Curriculum Vitae: Andrew N. Doust Professor and Head, Department of Plant Biology, Ecology and Evolution, Oklahoma State University

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Education

Ph.D. University of Melbourne, Botany

Dissertation: Floral Form and Ontogenetic Process in Winteraceae.

Advisor: Andrew Drinnan.

Diploma of Teaching, University of New England, Australia

No thesis

Faculty

B.Sc. (1st class honors) Botany and Zoology, University of Sydney, Australia

Honors Thesis: Evolution and Biogeography of Banksia L.f. (Proteaceae).

Advisor: Roger Carolin.

Positions Held

2017-present	Professor and Head, Department of Plant Biology, Ecology and Evolution, Oklahoma State University.
2013-2017	Associate Professor, Department of Botany (now Department of Plant Biology, Ecology and Evolution), Oklahoma State University.
2007-2013	Assistant Professor, Department of Botany, Oklahoma State University.
Post-Doctoral	Research
2006-2007	Postdoctoral Associate, University of Florida; Advisors - Doug and Pam Soltis.
1999-2006	Postdoctoral Associate, University of Missouri-St. Louis; Advisor - Elizabeth Kellogg.

Teaching and professional positions

1995-1999	Teaching Assistant, University of Melbourne, Australia
1991-1995	Research Officer, National Herbarium of NSW.
1988-1990	Garden designer, London, England.
1986-1988	Second year coordinator & Tutor in Botany, University of Sydney, Australia.
1986	Lecturer (part-time), Ryde College of Technical and Further Education, Australia.
1984-1986	Assistant Research Officer, National Herbarium of NSW, Australia

Publications

(52 total articles, 1 edited book + 1 edited eBook)

Peer Reviewed Journals (Google Scholar: (h-index = 24, total citations 2741, i10-index = 36) Underlined names denote undergraduate researchers.

- 1. Govindarajulu, R., A.N. Henderson, Y. Xiao, S.R. Chaluvadi, M. Mauro-Herrera, M.L. Siddoway, C.Whipple, J.L. Bennetzen, K.M. Devos, **A.N. Doust**, J.S. Hawkins. 2020. Integration of high-density genetic mapping with transcriptome analysis uncovers numerous agronomic QTL and reveals candidate genes for the control of tillering in sorghum. *Genes Genomes Genetics*. (accepted)
- 2. Yu, Y., Hu, H. **Doust, A.N.**, and E.A. Kellogg. 2019. Divergent gene expression networks underlie morphological diversity of abscission zones in grasses. *New Phytologist*. 225:1799-1815. doi: 10.1111/nph.16087.
- 3. Hao, H., M. Mauro-Herrera, and **A.N. Doust**. 2018. Domestication and improvement in the model C4 grass, Setaria. *Frontiers in Plant Science*. 9:719 doi: 10.3389/fpls.2018.00719.
- 4. Gehan, M.A., N. Fahlgren, A. Abbasi, J.C. Berry, S.T. Callen, L. Chavez, **A.N. Doust**, M.J. Feldman, K.B. Gilbert, J.G. Hodge, J. Steen Hoyer, A. Lin, S. Liu, C. Lizárraga, A. Lorence, M. Miller, E. Platon, M. Tessman, T. Sax. 2017. PlantCV v2: Image analysis software for high-throughput plant phenotyping. *PeerJ.* 5:e4088 https://doi.org/10.7717/peerj.4088.
- 5. **Doust, A.N.**, M. Mauro-Herrera, J. G. Hodge and <u>J. Stromski</u>. 2017. The C4 Model Grass Setaria Is a Short Day Plant with Secondary Long Day Genetic Regulation. *Frontiers in Plant Science* **8:** 1062. doi:10.3389/fpls.2017.01062.
- 6. Pant, S.R, S.C. Irigoyen, **A.N. Doust**, K.-B.G. Scholthof, and K.K. Mandadi. 2016. Setaria: A food crop and translational research model for C4 grasses. *Frontiers in Plant Science*. 7: 1885. Published online 2016 Dec 15. doi: 10.3389/fpls.2016.01885.
- 7. Mauro-Herrera, M. and **A.N. Doust**. 2016. Development and genetic control of plant architecture and biomass in the panicoid grass, *Setaria*. *PLoS ONE* 11(3): e0151346. doi:10.1371/journal.pone.0151346.
- 8. **Doust, A.N.**, M. Mauro-Herrera, <u>A.D. Francis</u>, and <u>L.C. Shand</u>. 2014. Morphological diversity and genetic regulation of inflorescence abscission zones in grasses. *American Journal of Botany* 101: 1759-1769.
- 9. Larson, G, D.R. Piperno, R. Allaby, M. Purugganan, L. Andersson, M. Arroyo-Kalin, L. Barton, C. Climer Vigueira, T. Denham, K. Dobney, **A.N. Doust**, P. Gepts, T. Gilbert, K. Gremillion, L. Lucas, L. Lukens, F. Marshall, K.M. Olsen, J.C. Pires, P. Richerson, R. Rubio de Casas, O. Sanjur, M. Thomas, M.J. West-Eberhard, D.Q. Fuller. 2014. Current Perspectives and the Future of Domestication Studies. *Proceedings of the National Academy of Sciences* 111: 6139-6146.
- 10. **Doust, A.N.**, Lukens, L., Olsen, K.M., Mauro-Herrera, M., Meyer, A., Rogers, K. 2014. Beyond the single gene do epistasis and gene-by-environment effects influence crop domestication? *Proceedings of the National Academy of Sciences* 111: 6178-6183.

