integrative Training & Education Grant, UBC	\$4,000
R Howard Webster Foundation Fellowship, UBC	\$2,500
Four Year Doctoral Fellowship, UBC	\$18,000
Student Travel grant, International Ornithological Congress	\$500
Travel grant, Ecology, Evolution and Behavior, UT Austin	\$1,000
Texas Ecolab Research Grant	\$3,000
Student Travel Award, American Ornithologists' Union	\$600
Ontario Graduate Scholarship, Ministry of Training,	
Colleges and Universities of Ontario	\$6,000
Excellence Award in the Natural Sciences and Engineering, U of T	\$5,600
	Zoology Travel Award, Department of Zoology, UBC Best Talk Award, Eco-Evo Retreat, Brackendale, BC Zoology Graduate Fellowship, UBC Gibson's citation, Green College, UBC Best Poster Award, Zoology Graduate Spring Symposium Graduate Student Travel Fund, UBC Best Poster Award, Zoology Graduate Spring Symposium Werner and Hildegard Hesse Research Award in Ornithology Postgraduate Scholar ship D (PGS D) Natural Sciences and Engineering Research Council of Canada (NSERC) Werner and Hildegard Hesse Research Award in Ornithology Biodiversity Research: Integrative Training & Education Grant, UBC R Howard Webster Foundation Fellowship, UBC Four Year Doctoral Fellowship, UBC Student Travel grant, International Ornithological Congress Travel grant, Ecology, Evolution and Behavior, UT Austin Texas Ecolab Research Grant Student Travel Award, American Ornithologists' Union Ontario Graduate Scholarship, Ministry of Training, Colleges and Universities of Ontario

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

2010 Student Membership Award, American Ornithologists' Union

## PROGRAMMING EXPERIENCE

•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

• 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

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 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, **May11**<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.