Sara Jeanes Wright

Rowan University • Department of Biological Sciences • 201 Mullica Hill Road • Glassboro, NJ 08028
wrights@rowan.edu • 856-256-4500 x53024 • www.sarajwright.com

WORK EXPERIENCE

2019-Present	Rowan University, Glassboro, NJ Department of Biological Sciences Lecturer

EDUCATION

2012-2019	Washington University, St. Louis, MO Ph.D. in Biological and Biomedical Sciences (program in Evolution, Ecology & Population Biology) Dissertation: "Cyanogenesis and the genetics of local adaptation in white clover (*Trifolium repens L.*)" Teaching Citation, 2018
2013	Organization for Tropical Studies (OTS), Costa Rica 8-week Graduate course: "Tropical Biology: An Ecological Approach"
2007-2011	The University of Texas at Austin, Austin, TX B.S. in Biology (Dean's Scholars Honors Program) *Magna cum laude*, Special Departmental Honors in Biology
2007-2011	UTeach Natural Sciences, The University of Texas at Austin, Austin, TX High school teaching certificates in Science (focus: Biology) and Mathematics

AWARDS AND SCHOLARSHIPS

2021	President's Award for Excellence in Innovative Instructional Delivery, Rowan University	
2018	New Frontiers Scholar, Corteva Agriscience Conference Travel Award	$500
2017	Wash U Center for the Integration of Research, Teaching and Learning (CIRTL) Community Member	
2011	Phi Beta Kappa inductee	
2011	Jane Sanford Beasley Scholarship for Teaching Excellence	$500
2011	Austin ISD Future Teacher Scholarship	$500
2009	Eva Stevenson Woods Endowed Presidential Scholarship, UT Austin	$1,000
2009	College Reading and Learning Association (CRLA) Level I Mentor/Tutor Certification	
2009	National FFA American Degree Recipient	

RESEARCH FUNDING AND FELLOWSHIPS

2016	National Science Foundation Doctoral Dissertation Improvement Grant "Ecological genomics of local adaptation in a perennial plant species"	$19,825
2015	Tyson Research Center Graduate Student Research Grant	$1,500
2013	Washington University Biology Dept. Fellowship for OTS Tropical Biology course	$2,000
2013	National Science Foundation Graduate Research Fellowship	$121,500
2011	Undergraduate Research Fellowship, UT Austin	$1,000
2008	Freshman Research Initiative Summer Research Fellowship, UT Austin	$1,250

PROFESSIONAL ORGANIZATION MEMBERSHIPS

2021-Present	Society for Molecular Biology & Evolution (SMBE)
2021-Present	Ecological Society of America (ESA)
2019-Present	National Center for Faculty Development and Diversity (NCFDD)
2018-Present	American Genetic Association (AGA)
2012-Present	Society for the Study of Evolution (SSE)
2012-Present	Botanical Society of America (BSA)

TEACHING AND MENTORING EXPERIENCE

Rowan University Teaching

Semester	Course #	Course Name	Responsibilities	# Sections	# Students
SP21	BIOL 01204	Introduction to Ecology	Online Course Designer	N/A	N/A
(Covid-19)	BIOL 01106	Introduction to Genetics	Online Instructor	2	22, 24
FA20	BIOL 02301	Plant Diversity	Remote Instructor	1	26
(Covid-19)	BIOL 01104	Intro. to Evolution and Sci. Inquiry	Remote Instructor	2	15, 18
SP20	BIOL 01204	Introduction to Ecology	Lecture & Lab Instructor	2	25, 25
(Covid-19)	BIOL 01104	Intro. to Evolution and Sci. Inquiry	Lecture & Lab Instructor	1	25
FA19	BIOL 01104	Intro. to Evolution and Sci. Inquiry	Lecture & Lab Instructor	2	26, 23

Washington University Teaching

Semester	Course#	Course Name	Responsibilities
SU18	U29-Bio 525	Evolution	Lab Instructor, Guest Lecturer
FA17	Bio 2950	Environmental Biology	Guest Lecturer, Teaching Assistant
SU16	U29-Bio 525	Evolution	Lab Instructor, Teaching Assistant
SU14	U29-Bio 525	Evolution	Lab Instructor, Teaching Assistant
FA13	Bio 3501	Evolution	Discussion Leader, Teaching Assistant

Student-Centered Service Activities

FA20-Present	Course Coordinator for Introduction to Evolution & Scientific Inquiry, Rowan University *Serves approximately 20 sections (~480 students) per academic year*
SU20-Present	Diversity, Equity, and Inclusion (DEI) Committee, Rowan University
FA19-Present	Food Systems Initiatives Task Force, Rowan University
2013-2018	"Show me Costa Rica" Project (volunteer instructor), Young Scientist Program, Washington U
2012-2018	Evolution and Ecology Teaching Team (member), Young Scientist Program, Washington University
2012-2014	Mentorship of local high school student, Young Scientist Program, Washington University