- 11. Kellogg E.A., Camara P.E.A.S., Rudall P.J., Ladd P., Malcomber S.T., Whipple C., **Doust A.N**. 2013. Early inflorescence development in the grasses (Poaceae). Frontiers in Plant Science 4: 00250. doi=10.3389/fpls.2013.00250.
- 12. Zhao, M., H. Zhi, A.N. Doust, W. Li, H. Li, Y. Wang, G. Jia, Y. Wang, N. Zhang, X. Diao. 2013. Novel genomes and genome constitutions identified by GISH and 5S rDNA and knotted1 genomic sequences in the genus Setaria. BMC Genomics 14:244.
- 13. Mauro-Herrera, M., X. Wang, H. Barbier, T.P. Brutnell, K.M. Devos, and A.N. Doust. 2013. Genetic control and comparative genomic analysis of flowering time in Setaria (Poaceae). Genes, Genomes, and Genetics 3: 283-295.
- 14. Bennetzen, J.L., J. Schmutz, H. Wang, R. Percifield, J. Hawkins, A.C. Pontaroli, M. Estep, L. Feng, J. Grimwood, J. Jenkins, K. Barry, E. Lindquist, U. Hellsten, S. Deshpande, X. Wang, X. Wu, T. Mitros, J. Triplett, X. Yang, C.-Y. Ye, M. Mauro-Herrera, L. Wang, P. Li, M. Sharma, R. Sharma, P.C. Ronald, O. Panaud, E.A. Kellogg, T. Brutnell, A.N. Doust, G.A. Tuskan, D. Rokhsar, and K.M. Devos. 2012. Reference Genome Sequence of the Model Plant Setaria. Nature Biotechnology 30: 555-569.
- 15. Smith, S.M., Y. Yuan, A.N. Doust, and J.L. Bennetzen. 2012. Haplotype Analysis and Linkage Disequilibrium at Five Loci in *Eragrostis tef. Genes Genomes Genetics* 2: 407-419.
- 16. Qian, J.Y., G.Q. Jia, H. Zhi, W. Li, Y.F. Wang, H.Q. Li, Z.L. Shang, A.N. Doust, X.M. Diao. 2012. Sensitivity to Gibberellin of Dwarf Foxtail Millet Varieties. Crop Science 52: 1068-1075.
- 17. Thapa, V., U. Melcher, G.B. Wiley, A.N. Doust, M.W. Palmer, K. Roewe, B.A. Roe, G.A. Shen, M.J. Roossinck, Y.M. Yang, N. Kamath. 2012. Detection of members of the Secoviridae in the Tallgrass Prairie Preserve, Osage County, Oklahoma, USA. Virus Research 167: 34-42.
- 18. Parkhurst, M.J., A.N. Doust, M. Mauro-Herrera, J.A. Steets, and J.M. Byrnes. 2011. Spatial Genetic Structure of the Tallgrass Prairie Grass Dichanthelium oligosanthes (Scribner's panicum). Oklahoma Native Plant Record. 11: 33-42.
- 19. Doust, A.N., E.A. Kellogg, K.M. Devos, J.F. Bennetzen. 2009. Foxtail millet, a sequence driven grass model system. Plant Physiology 149:137-141.
- 20. Buggs, R.J.A.*, A.N. Doust*, J.A. Tate, J. Koh, K. Soltis, F.A. Feltus, A.H. Paterson, P.S. Soltis, D.E. Soltis. 2009. Gene loss and silencing in *Tragapogon miscellus* (Asteraceae): comparison of natural and synthetic allotetraploids. *Heredity* 103:73-81 [*These authors contributed equally to the work.]
- 21. Tate, J.A., V.V. Symonds, A.N. Doust, R. Buggs, E. Mavrodiev, L. Majure, P. Soltis, D.E. Soltis. Synthetic polyploids of *Tragopogon* 2009. miscellus and mirus (Asteraceae): 60 years after Ownbey's discovery. American Journal of Botany 96:979-988.
- 22. **Doust, A.N.**, 2007. Domestication and the evolution of plant architecture in grasses. *Annals* of Botany 100: 941-950.
- 23. Doust, A.N., 2007. Grass architecture: genetic and environmental control of branching. Current Opinion in Plant Biology 10:1-5.

- 24. **Doust, A.N.**, <u>A.M. Penly</u>, S.M. Jacobs and E.A. Kellogg. 2007. Congruence, conflict and polyploidization revealed by nuclear and chloroplast markers in the monophyletic "bristle clade" (Poaceae: Paniceae). *Systematic Botany* 32:531-544.
- 25. Bess, E.C., **A.N. Doust**, G. Davidse, and E.A. Kellogg. 2006. *Zuloagea*, a new genus of Neotropical grass within the "bristle clade" (Poaceae: Paniceae). *Systematic Botany* 31:656-670.
- 26. **Doust, A.N.** and E.A. Kellogg. 2006. The effect of plant density on branching in weedy and domesticated millet grasses. *Molecular Ecology* 15: 1335-1349.
- 27. Devos, K.M., J. Beales, Y. Ogihara and **A.N. Doust**. 2005. Comparative sequence analysis of the *Phytochrome C* gene and its upstream region in allohexaploid wheat reveals new data on the evolution of its three constituent genomes. *Plant Molecular Biology* 58: 625-641.
- 28. **Doust, A.N.** and P.F. Stevens. 2005. A re-interpretation of the staminate flowers of *Haptanthus*. *Systematic Botany* 30: 779-785.
- 29. **Doust, A.N.**, K.M. Devos, <u>M. Gadberry</u>, M.D. Gale, and E.A. Kellogg. 2005. The genetic basis for inflorescence variation between foxtail and green millet (Poaceae). *Genetics* 169: 1659-1672.
- 30. Bess, E.C., **A.N. Doust**, and E.A. Kellogg. 2005. A naked grass in the "bristle clade": a phylogenetic and developmental study of *Panicum* section bulbosa (Paniceae: Poaceae). *International Journal of Plant Sciences* 166: 371-381.
- 31. <u>Gadberry, M.D.</u>, S.T. Malcomber, **A.N. Doust,** and E.A. Kellogg. 2004. Primaclade A flexible software tool to find conserved PCR primers across multiple species. *Bioinformatics* 21:1263-1264.
- 32. **Doust, A.N.,** K.M. Devos, <u>M. Gadberry</u>, M.D. Gale, and E.A. Kellogg. 2004. Genetic control of branching in the foxtail millet. *Proceedings of the National Academy of Sciences* 101: 9045-9050.
- 33. Kellogg, E.A., K. Hiser, and **A.N. Doust**. 2004. Taxonomy, phylogeny, and inflorescence development of the genus *Ixophorus* (Panicoideae, Poaceae). *International Journal of Plant Sciences* 165:1089-1105.
- 34. **Doust, A.N**. and A.N. Drinnan. 2004. Floral development and molecular phylogeny support the generic status of *Tasmannia* (Winteraceae). *American Journal of Botany* 91: 321-331.
- 35. **Doust**, **A.N**. and E.A. Kellogg. 2002. Inflorescence diversification in the panicoid "bristle grass" clade (Paniceae, Poaceae): evidence from molecular phylogenies and developmental morphology. *American Journal of Botany* 89: 1203-1222.
- 36. **Doust, A.N.** 2001. The developmental basis of floral variation in *Drimys winteri* (Winteraceae). *International Journal of Plant Sciences* 162: 697-717.
- 37. **Doust**, **A.N.** 2000. Comparative floral ontogeny in Winteraceae. *Annals of the Missouri Botanic Gardens* 87: 366-379.
- 38. Conn, B.J. and **A.N. Doust** 1997. Revision of *Xyris* section *Pomatoxyris* (Xyridaceae) in Australia. *Australian Systematic Botany* 10: 189-248.

- 39. **Doust, A.N.** and B.J. Conn 1994. *Xyris* L. section *Xyris* (Xyridaceae) in Australia. *Australian* Systematic Botany 7: 455-484.
- 40. Everett, J. and A.N. Doust 1992. New species in *Craspedia* sens. strict. (Asteraceae: Gnaphalieae). Telopea 5: 35-38.
- 41. Everett, J. and A.N. Doust 1992. New species and a new combination in *Pycnosorus* (Asteraceae: Gnaphalieae). Telopea 5: 39-44.

