

Brian J. Sanderson

Professional appointments

2016–present **Postdoctoral Researcher**, Texas Tech University, Lubbock, TX.
Advised by Matthew Olson

Education

- 2016 **Ph.D. in Biology**, University of Virginia, Charlottesville, VA.
Advised by Edmund Brodie III
Dissertation title: The role of sex ratio as a context for selection in *Silene vulgaris*
- 2009 **B.S. in Genetics**, University of Kansas, Lawrence, KS.
Advised by Jennifer Gleason

Peer-reviewed publications

Journal articles

Sanderson BJ, Augat ME, Taylor DR, and Brodie III ED (2016). Scale dependence of sex ratio in wild plant populations: implications for social selection. *Ecology and Evolution*, 6(5):1411–19.

King EG, **Sanderson BJ**, McNeil CL, Long AD, and MacDonald SJ (2014). Genetic dissection of the *Drosophila* female head transcriptome reveals widespread allelic heterogeneity. *PLoS Genetics*, 10(5).

Sloan DB, Keller SR, Berardi AE, **Sanderson BJ**, Karpovich JF, and Taylor DR (2012). De novo transcriptome assembly and polymorphism detection in the flowering plant *Silene vulgaris* (Caryophyllaceae). *Molecular Ecology Resources*, 12(2):333–43.

Presentations and posters

Presentations

Sanderson BJ, Wang L, Tiffin P, Wu Z, and Olson MS (2017). Sexual dimorphism and the evolution of sex-biased and sex-limited genes in the dioecious tree *Populus balsamifera*. Plant and Animal Genome meeting in San Diego, CA.

Sanderson BJ and Brodie III ED (2013). Fitness consequences of variable sex ratios among and within populations of *Silene vulgaris*. Southeastern Population Ecology and Evolutionary Genetics (SEPEEG) meeting at Mountain Lake Biological Station, Pembroke, VA.

Sanderson BJ, Fields PD, and Taylor DR (2012). Cytonuclear linkage disequilibrium in the gynodioecious plant *Silene vulgaris* (Caryophyllaceae). SEPEEG meeting in Clemson, SC.

Sanderson BJ and Taylor DR (2011). Sex ratio evolution in the flowering plant *Silene vulgaris* (Caryophyllaceae). SEPEEG meeting in Reidsville, NC.

Posters

Sanderson BJ and Brodie III ED (2013). Fine scale phenotypic structuring: defining social context in wild *Silene vulgaris* populations. Evolution meeting in Snowbird, UT.

Sanderson BJ and Taylor DR (2011). Genetics of selfish sex determination in the flowering plant *Silene vulgaris* (Caryophyllaceae). Evolution meeting in Norman, OK.

Fellowships and Awards

June 2014 National Science Foundation Doctoral Dissertation Improvement Grant(\$20,434)
Ecological mechanisms of multilevel selection

Teaching and mentorship

2016 **Teaching Assistant**, Evolution and Ecology (BIOL 3020).
University of Virginia

2013 **Teaching Assistant**, Biology of Infectious Disease (BIOL 3090).
University of Virginia

2012–2015 **Mentor**, NSF Research Experiences for Undergraduates (REU).
Mountain Lake Biological Station

2012 **Teaching Assistant**, Microbiology Laboratory (BIOL 3150).
University of Virginia

2011, 2015, **Teaching Assistant**, Genetics and Molecular Biology (BIOL 3010).
2016 University of Virginia

2011 **Teaching Assistant**, Introduction to Biology: Organismal and Evolutionary
Biology Laboratory (BIOL 2040).
University of Virginia

Work and research experience

2010 **Research Technician**, University of Kansas, Molecular Biosciences.
PI: Stuart Macdonald, *Drosophila* quantitative genetics

2007–2009 **Research Assistant**, University of Kansas, Ecology and Evolutionary Biology.
PI: Jennifer Gleason, behavioral genetics in *Drosophila*

Service

2013 **Fundraiser**, USEED Notes from Nature campaign.
Mountain Lake Biological Station

2013 **Conference Organizer**, Southeastern Population Ecology and Evolutionary
Genetics Conference.
Mountain Lake Biological Station

2012–2013 **co-President**, Graduate Student and Post-doc Association.
University of Virginia

Memberships

2011–*present* **American Society of Naturalists.**

2011–*present* **Society for the Study of Evolution.**