Justin W. Walley, Ph.D.

Iowa State University – Plant Pathology & Microbiology

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Education

Ph.D	2009	University of California – Davis	Plant Biology
M.S.	2005	Miami University	Botany
B.S.	2001	Mount Union College	Biology

Professional Experience

2015-	Assistant Professor, Department of Plant Pathology & Microbiology, Iowa State University
2009-2014	Postdoctoral Scholar, Division of Biological Sciences, University of California - San Diego

Professional Experience

Ad hoc reviewer: *Molecular & Cellular Proteomics, Plant Physiology*, *PLoS One*, *Journal of Integrative Plant Biology,* and *International Journal of Molecular Sciences*

Member: American Phytopathological Society, American Society of Plant Biologists, American Society for Mass Spectrometry

Honors and Awards

2013-14	San Diego Center for Systems Biology Seed Grant
2010-13	NIH Ruth L. Kirschstein NRSAPostdoctoral Fellowship (F32GM096707)
2009	ASPB-Pioneer Hi-Bred International Graduate Student Prize
2008	Russell Fellowship - most outstanding Plant Biology graduate student (UCD)
2008	Graduate Student Travel Award (UCD)
2007-08	Trainee, NIH Training Grant in Molecular and Cellular Biology (UCD)
2007	Elsie Taylor Stocking Memorial Fellowship (UCD)
2005	Phi Sigma Biological Honor Society (UCD)
2005	Dupont Travel Award (UCD Section of Plant Biology)
2004	Sigma Xi, The Scientific Honor Society (Miami U)
2003	Phi Kappa Phi Honorary Society (Miami U)
2002	Center for Bioinformatics and Functional Genomics Fellowship (Miami U)
2002	National Garden Clubs Inc. Scholarship
2002	Garden Club of Ohio Scholarship
2001	The Shumaker Physiology Prize (MUC)
2000	Tomsich Awards for Excellence (MUC)

Publications

Walley JW and Briggs SP (2015) Dual use of peptide mass spectra: protein atlas and genome annotation. *Current Plant Biology - Accepted*

Marcon C, Malik WA, **Walley JW**, Shen Z, Paschold A, Smith LG, Peipho H, Briggs SP, Hochholdinger F (2015) A high resolution tissue-specific proteome and phosphoproteome atlas of maize primary roots reveals functional gradients along the root axis. *Plant Physiology – In Press*

Castellana NE, Shen Z, He Y, **Walley JW**, Cassidy CJ, Briggs SP, Bafna V (2014) An Automated Proteogenomic Method Utilizes Mass Spectrometry to Reveal Novel Genes in *Zea mays*. *Molecular & Cellular Proteomics* 13(1); 157-167

Walley JW, Shen Z, Sartor RC, Wu KJ, Osborn J, Smith LG, Briggs SP (2013) Reconstruction of Protein Networks from an Atlas of Maize Seed Proteotypes. *PNAS* 110(49) E4808-4817

Walley JW, Kliebenstein DJ, Bostock RM, and Dehesh K (2013) Fatty acids and early detection of pathogens. *Current Opinion in Plant Biology* 16(4):526-520

Savchenko T, **Walley JW**, Chehab EW, Xiao Y, Kaspi R, Pye MF, Mohammed ME, Lazarus C, Bostock RM and Dehesh K (2010) Arachidonic acid: an evolutionarily conserved signaling molecule modulates plant stress signaling networks. *Plant Cell* 22(10):3193-3205

Walley JW and Dehesh K (2010) Molecular mechanisms regulating general stress signaling networks in Arabidopsis. *Journal of Integrative Plant Biology* 52(4):354-359 (Cover Article)

Walley JW, Kelley DR, Savchenko T and Dehesh K (2010) Investigating the function of CAF1 deadenylases during plant stress responses. *Plant Signaling and Behavior* 5(7):802-805

Rowe HC, **Walley JW**, Corwin J, Chan EKF, Dehesh K and Kliebenstein DJ (2010) Deficiencies in Jasmonate-Mediated Plant Defense Reveal Quantitative Variation in *Botrytis cinerea* Pathogenesis. *PLoS Pathogens* 6(4): e1000861

Walley JW* and Huerta AJ (2010) Exposure to environmentally relevant levels of cadmium primarily impacts transpiration in field-grown soybean. *Journal of Plant Nutrition* 33(10):1519-1530

Walley JW, Kelley DR, Nestorova G, Hirschberg DL, Dehesh K (2010) *Arabidopsis* deadenylases AtCAF1a and AtCAF1b play overlapping and distinct roles in mediating environmental stress responses. *Plant Physiology* 152(2):866-875

Walley JW, Rowe HC, Xiao Y, Chehab EW, Kliebenstein DJ, Wagner D and Dehesh K (2008) The Chromatin Remodeler SPLAYED Regulates Specific Stress Signaling Pathways. *PLoS Pathogens* 4(12): e1000237

Walley JW, Coughlan S, Hudson ME, Covington MF, Kaspi R, Banu G, Harmer SL, and Dehesh K (2007) Mechanical Stress Induces Biotic and Abiotic Stress Responses via a Novel cis-Element. *PLoS Genetics* 3: e172
Selected by PLoS Genetics as an Editor's Pick.

Chehab EW, Raman G, **Walley JW**, Perea JV, Banu G, Theg S, and Dehesh K (2006) Rice HYDROPEROXIDE LYASES with Unique Expression Patterns Generate Distinct Aldehyde Signatures in Arabidopsis. *Plant Physiology* 141(1):121-134