Professional Development

SU20-Present	Peer Reviewer for PLOS ONE (https://orcid.org/0000-0001-5864-2661)

Long-term Experiences

FA19-FA20	Diversity, Equity, and Inclusion Certificate (Completed 7-Module Series, Rowan University)
SU20	Online Teaching Basics Course (Completed both Parts 1 and 2, Rowan University)
FA13	Entering Mentoring: A Seminar to Train a New Generation of Scientists (Wash U one-semester course)
FA08	Franklin Covey's "The 7 Habits of Highly Effective College Students" (UT-Austin Mentor Academy)

Rowan University Workshops (participant)

SU20	Trauma-Informed Pedagogy: Teaching in Uncertain Times (Magna Online Webinar)
SP20	Suicide Reduction Training (QPR)
SP20	Communication Skills in the Workplace Training
FA19	Active Shooter Awareness Training

Washington University Teaching Center Workshops (participant)

2018	Structuring and Teaching Introductory STEM courses
2017	Peer-Led Team Learning: Philosophy and Implementation
2017	Structuring Opportunities for Active Learning
2013	Advising and Supporting Students: Understanding the TA's Role
2013	Teaching in Review Sessions and Office Hours
2013	Teaching with Discussions: Strategies for Structuring Discussions and Increasing Participation
2013	Grading and Responding to Students' Concerns About Grades

Mentoring

Semester(s)	Student	†Research credits, awarded fellowships, theses
FA20-Present	Sofia Cook (Rowan U)	2021 REU Binghamton U (Biomedical Engineering)
SU17-SP19	Maya Dutta (Wash U)	Tyson Research Fellow, Bio 500 (x4), honors thesis
SU17-FA18	Alexander Mahmoud (Wash U)	Tyson Research Fellow, Bio 500 (x3)
SP16-SP18	Akash Oza (Wash U)	Bio 200, Bio 500 (x4), BioSURF, honors thesis
SU18-SP18	Julia Beliz (Clayton HS)	Tyson TERF Fellow, field/lab research assistant
SU17-FA17	Samantha Myers (Wash U)	Tyson Research Fellow, work-study
SU17-FA17	Eileen Kosola (Lafayette HS)	Tyson TERF Fellow, field research assistant
SU17	Erin Rowland (Concordia U-NE)	Tyson Research Fellow
SU17	August Gremaud (Wash U)	Tyson Research Fellow
SP17-SU17	Brenda Alvarado (Wash U)	Bio 200, Tyson Research Fellow
SU16-FA16	Julien Weinstein (Wash U)	Tyson Research Fellow, Bio 500
SU16	Amy Kuhle (Quincy U)	Tyson Research Fellow
SU16	Bailee Warsing (U Missouri-St. Louis)	Tyson Research Fellow
SU16	Lydia Young (Pattonville HS)	Tyson TERF Fellow
SU16	Sydney Ties (Eureka HS)	Tyson TERF Fellow
SP15-SP16	Daniel Cui Zhou (Wash U)	Bio 500 (x3), BioSURF, honors thesis
FA13	Jennie (Hokyung) Keum (Wash U)	Bio 200

† Bio 200/500 – 6/10 hrs/week for course credit at Washington University
† Tyson Research Fellow – 11-week, full-time undergraduate summer fellowship at Wash U's field research center
† Tyson TERF Fellow – 4-week, full-time high school summer research fellowship at Wash U's field research center

Additional Teaching Experiences

Dates	Organization	Responsibilities
2014-17	One on One Tutoring, Inc., St. Louis, MO	Tutor for >50 students (math and science)
AY 11-12	Austin ISD, Austin, TX	Substitute teacher, science and math
AY 11-12	Mathnasium, Austin, TX	Math tutor (pre-K through Calculus)
FA11	9th grade Biology, Crockett HS, Austin, TX	Apprentice Teacher, 2 sections
SU11	College of Natural Sciences, UT Austin	College Readiness Mentor
SU11	UTeach Outreach, UT Austin	7th grade Geology Camp Lead Intern
SP09	Freshman Research Initiative, UT Austin	Peer Research Mentor
AY 08-09	TIP Mentor Academy, UT Austin	Peer Mentor (to four college freshmen)
FA08	TIP Scholars Program, UT Austin	Tutor (M408C-Differential/Integral Calculus)

PUBLICATIONS

* Denotes undergraduate student (at the time research was conducted)
** Denotes equal contributions

Wright SJ, *Cui Zhou D, *Kuhle A & Olsen KM (2018). Continent-wide climatic variation drives local adaptation in North American white clover. *Journal of Heredity* 109: 78–89.