Submitted

1. Angle, J.M., T.W. Bryan, A.N. Doust, R.L. Burnap, P. Campbell, J.L. Grindstaff, D.P. French. 2020. ICoP-RET Model: Integrating Communities of Practices through a Year-Long Research Experience for Teachers Program. School Science and Mathematics.

Non-peer reviewed articles and book chapters:

- 1. **Doust A.N.**, T.P. Brutnell, H.D. Upadhyaya, J. Van Eck. 2019. Editorial: Setaria as a Model Genetic System to Accelerate Yield Increases in Cereals, Forage Crops, and Bioenergy Grasses. Frontiers in Plant Science. 10:1211. doi=10.3389/fpls.2019.01211.
- 2. Hodge, J.G. and A.N. Doust. 2017. Chapter 10: Morphological Development of Setaria viridis from Germination to Flowering. In Doust, A.N. and X. Diao (eds.). The Genetics and Genomics of Setaria. Plant Genetics and Genomics: Crops and Models, Vol. 19. Springer-Verlag, New York.
- 3. Doust, A.N. 2017. Chapter 12: The Effect of Photoperiod on Flowering Time, Plant Architecture, and Biomass in Setaria. In **Doust, A.N.** and X. Diao (eds.). The Genetics and Genomics of Setaria. Plant Genetics and Genomics: Crops and Models, Vol. 19. Springer-Verlag, New York.
- 4. Doust, A.N. 2016. RETurn to the Classroom: Linking Science Teaching and Science Experience for Pre- and In-service High School Science Teachers. Plant Science Bulletin 62(1):25-29.
- 5. **Doust, A.N.** 2013. New ways to gather grains. *Developmental Cell*. 25: 114-115.
- 6. Nelson, R. S., H. Ramanna, A.N. Doust. 2011. Setaria: Its Potential as a Model for C4 Grass Species. In Vitro Cellular & Developmental Biology-Animal 47: S25-S26 (abstract).
- 7. **Doust, A.N.** 2009. Review of Stuppy, W. and R. Kesseler. 2008. Fruit: Edible, Inedible, Incredible. Firefly Books, New York. The Quarterly Review of Biology 84:310-311.
- 8. **Doust, A.N.** and E.A. Kellogg. 2002. Integrating phylogeny, developmental morphology and genetics: a case study of inflorescence evolution in the 'bristle grass' clade (Panicoideae, Poaceae). In Cronk, Q. Bateman, R. and J. Hawkins (Eds), Developmental Genetics and Plant Evolution, Taylor & Francis, London.
- 9. **Doust, A.N.** and B.J. Conn 1993. *Xyris* L. (Xyridaceae). In Harden, G. (Ed) *Flora of New* South Wales 4: 261-263. New South Wales University Press.

- 10. **Doust, A.N.** and J. Everett 1992. *Pycnosorus* Benth. (Asteraceae: Gnaphalieae). In Harden, G. (Ed) Flora of New South Wales 3: 260-262. New South Wales University Press.
- 11. Everett, J. and A.N. Doust 1992. In Harden, G. (Ed) Craspedia Forst. f. (Asteraceae: Gnaphalieae). Flora of New South Wales 3: 221-226. New South Wales University Press.

Books and eBooks:

- 12. Eames, A.L. A.N. Doust, C.P. Grof. (in prep.) The Use of Setaria Species as a Molecular Genetic Model to Characterize C₄ Plant Biology. Frontiers Research Topics.
- 13. Brutnell, T.P., A.N. Doust, H.D. Upadhyaya, J. Van Eck. 2019. Setaria as a Model Genetic System to Accelerate Yield Increases in Cereals, Forage Crops, and Bioenergy Grasses. Frontiers Research Topics doi=10.3389/978-2-88936-282-4.
- 14. **Doust, A.N.** and X. Diao (eds.). 2017. The Genetics and Genomics of Setaria. Plant Genetics and Genomics: Crops and Models, Vol. 19. Springer-Verlag, New York.

Grants and Contracts

Active

- 2020-2023 Kellogg, E.A., A.N. Doust, J. Angle. "Genetic comparisons of abscission zones in grasses." National Science Foundation, Division of Biology, Integrative Organismal Systems (co-PI \$635,537, total \$1,278,245).
- **Doust, A.N.** "Dissecting the effect of photoperiod on architecture and flowering 2020-2022 time in locally adapted populations of the C4 model grass, Setaria viridis" Oklahoma Basic Plant Science Research Program, PS20-002 (PI; \$100,00).
- Huang, Y. and A.N. Doust. "Molecular Basis of Host Plant Resistance to Aphids 2018-2021 in Sorghum", USDA (\$55,233).
- Angle, J.M., A.N. Doust, D.P. French, C. Ramming. "Transitioning Students to 2018-2020 Teacher-Researchers (TSTR)" National Science Foundation, DUE – IUSE (co-PI \$25,133, total \$598,745)

Completed

- 2018-2019 Hodge, J.G. and A.N. Doust. "New Tools to Study Environmental Control of Branching in the C4 Model Grass Setaria", Society of Developmental Biologists (\$5,000 to Ph.D. student John Hodge).
- 2016-2019 Hoyt, P.R., C. Chen, A.N. Doust, M. Fishbein, R.A. Van Den Bussche. "MRI: Acquisition of a genomic sequencer within a shared resource facility for interdisciplinary sciences and training at Oklahoma State University." National Science Foundation, MRI-1626257 (\$357,143).
- 2016-2019 Kellogg, E.A., A.N. Doust, J. Angle. "Genetic comparisons of abscission zones in grasses." National Science Foundation, Division of Biology, Integrative Organismal Systems (co-PI \$433,294, total \$783,018).

2014-2019 **Doust**, A.N., G. Chuck, J. Hawkins, C. Whipple, J. Angle. "The genetic architecture of tillering in panicoid cereals." National Science Foundation, Division of Biology, Integrative Organismal Systems, Plant Genome Research Program (PI; \$955,709 total, \$3,179,347). **Doust, A.N.** Oklahoma Center for the Advancement of Science and Technology, 2013-2015 Oklahoma Basic Plant Science Research Program, PS13-016, "Genetic regulation of seed oil composition in *Paysonia* (Brassicaceae)" (PI; \$100,000). 2011-2013 **Doust, A.N.** Oklahoma Center for the Advancement of Science and Technology, Oklahoma Basic Plant Science Research Program, PS11-035B, "Foxtail Millet As A Model To Improve Drought Resistance In Biofuel Grasses" (PI: \$100,000). 2012 Doust, A.N. EPSCoR REU, "Foxtail Millet As A Model To Improve Drought Resistance In Biofuel Grasses: (\$5,000 to undergraduate Jessica Stromski). 2008-2011 Bennetzen, J.L., K.M. Devos, A.N. Doust, J.T. Zale. USDA/DOE Plant Feedstocks for Biofuels, DE-FG02-08ER64636, "Development of Genomic and Genetic Tools for Foxtail Millet, and Use of These Tools in the Improvement of Biomass Production for Bioenergy Crops: (co-PI; \$285,000). 2008-2010 **Doust, A.N.** Oklahoma Center for the Advancement of Science and Technology, Oklahoma Basic Plant Science Research Program, PSB08-007, "A foxtail millet

model for switchgrass biomass traits: (PI; \$82,000).

