

## CURRICULUM VITAE

Sarah D. Turner

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## Education & Training

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- 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: "Genetic influences on shoot architecture 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  
Honors: *magna cum laude*

## Publications

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Turner SD, Maurizio PL, Valdar W, Yandell BS, and Simon PW (2018) 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

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- 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

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2016	2 <sup>nd</sup> place – Crop Science Society of America poster competition, PAG XXIV
2014	Student Voice Representative, North American Agricultural Biotechnology Council (NABC) 26
2011	2 <sup>nd</sup> place – Frank L. Haynes Graduate Student Research Competition, 95 <sup>th</sup> 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

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### *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

### *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
2013	“Evaluation of the environmental and genotypic control of canopy growth in carrot under organic and conventional management systems” 36 <sup>th</sup> 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

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

## Professional Service & Outreach

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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 WI Institutes for Discovery, “Secrets of Food: Why are carrots orange?”  
     Outreach event detailing carrot domestication, breeding, and health properties (all ages)  
 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

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

## Membership in Professional Societies

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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