Branham SE, ***Wright SJ**, Reba A & Linder CR (2016). Genome-wide association study of *Arabidopsis thaliana* identifies determinants of natural variation in seed oil composition. *Journal of Heredity* 107: 248-256.

Branham SE, ***Wright SJ**, Reba A, Morrison GD & Linder CR (2016). Genome-wide association study in *Arabidopsis thaliana* of natural variation in seed oil melting point: A widespread adaptive trait in plants. *Journal of Heredity* 107: 257-265.

Manuscripts in preparation or review

Olsen, K, **Goad, D, ****Wright, S**, *Dutta, M, *Myers, S, Small, L, & Li, L-F. Dual-species origin of an adaptive chemical defense polymorphism. *(currently under review at New Phytologist)*

Ruhl N, Crumrine P, Oberle J, Richmond C, Thomas S, & **Wright S**. Harnessing the 4DEE framework to promote ecological sciences in a changing higher education landscape. *(currently under review at Ecosphere)*

Wright SJ, Goad DM, Gross BL, Muñoz PR & Olsen KM. Genetic trade-offs underlie divergent life history strategies for local adaptation in white clover (*Trifolium repens*). *(in prep, May '21 submission to Molecular Ecology expected)*

INVITED RESEARCH PRESENTATIONS

Wright SJ, Cui Zhou D, Small L, Kuhle A & Olsen KM. "Cyanogenesis and local adaptation in white clover." St. Louis Ecology, Evolution and Conservation (SLEEC) meeting, Principia College, Elsah, IL, September 17, 2016.

Wright SJ, Cui Zhou D, Small L & Olsen KM. "Selective mechanisms shaping local adaptation in North American white clover." 13th Annual Ecological Genomics Symposium, Manhattan, KS, November 6-8, 2015.

Jeanes SR. "Using Single Nucleotide Polymorphisms (SNPs) to identify the genetic structure of polygenic traits in *Arabidopsis thaliana*." Dean's Scholars Journal Club, The University of Texas at Austin, November 2, 2010.

OTHER RESEARCH PRESENTATIONS

Oral Presentations

Wright SJ. "Three years in clover: Lessons learned mentoring undergraduates in eco-evo research." Evolution, Ecology & Population Biology Seminar Series, Washington University, St. Louis, MO, December 7, 2017.

Wright SJ, Cui Zhou D, Small L, Kuhle A & Olsen KM. "Cyanogenesis and local adaptation in white clover." Bioforum Seminar Series, Washington University, St. Louis, MO, December 2, 2016.

Wright SJ, Cui Zhou D & Olsen KM. "Ecological and genetic mechanisms of local adaptation in white clover." Evolution Conference, Austin, TX, June 17-21, 2016.

Wright SJ. "Being in (white) clover: Combining ecology and genomics to study local adaptation." Evolution, Ecology & Population Biology Seminar Series, Washington University, St. Louis, MO, February 11, 2016.

Wright SJ. "Population genomics of local adaptation in white clover (*Trifolium repens*)." Evolution, Ecology & Population Biology Seminar Series, Washington University, St. Louis, MO, April 9, 2015.

Poster Presentations

Wright SJ, Goad DM, Gross BL, Muñoz PR, & Olsen KM. "Uncovering the genetic architecture of local climatic adaptation in white clover." New Frontiers in Genetic Evaluation, Corteva Agriscience, Johnston, IA, July 25-27, 2018.

Gomez-Quijano MJ, **Wright SJ**, Olsen KM & Gross BL. "Variation in cyanide production of white clover (*Trifolium repens*) across a steep environmental gradient." Botany Conference, Rochester, MN, July 21-25, 2018.

Wright SJ, Gross BL, Muñoz PR, & Olsen KM. "Uncovering the genetic architecture of local climatic adaptation in white clover." American Genetic Association President's Symposium: Evolutionary Quantitative Genetics in the Wild. University of Toronto, Toronto, ON, March 23-25, 2018.

Wright SJ, Cui Zhou D, Small L, Kuhle A & Olsen KM. "Cyanogenesis and local adaptation in white clover." Danforth Plant Science Center Symposium, St. Louis, MO, September 28-30, 2016.

Wright SJ, Cui Zhou D, Small L & Olsen KM. "Ecological field studies and copy number variation (CNV) analyses shed light on the selective mechanisms maintaining North American white clover cyanogenesis clines." Ecological Genomics Symposium, Manhattan, KS, November 6-8, 2015.