DOE (no funds). Setaria Community Sequencing Project.

Internal Funding-Research

2007

Completed 2012-2013	Oklahoma State University, OSU Planning Grants for Establishing Interdisciplinary Programs, "Integrative Biology through Ecology and Evolution of Infectious Plant Microbes" (co PI; A. Wayadande PI - \$45,919)
2011-2012	Oklahoma State University, OSU Planning Grants for Establishing Interdisciplinary Programs, "Entangled Genomes: An Interdisciplinary Program in the Ecology and Evolution of Genomic Interactions" (co PI; M. Fishbein PI - \$40,926)
2011-2012	Oklahoma State University, OSU Planning Grants for Establishing Interdisciplinary Programs, "Phase II of the Bioinformatics Graduate Certificate Program: An Interdisciplinary Training Workshop" (co PI; P. Hoyt PI - \$20,800)
2008	Arts and Sciences Summer Research Grant (\$6,000)

Internal Funding-Teaching

Completed 2019	Oklahoma State University, College of Arts and Sciences, Student Technology Fee Program, "Lighting Plant Biology II, LED growlights and electrical circuit improvements" (\$26,682)
2018	Oklahoma State University, College of Arts and Sciences, Student Technology Fee Program, "Lighting Plant Biology" (\$16,955)

2012 Oklahoma State University, College of Arts and Sciences, Student Technology Fee Program, "New tools for training the next generation of evolutionary researchers" (\$4,314) 2010 Oklahoma State University, College of Arts and Sciences, Student Technology Fee Program, "Enhancing botanical learning through digital microscopy" (\$42,470)2008 Oklahoma State University, College of Arts and Sciences, Student Technology Fee Program, "Purchasing of two growth chambers and a desktop computer to upgrade laboratory exercises for BOT1404 Plant Biology" (\$31,500) Oklahoma State University, College of Arts and Sciences, Student Technology 2008 Fee Program, "Operating System, Software, and Wireless Upgrade for Molecular Evolution Student Research in BOT 4400/5110, Molecular Phylogenetics and Evolution" (\$4,060)

Awards, Honors

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1997	Katherine Esau Award for best graduate paper in the Developmental and Structural Botany Section, Botanical Society of America, AIBS conference, Montreal.
1997	Sophie Ducker Postgraduate Scholarship, University of Melbourne.
1995-1998	Australian Postgraduate Award and HECS Postgraduate Scholarship.
2019	President's Cup Award – Promoting Creative Interdisciplinarity Competition: "Promoting Interdisciplinary Inquiry Through Scientist-Teachers and Teacher-Scientists", Oklahoma State University.

Presentations

(71 as presenter, 102 total, of all kinds)

Invited Presentations at International Conferences

- Jan 2019 "Evolution and domestication in grasses" Sorghum and Millet Workshop, Plant 1 and Animal Genome Conference, San Diego, CA. (also chaired workshop).
- May 2017 "Setaria is a short day plant with a secondary long day genetic regulatory 2. pathway." 10th Brazilian Symposium on the Molecular Genetics of Plants, Ouro Preto, Brazil.
- Mar 2017 "The Setaria model system: past, present, and future." Second International 3. Setaria Genetics Conference, St. Louis, MO.
- Oct 2013 "Evolution and domestication in grasses." XV Biochemistry and Biology 4. Congress, and 8th US-Mexico Plant Biology Symposium, Cancún, Mexico.
- Jul 2013 "The genetics of growth and development in foxtail and green millet (Setaria 5. spp.)." International Millet Symposium, Cambridge, UK.
- 6. Jan 2013 "Comparative genomics of domestication in foxtail millet and other grasses." Plant and Animal Genome Domestication Genomics Symposium, San Diego.

- 7. Jul 2011 "Clade-based evo-devo: fruit shape diversification in *Paysonia* (Brassicaceae)." International Botanical Congress, Melbourne.
- 8. Jan 2008 "Biomass for Biofuels." Plant and Animal Genome Sorghum and Millet workshop, San Diego.
- Jan 2008 "Polyploid speciation in *Tragopogon*." Plant and Animal Genome Polyploidy 9. Symposium, San Diego.
- Sep 2000 "Integrating phylogeny, developmental morphology and genetics: a case study 10. of inflorescence evolution in the 'bristle grass' clade (Panicoideae, Poaceae)." Developmental Genetics and Plant Evolution Conference, London, U.K.
- Aug 1999 "Floral form and ontogenetic process in Winteraceae." XVI International 11. Botanical Congress, St Louis, MO, USA.

Invited Presentations at National Conferences

- Aug 2004 "Inflorescence evolution in the grasses: matching genes and phenotypes." 1. Botanical Society of America Conference symposium on 'Lessons learned from candidate genes'. Snowbird, Utah.
- 2. Sep 2002 "Genetic and developmental basis of morphological diversification in the millet grasses." IGERT Symposium, Bloomington, Indiana.
- Aug 2002 "Patterns of inflorescence evolution in grasses; evidence from phylogeny and 3. developmental morphology." Botanical Society of America Conference symposium in Madison on "Generating diversity: the link between developmental morphology and phylogeny."

Contributed Presentations at Professional Conferences

- Jul 2020. "Growth analysis of the C4 grass Setaria viridis in high and low light 1. environments." Botanical Society of America Conference, online.
- 2. Jul 2018. "Analysis of flowering time in the C₄ panicoid grass model, *Setaria* sheds new light on the role of the CONSTANS transcription factor in photoperiod response." Botanical Society of America Conference, Rochester, MN.
- Mar 2017. "The effect of photoperiod on flowering time in Setaria." Second International 3. Setaria Genetics Conference, St. Louis, MO.
- 4. Sep 2016. "Genetic regulation of tillering in panicoid grasses." Plant Genome Research Program workshop, Washington, D.C.
- Mar 2016. "QTL mapping of plant architectural traits in the panicoid grass *Setaria*." 5. Maize Genetics Conference, Jacksonville, FL.
- Jan 2016. "Genetic regulation of tillering in panicoid grasses." Plant and Animal Genome 6. Conference, San Diego, CA.
- Sep 2015. "Genetic regulation of tillering in panicoid grasses." Plant Genome Research 7. Program workshop, Washington, D.C.

