

CURRICULUM VITAE

Sarah D. Turner

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Education & Training

- 2017-present **National Science Foundation Plant Genome (NPGI) Postdoctoral Fellow**
 University of Missouri, Columbia (Advisor: Ruthie Angelovici)
 Project: Quantifying the genome-wide influence of human selection on leaf morphology and amino acid metabolism in cole crops (*Brassica oleracea* L.)
- 2012-17 **Ph.D. Plant Breeding & Plant Genetics**
 University of Wisconsin-Madison (Advisor: Philipp W. Simon)
 Dissertation: Environmental and genetic basis of top size in carrot (*Daucus carota*, L.)
 Committee: Edgar Spalding, Julie Dawson, Patrick Krysan, Erin Silva
- 2009-12 **M.S. Plant Breeding**
 Texas A&M University, College Station (Advisor: J. Creighton Miller, Jr.)
 Thesis: "Effects of bioactive compounds from different potato genotypes on prostate cancer development in athymic nude mice"
 Committee: Elizabeth Pierson, Lavanya Reddivari, Luis Cisneros-Zevallos
- 2007-09 **B.S. Horticulture**
 Texas A&M University, College Station

Publications

Turner SD, Maurizio PL, Valdar W, Yandell BS, and Simon PW (2017) Dissecting the genetic architecture of shoot growth in carrot (*Daucus carota* L.) using a diallel mating design. *G3:Genes, Genome, Genetics* 8(2):411-26, doi: <https://doi.org/10.1534/g3.117.300235>

Book Chapter

Turner SD (2016) Potatoes and Related Crops: Role in the Diet. In: Caballero, B., Finglas, P., and Toldrá, F. (eds.) *The Encyclopedia of Food and Health* vol. 4, pp. 452-457. Oxford: Academic Press.

Grants & Travel Funding

- 2017-2020 NSF National Plant Genome Initiative Postdoctoral Fellowship
 2016 WISELI Celebrating Women in Science and Engineering Grant (via PSGSC)
 2015 National Association of Plant Breeders (NAPB) Travel Award
 2015 Ceres Trust Graduate Student Grant

Honors & Awards

2016	2 nd place – Crop Science Society of America poster competition, PAG XXIV
2014	Student Voice Representative, North American Agricultural Biotechnology Council (NABC) 26
2011	2 nd place – Frank L. Haynes Graduate Student Research Competition, 95 th Annual Meeting of the Potato Association of America
2010-12	Monsanto Plant Breeding Fellowship
2009, 2008	Ben T. & Mattie B. Little Scholarship
2009	C.O. Smith '50 Endowed Scholarship
2009	Leon Miller Scholarship, Texas A&M University

Presentations

Invited Talks

2018	“Demographic history of morphotype diversification in <i>Brassica oleracea</i> ” Plant & Animal Genome Conference (Brassica session)
2018	“A high-throughput image analysis pipeline to quantify carrot shoot and root morphology” Plant & Animal Genome Conference (CyVerse session)
2016	“Diallel analysis and image-based phenotyping of top size in carrot” University of Missouri, Columbia (interview seminar)

Contributed Talks

2014	“Evaluation of carrot for traits related to early seedling establishment and canopy growth at different planting densities in organic systems” Organic Agriculture Research Symposium (Abstr. p.36)
2011	“Effect of purple and white potato extracts on prostate cancer development in athymic mice” Annual Meeting of the Potato Association of America, <i>Amer J Potato Res</i> 89:49 (Abstr)

Poster Presentations

2018	“Demographic history of morphotype diversification in <i>Brassica oleracea</i> ” Plant & Animal Genome Conference (PAG)
2017	“Heritability and genetic basis of carrot shoot growth using Bayesian diallel analysis” (PAG)
2016	“Image-based phenotyping and Bayesian analysis of a diallel mating design in carrot” National Association of Plant Breeders Annual Meeting
2016	“Diallel analysis of top size in carrot using biplots and image-based phenotyping” International Conference on Quantitative Genetics & PAG
2015	“Heritability and genetic basis of top size in carrots” PAG
2014	“Evaluation of carrot for traits related to early seedling establishment and canopy growth at different planting densities” American Society for Horticultural Science Annual Meeting, <i>HortSci</i> 49(9):S349 (Abstr)
2013	“Evaluation of the environmental and genotypic control of canopy growth in carrot under organic and conventional management systems” 36 th International Carrot Conference, Madison, WI
2011	“Effects of bioactive compounds from white and purple potatoes on prostate cancer development in athymic nude mice” National Association of Plant Breeders Annual meeting

Teaching & Mentoring Experience

Fall 2015 Undergraduate Research Scholar (URS) Mentor, University of Wisconsin-Madison
 2010-2012 Teaching assistant for Horticulture 101, Texas A&M University (5 semesters)

Professional Service & Outreach

2018 National Association of Plant Breeders Early Career Working Group (NAPB-ECWG; Secretary)
 2016 National Association of Plant Breeders Graduate Student Working Group (NAPB-GSWG)
 2016, 2013 Plant Sciences Graduate Student Council (PSGSC), Madison, WI
 Journal Club Chair (2016) & Vice President (2013)
 2015 Saturday Science at Discovery, “Secrets of Food: Why are carrots orange?” (all ages)
 Outreach event detailing carrot domestication, breeding, and health properties
 2015, 2014 Wisconsin Science Festival—Discovery Expo, “Where the Wild Things Are” (all ages)
 USDA-ARS exploration station focusing on crop wild relatives and domestication

Training

2018 CIRTL course: “Engaging Students in the Teaching of Statistics”
 2017 Open Science Grid (OSG) User School

Membership in Professional Societies

2017- Genetics Society of America
 2016- American Association for the Advancement of Science
 2016- American Society of Plant Biologists
 2016- National Association of Plant Breeders
 2015- Agronomy, Crop Science, and Soil Science Societies of America
 2009- Pi Alpha Xi, National Honor Society for Horticulture