Wright SJ, Cui Zhou D, Small L & Olsen KM. "Ecological field studies and copy number variation (CNV) analyses shed light on the selective mechanisms maintaining North American white clover cyanogenesis clines." Missouri Botanical Garden and Danforth Plant Science Center Joint Symposium, St. Louis, MO, October 8-10, 2015.

Jeanes S & Linder CR. "Do leaf anthocyanin concentrations in *Arabidopsis thaliana* vary according to latitude: developing methods to test the hypothesis." Undergraduate Research Forum, The University of Texas, Austin, TX, April 2011.

Eschenbach A, **Jeanes S**, Lopez L, Su Y & Heineman R. "T7+ Bacteriophage Host Adaptation." Undergraduate Research Forum, The University of Texas at Austin, Austin, TX, April 2009.

Mentored Student Research Posters (Washington University Undergraduate Research Symposia)

Dutta M, **Wright SJ** & Olsen KM. "Cyanogenic glucoside induction across an environmental gradient in white clover (*Trifolium repens*)." April 12, 2019.

Mahmoud A, **Wright S**, Goad D & Olsen K. "Identifying locally adaptive SNPs in white clover using environmental association analysis (EAA)." April 12, 2019.

Mahmoud A, Beliz J, Olsen K & Johnson M. "Urban-to-rural trends in white clover cyanogenesis across St. Louis." October 27, 2018.

Oza A, **Wright SJ** & Olsen KM. "The contributions of gene copy number variation to drought tolerance in white clover (*Trifolium repens*)." April 13, 2018.

Alvarado B, **Wright S** & Olsen K. "The evolution of chemical defense in white clover: When and where does cyanogenesis matter most?" October 21, 2017.

Beliz J, Kosola E, **Wright S** & Olsen K. "Wild sampling in white clover informs interpretations of controlled field experiment data: herbivory and soil moisture." October 21, 2017.

Dutta M, **Wright S** & Olsen K. "Buffering against heat, drought, and fungus in white clover: Does cyanogenesis play a role?" October 21, 2017.

Mahmoud A, Gremaud A, **Wright S** & Olsen K. "Insect diversity survey of white clover in wild vs cultivated environments." October 21, 2017.

Myers SR, **Wright SJ** & Olsen KM. "Ecological drivers of local adaptation in white clover: Herbivores or winter temperatures?" October 21, 2017.

Oza A, **Wright SJ** & Olsen KM. "The contributions of gene copy number variation to drought tolerance in white clover (*Trifolium repens*)." October 21, 2017.

Ties S, Young L, **Wright SJ** & Olsen KM. "Cyanogenesis and local adaptation in early life stages of white clover (*Trifolium repens*)." October 29, 2016.

Cui Zhou D, **Wright SJ** & Olsen KM. "Gene copy number variation and molecular mechanisms of local climatic adaptation in white clover (*Trifolium repens*)." April 9, 2016.

Cui Zhou D, **Wright SJ** & Olsen KM. "Gene copy number variation and molecular mechanisms of local climatic adaptation in white clover (*Trifolium repens*)." October 10, 2015.

ADDITIONAL MEETINGS, WORKSHOPS & SYMPOSIA

2021	4th Annual Flying First (First Generation) Symposium, Rowan University, February 10-12
2020	GLAM EvoGen: Great Lakes Evolutionary Genomics (Virtual) Annual Meeting, July 20-24
2020	AVIDA-ED LENS (Virtual) Workshop, July 1-2
2020	UTeach STEM Educators (Virtual) Summit, June 30-July 1
2020	3rd Annual Flying First (First Generation) Symposium, Rowan University, February 13
2017	St. Louis Ecology, Evolution, and Conservation (SLEEC) meeting, Saint Louis University, September 16
2016	Genotyping-by-Sequencing (GBS) Workshop, University of Missouri, Columbia, MO, April 11-12
2015	St. Louis Ecology, Evolution, and Conservation (SLEEC) meeting, Saint Louis Zoo, August 24
2015	I-CARES Climate Change and Biodiversity Symposium, Washington University, St. Louis, MO, Sept. 10-11
2015	UCLA Conservation Genomics Workshop, La Kretz Field Station, March 22-26
2013	Introduction to PERL Workshop, Washington University, St. Louis, MO, January 8-12
2013	Plant Genomics Congress, St. Louis, MO, September 23-24
2013	St. Louis Ecology, Evolution, and Conservation (SLEEC) meeting, Saint Louis Zoo, September 28
2013	50th Anniversary meeting of the Organization for Tropical Studies (OTS) and the Association of Tropical Biology and Conservation (ATBC), San Jose, Costa Rica, June 23-27
2012	Software Carpentry Workshop (intro to Python), Washington University, St. Louis, MO, November 10-11
2012	St. Louis Ecology, Evolution, and Conservation (SLEEC) meeting, Principia College, September 29