- 8. Jul 2015. "Shading response in *Setaria*." Botanical Society of America, Edmonton, Alberta, Canada.
- 9. Apr 2015. "Phenotypic plasticity in *Setaria viridis*." Micromorph Conference on Phenotypic Plasticity, Arnold Arboretum, Boston, MA.
- 10. Mar 2015. "Effect of photoperiod on the growth and flowering in the panicoid grass *Setaria*." Maize Genetics Conference. St. Charles, IL.
- 11. Sep 2014 "Genetic regulation of tillering in panicoid grasses." Plant Genome Research Program workshop, Washington, D.C.
- 12. Jul 2013 "The evolutionary history of *Paysonia* (Brassicaceae)." Botanical Society of America, New Orleans.
- 13. Jul 2012 "Genetic analysis of lifetime development in grasses." Botanical Society of America, Columbus.
- 14. Jul 2011 "Genetic basis of plant architectural development in grasses insights from foxtail millet." International Botanical Congress, Melbourne.
- 15. Jan 2010 "Branching and biomass accumulation in foxtail millet." Plant and Animal Genome, San Diego.
- 16. Nov 2009 "Branching and biomass accumulation in foxtail millet." Oklahoma Academy of Sciences, Ada.
- 17. Jul 2009 "Fruit diversity in *Paysonia* (Brassicaceae); integrating developmental morphology, phylogeny and genetics." Botany 2009, Snowbird, Utah.
- 18. Nov 2008 "Evolutionary patterns in *Paysonia* (Brassicaceae)." Oklahoma Academy of Sciences Fall Meeting, Oklahoma City.
- 19. Nov 2007 "Biomass for Biofuels." (poster) Ecological Genetics conference, Kansas City.
- 20. Oct 2007 "Biomass for Biofuels." Oklahoma Academy of Sciences, Tulsa.
- 21. July 2007 "Gene duplication and gene fate in *Tragopogon* (Asteraceae)." Joint meeting of American Society of Plant Biologists and Botanical Society of America, Chicago.
- 22. Mar 2005 "Evolution of branching in millet grasses." (poster) Maize Genetics meeting, Wisconsin.
- 23. Mar 2004 "Genetic control of branching in foxtail millet." (poster) Maize Genetics meeting, Mexico City.
- 24. Jul 2003 "Floral development and molecular phylogeny support the generic status of *Tasmannia* (Winteraceae)." Botany 2003, Mobile.
- 25. Jun 2003 "Genetic control of inflorescence diversification in millet grasses." Evolution 2003, Chico.
- 26. Jul 2002 "QTL underlying architectural diversity and domestication in millet grasses." Evolution 2002, Champaign-Urbana.

- 27. Aug 2001 "Integrating phylogeny, developmental morphology, and genetics: a case study of inflorescence evolution in the 'bristle grass' clade (Panicoideae; Poaceae)." Botany 2001, Albuquerque.
- 28. Aug 2000 "Floral morphology and development in Winteraceae." Botany 2000, Portland.
- 29. Mar 2000 "Inflorescence development in *Setaria* (Paniceae, Poaceae)." (poster) Maize Genetics meeting, Coeur d'Alene.
- 30. Aug 1997 "Variation and form in the flowers of *Drimys winteri* (Winteraceae)." American Institute of Biological Sciences conference, Montreal, Canada.
- 31. Aug 1997 "*Drimys winteri* and variation in floral form in Winteraceae." Systematic Association Conference, Oxford, U.K.
- 32. Jul 1996 "Variable floral organization in the primitive angiosperm *Drimys winteri* J.R. and G. Forst (Winteraceae)." Beyond the Floras Conference, Melbourne, Australia.

Invited Seminars at Universities

- 1. Oct 2020 "Determinants of plant architecture in grasses." Prairie View A&M University, TX
- 2. Oct 2019 "Conserved genetic networks underlying domestication in grasses." North Carolina State University, Raleigh, NC.
- 3. Oct 2018 "Evolution and domestication in grasses." West Virginia University, Morgantown, WV.
- 4. Feb 2016 "Environmental and genetic determinants of form in the panicoid grass, *Setaria*." University of Arizona, Tucson, AZ.
- 5. Feb 2015 "Evolution and Domestication in Grasses." Oklahoma State University, Botany Department
- 6. Nov 2014 "Evolution and Domestication in Grasses." Universidad Nacional Autónoma de México, Instituto de Ecología.
- 7. Apr 2014 "Evolution and Domestication in Grasses." Iowa State University, Department of Ecology, Evolution and Organismal Biology.
- 8. Feb 2013 "Evolution and Domestication in Grasses." Oklahoma State University, Department of Entomology and Plant Pathology.
- 9. Jan 2013 "Parsing the grammar of grasses, evolutionary and developmental perspectives on grass form." University of Illinois, Champagne-Urbana.
- 10. Oct 2012 "Parsing the grammar of grasses, evolutionary and developmental perspectives on grass form." Saint Louis University.
- 11. May 2012 "An evo-devo approach to bauplan evolution in grasses." University of California at Riverside.
- 12. Sep 2011 "Parsing the grammar of grasses, evolutionary and developmental perspectives on grass form." Ohio University.

- 13. Oct 2009 "Architectural evolution and domestication in grasses." University of Oklahoma.
- 14. Feb 2009 "Domestication and evolution of plant architecture in grasses." Kansas State University.
- 15. Apr 2008 "Branching in grasses and other stories." University of Kansas.
- 16. Feb 2007 "Architectural evolution in grasses." University of Florida.
- 17. Nov 2005 "The evolution of branching in grasses, linking pattern and process." University of Texas at Austin.
- 18. Oct 2005 "The evolution of branching in grasses, linking pattern and process." Institute of Plant Sciences, University of Bern, Switzerland.
- 19. Sep 2005 "Evolution of branching in grasses, patterns and processes." Department of Plant Biology, University of Georgia.
- 20. Jan 2005 "Inflorescence evolution in the grasses." Department of Plant Sciences, University of Oxford, UK.
- 21. Apr 2004 "Grass evolution, a story of genes, form and history." Botany Department, University of Tennessee.
- 22. Nov 2003 "Probing the secrets of morphological diversity: phylogeny, development and genetics of millet grasses." Mississippi State University.
- 23. Jul 2003 "Probing the secrets of morphological diversity: phylogeny, development and genetics of millet grasses." University of Melbourne, Victoria, Australia.
- 24. Mar 2003 "Plant Evolution: integrating phylogeny, development, and genetics." Royal Botanic Gardens, Kew, United Kingdom.
- 25. Feb 2002 "Inflorescence evolution in the millet grasses: evidence from phylogeny, developmental morphology and genetics." University of California at Berkeley.
- 26. Dec 2001 "Integrating phylogeny, developmental morphology and genetics: a case study on inflorescence evolution in the foxtail millet grasses." Harvard University.
- 27. Feb 2000 "Floral form and ontogenetic process in the primitive angiosperm family Winteraceae." Miami University.

