

# Brittany Lynne Sutherland

University of Arizona  
Dept. of Ecology and Evolutionary Biology  
P.O. Box 210088  
Tucson, AZ 85721

## PROFESSIONAL APPOINTMENTS

---

2018-present NIH Postdoctoral Excellence in Research and Teaching (PERT) Fellow,  
University of Arizona  
*Supervisor:* Dr. Michael Barker

## EDUCATION AND TRAINING

---

2011-2017 Ph.D. in Biology, University of Virginia  
*Advisor:* Dr. Laura Galloway  
Dissertation: "Interploid reproductive isolation in the *Campanula rotundifolia* polyploid complex"

2008-2010 Master of Arts in Teaching, Morehead State University

2001-2005 B.S. in Biology, Western Kentucky University  
with High Honors

## PUBLICATIONS

*undergraduate coauthors are underlined*

---

5. **Sutherland BL** and LF Galloway. *In press*. Effects of glaciation and whole genome duplication on the distribution of a polyploid complex. *American Journal of Botany*.
4. **Sutherland BL**, Quarles BM, and LF Galloway. 2018. Dispersal history and whole-genome duplication contribute to loss of self-incompatibility in a polyploid complex. *American Journal of Botany* 105: 249-256.
3. **Sutherland BL** and LF Galloway. 2017. Reproductive isolation varies by ploidy level within a polyploid complex. *New Phytologist* 13: 404-412.
2. Alice LA, Dodson TM, and **BL Sutherland**. 2008. Diversity and Relationships of Bhutanese *Rubus*. *Acta Horticulturae* (ISHS) 777:63-70.
1. Olsen KM, **Sutherland BL**, and LL Small. 2007. Molecular evolution of the Li/li chemical defense polymorphism in white clover (*Trifolium repens* L.). *Molecular Ecology* 16: 4180-4193.

*In review and in prep (manuscript available upon request)*

**Sutherland BL**, Miranda-Katz T, and LF Galloway. *In Review*. Reproduction between cytotypes in polyploid complexes is mediated by ploidy level and cytotype frequency. *Evolution*.

**1KP Consortium\***. *In Review*. A Phylogenomic View of Evolutionary Complexity in Green Plants. *Nature*. \*[BL Sutherland and 191 other authors]

**Sutherland BL** and LF Galloway. *In Prep.* Variation in interploid reproduction and gene flow across a polyploid complex: one size does not fit all.

**Sutherland BL**, [Trostle A](#), [Goyal A](#), [Galuska S](#), [Reardon C](#), Tiley GP, [Ellis J](#), Li Z, and MS Barker. *In Prep.* Supervised Learning Estimation of Duplicated GENomes (SLEDGE): A new tool for identifying whole genome duplications. *Bioinformatics*.

### FELLOWSHIPS AND AWARDS

---

2018	W. D. Hamilton Award Finalist, Society for the Study of Evolution
2017	Dr. Frank Finger All-University Graduate Award for Teaching, UVA
2017	Biology Department Graduate Teaching Award, UVA
2014	All-University Graduate Teaching Award Nominee, UVA
2014	Biology Department Graduate Teaching Award, UVA
2011-2015	Presidential Fellowship, UVA

### FUNDING

---

2018	PERT Fellowship, UA	\$160,000
2015	Center for Global Inquiry Grant, UVA	\$1000
2015	Graduate Research Fellowship, Botanical Society of America	\$500
2014	Graduate Research Fellowship, Torrey Botanical Society	\$1500
2013	International Studies Travel Award, UVA	\$500
2013	Rosemary Grant Award, Society for the Study of Evolution	\$1700
2012	GSPA Travel Award, UVA	\$115
2011	Presidential Fellowship Research Award, UVA	\$3000
2004	Honors Research Travel Award, Western Kentucky University	\$800

### CONTRIBUTED TALKS

---

**Sutherland BL**. 2018. Strong reproductive isolation exists between diploids and tetraploids - but not between higher cytotypes - within polyploid complexes. Evolution. Montpellier, France.

**Sutherland BL**, and LF Galloway. 2016. Reproductive isolation varies with cytotype in a polyploid complex. Botany. Savannah, Georgia.

**Sutherland BL**, and LF Galloway. 2016. Reproductive isolation varies with cytotype in a polyploid complex. Evolution. Austin, Texas.

