# Amanda L. Pendleton, Ph.D.

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## Education

**2014** Ph.D., Plant Molecular and Cellular Biology
University of Florida, Gainesville, Florida
**2010** B.S. (*Summa cum laude*), Botany
Department of Biology
University of Florida, Gainesville, Florida

## Work Experience

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| 2024-Current | Lead Research Analyst, Ag Data Services, Purdue University (2024 – Current) |

## Research Experience

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| 2018-2024 | Post-Doctoral Fellow, Biochemistry Department, Purdue University |
| 2014-2018 | Post-Doctoral Fellow, Department of Human Genetics, University of Michigan |
| 2010-2014 | Ph.D. Student, Plant Molecular and Cellular Biology, University of Florida |

## Publications

Timothy R. Fallon, Vikram V. Shende, Igor H. Wierzbicki, **Amanda L. Pendleton**, Nathan F. Watervoot, Robert P. Auber, David J. Gonzalez, Jennifer H. Wisecaver, Bradley S. Moore. (2024) Giant polyketide synthase enzymes in the biosynthesis of giant marine polyether toxins. *Science.* (*In Review*). https://doi.org/10.1101/2024.01.29.577497

Katharine E. Eastman, **Amanda L. Pendleton**, Mearaj A. Shaikh, Thiti Suttiyut, Raeya Ogas, Paxton Tomko, Gregory Gavelis, Joshua R. Widhalm, Jennifer H. Wisecaver. (2023) "A reference genome for the long-term kleptoplast-retaining sea slug *Elysia crispata* morphotype clarki" *G3: Genes, Genomes, Genetics* 13(12): jkad234. https://doi.org/10.1093/g3journal/jkad234

Abigail S. Jarosz, **Amanda L. Pendleton**, Michael J. Lashbrook, Erica Cech, Madison Altieri, Austin Kunch, Jaime F. Modiano, Julia V. Halo. (2023) "Expression and high levels of insertional polymorphism of an endogenous gammaretrovirus lineage in dogs" *PLoS Genetics* 19(12): e1011083. https://doi.org/10.1371/journal.pgen.1011083

Jennifer H. Wisecaver, Robert P. Auber, **Amanda L. Pendleton**, Nathan F. Watervoort*, Timothy R. Fallon, Olivia Riedling, Bradley S. Moore, William W. Driscoll. Extreme genome diversity and cryptic speciation in a harmful algal bloom forming eukaryote. *Current Biology.* 33(11) https://doi.org/10.1016/j.cub.2023.05.003

Julia V. Halo*, **Amanda L. Pendleton***, Feichen Shen*, Aurelien Doucet, Thomas Derrien, Christophe Hitte, Laura E. Kirby, Bridget Myers, Elzbieta Sliwerska, Sarah Emery, John V. Moran, Adam R. Boyko, Jeffrey M. Kidd. "Long-read assembly of a Great Dane genome highlights the contributions of GC-rich sequence and mobile elements to canine genomic diversity" *Proceedings of the National Academy of Sciences* (2021) 118(11). https://doi.org/10.1073/pnas.2016274118
* Authors contributed equally to this work.

Peter Thielen*, **Amanda L. Pendleton*,** Robert Player, Kenneth Bowden, Thomas Lawton, Jennifer H. Wisecaver. "Reference genome for the highly transformable *Setaria viridis* ME034V" *G3: Genes, Genomes, Genetics* (2020) 10(10): 3467-3478. https://doi.org/10.1534/g3.120.401345
* Authors contributed equally to this work.

Jing Li, Zhenxin Fan, Feichen Shen, **Amanda L. Pendleton**, Yang Song, Bisong Yue, Jeffrey M. Kidd, and Jing Li. "Genome-wide CNV study of nine *Macaca* species reveals their genetic divergence and evolutionary adaptations" (2020) *Genome Biology and Evolution.* https://doi.org/10.1093/gbe/evaa200

Andrew G. DeMarco, Kedric Milholland, **Amanda L. Pendleton**, Daniel Wesenberg, Monessha Nambiar, Antonella Pepe, Stefan Paula, Jean Chmielewski, Jennifer H. Wisecaver, W. Andy Tao, Mark C. Hall "Conservation of Cdc14 phosphatase specificity in plant fungal pathogens: implications for antifungal development" (2020) *Scientific Reports* 10:2073*.* https://doi.org/10.1038/s41598-020-68921-3

Robert P. Auber, Thiti Suttiyut, Rachel M. McCoy, Manoj Ghaste, Joseph W. Crook, **Amanda L. Pendleton**, Joshua R. Widhalm, and Jennifer H. Wisecaver (2020) "Hybrid *de novo* genome assembly of red gromwell (*Lithospermum erythrorhizon Siebold & Zucc.*) reveals evolutionary insight into shikonin biosynthesis" *Horticultural Research 7:82.* https://doi.org/10.1038/s41438-020-0301-9 (PMID: 32528694)

Julia V. Halo, **Amanda L. Pendleton,** Abigail S. Jarosz, Robert J. Gifford, Malika L. Day, Jeffrey Kidd (2019) "Origin and recent expansion of an endogenous gammaretroviral lineage in canids" *Retrovirology. 16(1): 1-25.* https://doi.org/10.1186/s12977-019-0468-z

**Amanda L. Pendleton**, Feichen Shen, Angela M. Taravella, Sarah Emery, Krishna R. Veeramah, Adam R. Boyko and Jeffrey M. Kidd. (2018) "Comparison of village dog and wolf genomes highlights the role of the neural crest in dog domestication" *BMC Biology 16(1):1-21.* https://doi.org/10.1186/s12915-018-0535-2

Laura Botigue*, Shiya Song*, Amelie Scheu*, Shyamalika Gopalan, **Amanda L. Pendleton**, Matthew Oetjens, Angela Taravella, Timo Seregély, Andrea Zeeb-Lanz, Rose-Marie Arbogast, Dean Bobo, Martina Unterländer, Kevin Daly, Jeffrey Kidd, Joachim Burger, Krishna Veeramah. (2017) "Genomic analysis of Neolithic dogs from Central Europe" *Nature Communications 8:1-11.* https://doi.org/10.1038/ncomms16082

*****Authors contributed equally to this work.

**Amanda L. Pendleton**, Katherine E. Smith, Nicolas Feau, Francis Martin, Igor Grigoriev, Richard Hamelin, C. Dana Nelson, J. Gordon Burleigh, John M. Davis. (2014) "Patterns of duplications and losses in gene families of basidiomycetes and rust pathogens" *Frontiers in Plant Science*. https://doi.org/10.3389/fpls.2014.00299

## Selected Funding and Awards

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| **2022** | **Purdue AgSEED Grant (Co-Investigator):** $48,853<br>Co-Investigators: Maria Soledad Sepulveda (PI), **Amanda Pendleton**, Tyler Hoskins, Jason Cannon |
| **2019** | **Purdue Summer Course Design Fellowship:** $1,000 |
| **2015-2017** | **NHGRI Genome Science Training Program Fellowship:** $87,000 |