Student and Post-doc Papers Presented at Professional Meetings

- 1. November 2020 "Characterization of *teosinte branched1* mutants in *Setaria viridis*." National Association of Biology Teachers Conference, virtual. (presented by H. Oliver, winner of the mentored undergraduate research poster competition https://news.okstate.edu/articles/education-health-aviation/2020/preservice-teacher-wins-national-award.html)
- 2. July 2020 "Reconstructing the engine of ontogeny: evidence for hierarchical function-value traits governing developmental processes." Botanical Society of America, online. (presented by J. Hodge)

- 3. March 2019 "Using high-throughput phenotyping to investigate the development of *Setaria viridis* under normal and shaded light regimes." Maize Genetics Conference, St. Louis, MO. (presented by Q. Li)
- 4. March 2019 "Branching out, exploring the genetic landscape of branching in Setaria viridis (green foxtail) with the *cushion plant* mutant background." Maize Genetics Conference, St. Louis, MO. (presented by J. Hodge)
- 5. March 2019 "Using mutants to identify new branching loci in Setaria italica (foxtail millet)." Maize Genetics Conference, St. Louis, MO. (presented by Y. Carillo)
- 6. March 2019 "Characterization of a *Setaria viridis* mutant with late flowering under short-day conditions." Maize Genetics Conference, St. Louis, MO. (presented by H. Hu)
- 7. March 2019 "Comparative co-expression gene network analysis reveals evolutionary conservation and divergence of seed shattering mechanism." Maize Genetics Conference, St. Louis, MO. (presented by H. Hu)
- 8. March 2019 "Analysis of a Plant Architecture QTL in *Setaria*: The Role of Height in Branching." Maize Genetics Conference, St. Louis, MO. (presented by M. Mauro-Herrera)
- 9. March 2019 "Mapping the *chia* Locus in *Setaria italica*." Maize Genetics Conference, St. Louis, MO. (presented by M. Haddox)
- 10. May 2018 "Competition performance of foxtail millet and sunflower." Plant Biology and OSUTeach Symposia, Oklahoma State University, Stillwater, OK. (presented by Kyle Goebel)
- 11. Mar 2017 "Height growth dynamics in Setaria." Second International Setaria Genetics Conference, St. Louis, MO. (presented by M. Mauro-Herrera)
- 12. Mar 2017 "Landmark-based semi-automated phenotyping for developmental traits." Second International Setaria Genetics Conference, St. Louis, MO. (presented by J. Hodge)
- 13. Mar 2017 "Landmark-based semi-automated phenotyping for developmental traits." Maize Genetics Conference, St. Louis, MO. (presented by J. Hodge)
- 14. Mar 2016 "Determining the Morphological Effects of Shading on *Setaria viridis*." National Science Teachers Association, Nashville, TN. (presented by Cara Stephens)
- 15. Mar 2016 "Acute, an Automated Landmark Identification Method for Whole Plant Phenotyping." Maize Genetics Conference, Jacksonville, FL. (presented by J. Hodge)
- 16. Jan 2016 "Developmental variation in branch architecture in tillering mutants of *Setaria viridis*." Plant and Animal Genome Conference, San Diego, CA. (presented by J. Hodge)
- 17. Jan 2016 "Interrelationship between biomass and architecture during growth in *Setaria*." Plant and Animal Genome Conference, San Diego, CA. (presented by M. Mauro-Herrera)
- 18. Mar 2015 "Developing a Standards-Based Lesson that Aligns with NGSS on Photosynthetic Feedback Mechanisms using Data from a Research Experience for

- Undergraduate Preservice Science Teachers." National Association of Science Teachers. Chicago, IL. (presented by K. Goodwin)
- 19. Nov 2014 "Developing a Standards-Based Lesson that Aligns with NGSS on Photosynthetic Feedback Mechanisms using Data from a Research Experience for Undergraduate Preservice Science Teachers." National Association of Biology Teachers. Cleveland, OH. (presented by K. Goodwin)
- 20. Jul 2012 "Phylogeny and populations genetics of *Paysonia*." Botanical Society of America, Columbus, Ohio (presented by L. Borja)
- 21. Jan 2012 "Genetic basis of plant architectural development in foxtail millet." Plant and Animal Genome Conference, San Diego, California (presented by J. Borrone)
- 22. Jul 2011 "Distinguishing incomplete lineage sorting and gene flow to infer the evolution of the Southeastern bladderpods (*Paysonia* spp.)." Botany and Economic Botany 2011, Botanical Society of America, St. Louis, Missouri (presented by L. Borja)
- 23. Jul 2011 "Architectural development in green millet (*Setaria viridis*) under varied light regimes." Botany and Economic Botany 2011, Botanical Society of America, St. Louis, Missouri (presented by M. Malahy)
- 24. Mar 2011 "Genetic basis of plant architectural development in foxtail millet." Maize Genetics Conference, Illinois (poster, presented by M. Mauro-Herrera)
- 25. Mar 2011 "Miami White Corn: Genetic Relationships Between Native American Landraces. Maize Genetics Conference, Illinois." (poster, presented by J. Long)
- 26. Mar 2011 "Pattern of vegetative architectural development in green millet (*Setaria viridis*) under varied light regimes." Maize Genetics Conference, Illinois. (poster, presented by M. Malahy)
- 27. Jan 2010 "Development of genomic and genetic resources for *Paysonia*: a model system to investigate evolutionary mechanisms of speciation in the Brassicaceae." Plant and Animal Genome, San Diego. (poster, presented by J. Borrone)
- 28. Nov 2009 "Development of genomic and genetic resources for *Paysonia* (Brassicaceae)." Ecological Genomics Conference, Kansas City, Kansas. (poster, presented by J. Borrone)
- 29. Nov 2009 "Spatial genetic structure in *Dichanthelium oligosanthes*." Oklahoma Academy of Sciences, Ada, Oklahoma. (presented by M. Parkhurst)
- 30. Nov 2009 "Conservation Genetics in *Paysonia perforata* (Brassicaceae)." Oklahoma Academy of Sciences, Ada, Oklahoma. (presented by J. Borrone)
- 31. Jul 2009 "Diversity of plant architecture in grasses: developmental stages contribute to branching patterns in foxtail millet." Botany 2009, Snowbird, Utah. (presented by M. Mauro-Herrera)
- 32. Jul 2009 "Phylogenetic patterns in branching across the grasses." Botany 2009, Snowbird, Utah. (presented by M. Malahy)
- 33. Jul 2009 "Development of genomic and genetic resources for *Paysonia* (Brassicaceae)." Botany 2009, Snowbird, Utah. (presented by J. Borrone)

Symposia Organized

- 1. Organizing Committee, Second International Setaria Genetics Conference, St. Louis, MO, in March 2017
- 2. Co-organized symposium "Out of the Evo-Devo Box" at the International Botanical Congress in Melbourne, Australia, in 2011.