**Sutherland BL**, and LF Galloway. 2014. Variation in interploid reproductive isolation within the polyploid complex, *Campanula rotundifolia* (Campanulaceae). Evolution. Raleigh, NC.

**Sutherland BL**, and LF Galloway. 2012. Phylogeography of the *Campanula rotundifolia* polyploid complex. SEPEEG (Southeastern Population Ecology and Evolutionary Genetics). Clemson, SC.

**Sutherland BL**, and KM Olsen. 2006. Molecular genetics of cyanogenesis in *Trifolium repens* (Fabaceae). Evolution. Stony Brook, NY.

#### POSTERS

**Sutherland, BL** and MS Barker. 2018. Supervised learning approaches to estimation of ancient and extant polyploidy. Polyploidy in Organ Development, Repair, and Disease. Bar Harbor, ME. (Planned)

Trostle A, Goyal C, Galuska S, Reardon C, Tiley GP, Ellis J, Li Z, **Sutherland BL**, and MS Barker. 2018. Supervised Learning Estimation of Duplicated GENomes (SLEDGE). Botany. Rochester, MN.

**Sutherland BL**, and LF Galloway. 2015. Interploid reproductive isolation in the *Campanula rotundifolia* polyploid complex. European Society for Evolutionary Biology. Lausanne, Switzerland.

**Sutherland BL**, Lennox C, and LA Alice. 2005. Taxonomic status and phylogenetic affinity of an invasive blackberry in South Africa. Evolution. Fairbanks, AK.

#### TEACHING AND MENTORSHIP

---

##### PRIMARY INSTRUCTOR

- 2016 Instructor, Introduction to Evolution and Organismal Biology, UVA
- 2011 Instructor, Introduction to Biology, Kentucky State University
- 2008-2011 Secondary Teacher, Anderson County High School, Lawrenceburg, KY (Chemistry, AP Environmental Science, AP Physics)
- 2006-2008 Secondary Teacher, Franklin County High School, Frankfort, KY (Biology and Chemistry)

##### TEACHING ASSISTANT

- 2017 Evolution and Ecology, UVA
- 2014 Evolution and Ecology, UVA
- 2013 Introduction to Evolution and Organismal Biology, UVA
- 2012-2016 Genetics and Molecular Biology, UVA

##### INDEPENDENT RESEARCH STUDENT PROJECTS

*(Names removed to protect student privacy)*

Pima Community College

- 2018 *Genome duplication in marine eukaryotic microbes* (planned)
- 2018 *Supervised learning estimation of extant polyploidy* (planned)
- 2018 *Seed morphology variation in Campanula rotundifolia* cytotypes (planned)

University of Arizona

- 2018 *Supervised learning approaches to detecting whole genome duplication*

- 2018            *Exploring ancient hybridization events using machine learning*  
 Swarthmore College
- 2015            MLBS REU: *Cytotypic pollinator fidelity in Campanula rotundifolia*  
 University of Virginia
- 2015            NSF REU: *Self-compatibility of Campanula rotundifolia*
- 2015            *Cytotypic variation in European Campanula rotundifolia*
- 2014-2015     *Relative fertility of interploid hybrids of Campanula rotundifolia*
- 2013-2015     *Cytotypic distribution of Campanula rotundifolia in North America*
- 2012-2014     *Variation in self-compatibility of Campanula rotundifolia cytotypes*

### **SERVICE AND OUTREACH**

---

- 2016-2018     Reviewer: Applications in Plant Sciences, Evolutionary Biology, Journal of the Botanical Research Institute of Texas, Journal of Plant Research, Molecular Ecology, New Phytologist, PeerJ
- 2018            Mentor: Planting Science outreach to high school students
- 2016-2017     Mentor: Western Albemarle High School Environmental Science Academy at Mountain Lake Biological Station
- 2015            Presenter: Mountain Lake Biological Station Open House
- 2014-2017     Presenter: Harrisonburg Middle School Science Day
- 2013-2015     Co-Organizer: Biology Department Darwin Day Open House
- 2013-2014     Co-President: Biology Graduate Student and Post-Doc Association
- 2013            Co-Organizer: Southeastern Population Ecology and Evolutionary Genetics (SEPEEG) academic conference
- 2008-2011     Coach: Anderson County High School Academic Team

### **PROFESSIONAL MEMBERSHIPS**

---

Society for the Study of Evolution  
 Botanical Society of America  
 American Society of Naturalists