Professional Experience: Teaching

- 2007-17, 2019-20 *Plant Biology* (BOT 1404), Fall Semester. An introductory plant biology course with an enrollment of c. 110-150 students, and both a lecture and lab component.
- 2009, 11, 13, 15, 17 *Molecular Phylogenetic Analysis*, Spring Semester, graduate course, enrollment 10-15.
- 2010 Species-level Phylogenetics, Spring semester, graduate seminar course, enrollment 14.

Professional Experience: Student and Post-Doc Mentoring

Post-doctoral Advisees

Hao Hu (2017-present)

John Stewart (2014)

Margarita Mauro-Herrera (2008-2019)

James Borrone (2008-2010)

Research Associate

Shakuntala Fathepure (2009-2010)

Graduate Student Advisees

Completed

Yisel Carrillo, MS, 2019, Oklahoma State University, Department of Plant Biology, Ecology and Evolution.

Thesis title: "Using a many-tillered mutant to identify branching locus in *Setaria italica* (foxtail millet)."

Research funded by National Science Foundation IOS-1339332.

Qing Li, MS, 2019, Oklahoma State University, Department of Plant Biology, Ecology and Evolution.

Thesis title: "Growth and development of *Setaria viridis* under normal and shaded light regimes."

Research funded by National Science Foundation IOS-1339332.

Armond Swift, M.S. 2018, Oklahoma State University, Department of Plant Biology, Ecology and Evolution

Thesis title: "Genetic regulation of hydroxyl fatty acid synthesis and accumulation in *Paysonia* spp."

Research funded by Oklahoma Center for the Advancement of Science and Technology Plant Basic Biology grant.

Present position: Tulsa Community College Lecturer

Jake Long, M.S., May 2013, Oklahoma State University, Department of Botany

Thesis title: "Phylogenetic relationships and genetic diversity of Miami White Flour corn."

Research funded by the Miami Nation and by grants from the Native American Faculty and Staff Association (\$1,000), the McPherson fund (\$500), the Maize Genetics Consortium (\$500), and the Institute for Genomic Biology at the University of Illinois (summer internship).

Formerly Director of Business Development and Agricultural R&D, Entogenetics Inc, presently Fractional Controller/CFO at Fuse Financial Partners

Lupita Borja, M.S., July 2013, Oklahoma State University, Department of Botany

Thesis title: "Species-level phylogenetics and population genetics in *Paysonia* (Brassicaceae)."

Research funded by three external grants totaling \$2,750 (Botanical Society of America Graduate Student Research Award, Botanical Society of America Genetics Section Research Award, Botanical Society of America Travel Awards (2), American Society of Plant Taxonomists Graduate Research Award, American Society of Plant Taxonomists Travel Award), and internal grants totaling \$2,000 (OSU Distinguished Graduate Summer Fellowship, McPherson Award)

Present position: Scientist, Midwest laboratories, Omaha, Nebraska

Michael Malahy, M.S. 2012, Oklahoma State University, Department of Botany

Thesis title: "Evolution and Development of Vegetative Architecture: Broad Scale Patterns of Branching across the Grass Family (Poaceae) and Characterization of Architectural Development in *Setaria viridis* L. P. Beauv."

Research funded by Department of Energy grant (Doust 2008), by two external grants of \$1000 (Botanical Society of America, Maize Genetics Consortium), and one internal grant of \$500.

Present position: High school science teacher, Putman City North High School, Oklahoma City

Continuing

John Hodge, Ph.D. started August 2015, Oklahoma State University, Department of Plant Biology, Ecology and Evolution.

Nikee Shrestha, MS, started August 2019, Oklahoma State University, Department of Plant Biology, Ecology and Evolution

Graduate Student Committees as committee member (29)

Nicole Bryant (Ph.D., Plant Sciences, OSU)

Megan Trope (Ph.D., Zoology, OSU)

Robert Pookoo (Ph.D., Biochemistry, OSU)

Colton Flynn (Ph.D., Geography, OSU)

Frankie Coburn (Ph.D., Plant Sciences, OSU)

Chao Huang (Botany, Masters)

Kate Halpin (Botany)

Vaskar Thapa (Botany)

Somashekhar Punnuri (Botany)

Justin Lack (Zoology)

Michael Schwemm (Zoology)

Harlan Svoboda (MS, Botany, OSU)

Lindsey Worcester (MS, Botany, OSU)

Chad Ternes (Ph.D., Plant Sciences, OSU)

AJ Harris (Ph.D., Plant Sciences, OSU)

Justin Lack (Ph.D., Zoology, OSU); graduated May 2012

Ruchika Fernando (Ph.D., Zoology, OSU); graduated May 2012

Tyler Kerr (Ph.D., Biochemistry, OSU)

Denise Thompson (Ph.D., Zoology)

Josh Bradley (MS, NREM)

Huang Li (Ph.D., Plant Sciences, OSU)

Rita Flores (Ph.D., Bichemistry, OSU)

Cara Stephens (MS, Education, OSU)

Tanner Bryan (MS, Education, OSU)

Victor Andreev (Ph.D., Plant Biology, OSU)

Xuwen Weinike (Ph.D. Animal Sciences, OSU)

Austin Leonie (Ph.D., Integrative Biology, OSU)

David Kunkel (Ph.D., Plant Biology, OSU)

Kumar Shrestha (Ph.D., Plant Sciences, OSU)

Jude Birkenholz (MS, Plant Biology, OSU)

Xi Wen (Ph.D., Plant Biology, OSU)

Undergraduates Mentored (43)

Jessica Stromski 2008-2015 Michael Malahy 2007-2008 Katie Miller 2007

 Erik Olson
 2009

 Tia Ellis
 2008

 Melissa Villareal
 2008-2009

 Mary Gard
 2010-2011

 Trey Cowles
 2010-2011

Katy Miller 2010 (honors thesis) Molly Parkhurst 2010 (honors thesis)

Armond Swift 2011-2012

Chelsea Fortenberry 2011

Josh McCloud 2011 (Wentz scholar)

Alex Hardison 2011-2012 (OK-LSAMP scholar)

Nadja Goertz 2012 Amie Francis 2012-2013 Kerry Quinn-Swift 2012 Sami Ricketts 2012

Kimberly Rogers 2012 (Freshman Research Scholar)

Brian Cunningham 2012 **Taylor Sossamon** 2012 Laura Shand 2013-2014 Mylissa Stover 2014-2015 Josh Keegan 2015 Rene Mitchell 2015 Richard Leckie 2015-2017 Khanh To 2015-2016

Kami Hogan 2015 (Freshman Research Scholar)

Lili Kim 2015 2016-2019 Molly Haddox Ben Puritin 2016-2017 Kia Smith 2017 Allie Coates 2017 Katie Mueller 2017 Kelli Norton 2017-2018 Gabe Johnson 2017-2018 Jordan Reed 2017-2018 Kyle Goebel 2018-2019 Christian Webb 2019 Codi Sandefur 2019 Alyssa Regier 2019 Fengshi Tian 2019

Professional Societies

Genetics Society of America, 2004-present American Society of Plant Biologists, 2007-present

Service

National Science Foundation

Panelist and Reviewer, Directorate for Biological Sciences, Division of Integrative Organismal Systems, Plant, Fungal, and Microbial Development Mechanisms Program and the Evolution of Developmental Mechanisms Program (2011, 2013, 2019, 2020)

Panelist and Reviewer, Directorate for Biological Sciences, Division of Integrative Organismal Systems, Plant Genome Research Program (2008)

Proposal Reviewer, Directorate for Biological Sciences, Division of Integrative Organismal Systems, Plant Genome Research Program (2008, 2009, 2010, 2011, 2013, 2015)

Proposal Reviewer, Directorate for Biological Sciences, Division of Integrative Organismal Systems, Organism-Environment Interactions (2009, 2010, 2011)

Proposal Reviewer, Directorate for Biological Sciences, Division of Environmental Biology, Phylogenetic Systematics Program (2009, 2010, 2011, 2013, 2014, 2016)

Department of Energy

Panelist and Reviewer, Plant Feedstock Genomics for Biofuels (2012)

Other Proposal Reviews

Alberta Ingenuity Fund (Canada) (2008) Agropolis Fondation (EU) (2012, 2013) Ohio Plant Biotechnology Consortium (2012) European Research Council (2014, 2015) National Geographic (2015) Global Center for Food Systems Innovation (2015)

Manuscript Reviews

American Journal of Botany, Aquatic Botany, Asia Pacific Journal of Molecular Biology and Biotechnology, BMC Genetics, Botanical Journal of the Linnaean Society, Crop Science, Evolution, Euphytica, Evolutionary Applications, Frontiers in Plant Evolution and Development, Functional Plant Biology, Gene, Genome, International Journal of Plant Science, Journal of the Botanical Research Institute of Texas, Journal of Heredity, Molecular Biology and Evolution, Molecular Ecology, Molecular Ecology Resources, Molecular Genetics and Genomics, Molecular Phylogenetics and Evolution, Nature Plant, New Phytologist, Plant Cell Reports, The Plant Genome, Plant Journal, Plant Physiology, Plant Science, Plant Systematics and Evolution, PLoS Genetics, PLoS One, Proceedings of the National Academy of Sciences, Taxon.

Service to professional organizations

Botanical Society of America Pelton Award Committee 2015, 2016

Botanical Society of America Grady L. Webster Award Committee 2015, 2016

Botanical Society of America Development and Structure Section Secretary and Treasurer 2018present

Service to profession

External Reviewer for Louisiana State University – Shrevesport Tenure Packet External Reviewer for University of Alberta, Edmonton Tenure Packet

Editorships

Genes, Genomes, Genetics, Associate Editor, 2017 – present

Frontiers in Plant Sciences, Guest Associate Editor, 2017-2019, 2020

University Service

Departmental

Botany Reappointment and Tenure Committee, 2007-2010

PBEE Growth Space Committee, 2010-present

PBEE Seminar Planning Committee, 2010-2018

PBEE Budget Reduction Committee, 2016

PBEE Assessment Committee 2018-present

Head of Department, 2017-present

College

Arts and Sciences Reappointment and Tenure Committee, 2008-2009

Arts and Sciences Faculty Council representative, 2009

Life Sciences Reorganization Committee, 2012-2013

University

Bioinformatics Certificate Steering Committee, 2009- present

University Faculty Council, Research Committee, 2013-2014

University Faculty Council, Head, Research Committee, 2015-2017

Institutional Biosafety Committee, 2014-2015

Professional Education Council, OSU, 2016-2018

CADRE, 2018

University Core Facilities Committee 2018- present

PACE

Award Committees 2015-2017

OSU Land Grant award selection committee

Eminent Faculty Award selection committee

Regents Distinguished Research Awards selection committee

Outreach Activities

I have participated in multiple outreach activities to make plant science accessible to the general public and to students. Some of these include National Lab Day, Up Close, Scholars Day, and talks to the Oklahoma State University Botanical Society. Presentations include:

2011	The domestication of humans by plants: insights from the grasses. Oklahoma Native Plants Society Winter Field Trip, Stillwater, Oklahoma.
2012	Tree thinking and bioinformatics, Department of Computer Sciences, Oklahoma State University.
2014	Classification and plant genomics. Oklahoma Native Plants Society Winter Field Trip, Stillwater, Oklahoma.
2014	Marsupials of Australia. Child Development Lab, Oklahoma State University
2015	National Lab Day with both high school and elementary school children doing DNA extractions from plants.
2015	Invited lecture: Plants and domestication. Plants and People class
2015	Attended "Proud to be a Life Scientist" fall Social Event to talk with freshman
2015	OSU College of Education Preservice Science Teacher Research Symposium
2016	Deer Creek High School Science Fair Symposium judge
2016	Panelist on Vice-President for research symposium on Big Data, organized by Dr. Dana Brunson.
2017	Contributor, Will Rogers Elementary School Reverse Science Fair
2017-2018 Collaboration with artist, Megan Singleton, on paper works made from grasses	
In Spring 2012, 2013, 2104 I was a scientist-mentor of a group of high school students for the	

In Spring 2013, 2014 and 2016 I was a judge of the Kansas-Nebraska-Oklahoma Regional Junior Science and Humanities Symposium (JSHS) competition

NSF-funded *PlantingScience* initiative of the Botanical Society of America.

Media

2009	Cover illustration for special grasses issue of <i>Plant Physiology</i>
2012	Oklahoma Gardening (television show), October 2012, "Plant Adaptations to Water
	Stress"
	(http://www.youtube.com/watch?v=oQfPNVBCbw&list=UUmxBsGrSE3sbCs3eXe
	oJViw&index=46&feature=plcp)
2019	College of Arts and Sciences Podcast "Sugar is Crystallized Sunlight"

References

Professor Elizabeth Kellogg Donald Danforth Plant Science Center 975 North Warson Road St. Louis MO 63132 USA

Phone: (314) 587-1490

E- mail: ekellogg@danforthcenter.org

Professor Doug Soltis University of Florida Florida Museum of Natural History–Dickinson Hall 1659 Museum Road Gainesville, FL 32611

Doug Soltis: (352) 273-1963, email: dsoltis@ufl.edu

Professor Pam Diggle
University of Connecticut
Department of Ecology and Evolutionary Biology
75 N. Eagleville Road, Unit 3043
Storrs, CT 06269-3043, U.S.A.

Phone: (860) 486-4788

Email: pamela.diggle@uconn.edu