

E. Christine Davis, Ph. D.

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Education

Ph.D. Botany, 2005; Duke University, Department of Biology, Durham, NC

B.S. Botany, 1998; University of Florida, Gainesville, FL

Academic appointments in last 10 years

Instructional Professor/Master Lecturer; Department of Biology, University of Florida, Gainesville, FL; 8/23 – present.

Associate Instructional Professor/Senior Lecturer; Department of Biology, University of Florida, Gainesville, FL; 7/16 – 7/23.

Assistant Instructional Professor/Lecturer; Department of Biology, University of Florida, Gainesville, FL; 4/13 – 7/16.

Publications in last 5 years

Mansy, M.M., Antonenko, P., Murfee, W.L., Furtney, S.C., **Davis, C.**, Krishna, S., Pawlyshyn, B., Thurlow, N., & Pierantoni, J-P. The Neuro-inspired LA: A Novel Neuroscience Approach to Implementing a Learning Assistant Program for Biomedical Engineering Undergraduate Students. *Biomed Eng Education* **4**, 109–127 (2024). <https://doi.org/10.1007/s43683-023-00123-5>

Bechteler J., G. Peñaloza-Bojacá, D. Bell, G. Burleigh, S. F. McDaniel, **E. C. Davis**, E. B. Sessa, A. Bippus, D. Christine Cargill, S. Chantanoarrapint, I. Draper, L. Endara, L. L. Forrest, R. Garilleti, S. W. Graham, S. Huttunen, J. Jauregui Lazo, F. Lara, J. Larrain, L. R. Lewis, D. G. Long, D. Quandt, K. Renzaglia, A. Schäfer-Verwimp, G. Ee Lee, A. S. Pinilla, M. von Konrat, C. E. Zartman, M. Regina Pereira, B. Goffinet & J. C. Villarreal. Comprehensive phylogenomic time tree of bryophytes reveals deep relationships and uncovers gene incongruences in the last 500 million years of diversification. *American Journal of Botany* **110**: e16249 (2023). <https://doi.org/10.1002/ajb2.16249>

Valle, N., Antonenko, P., Endara, L., **Davis, C.**, Somarriba, G., Sessa, E., Luo, F., Carey, S., Dogan, S., & McDaniel, S. 2021. Community science, storytelling, or inquiry-based learning? Evaluating three technology-enhanced pedagogical approaches in an online botany course. *The American Biology Teacher* **83** (8): 513–520.

Breinholt, J.W., Carey, S.B., Tiley, G.P., **Davis, E.C.**, Endara, L. McDaniel, S.F., Neves, L.G., Sessa, E.B., Von Konrat, M., Chantanoarrapint, S., Fawcett, S., Ickert-Bond, S.M. Labiak, P.H., Larrain, J., Lehnert, M., Lewis, L.R., Nagalingum, N.S., Patel, N., Rensing, S.A., Testo, W., Vasco, A., Villarreal, J.D., Williams, E.W., Burleigh, J.G. 2021. Target enrichment for flagellate plants: A target enrichment probe set for resolving the flagellate plant tree of life. *Applications in Plant Sciences* **9**:e11406.

Luo, F., Antonenko, P., Valle, N., Sessa, E., Burleigh, G., Endara, L., McDaniel, S., Carey, S., & **Davis, E. C.** 2020. Collaborative Design Reasoning in a Large Interdisciplinary Learning Tool Design Project. *International Journal of Designs for Learning*, 11(1), 85–97.

Luo, F., Antonenko, P., & **Davis, E.C.** 2020. Exploring the evolution of two girls' conceptions and practices in computational thinking in science. *Computers & Education* 146: 103759.

Luo, F., Antonenko, P. “Pasha”, Valle, N., Sessa, E., Burleigh, G., Endara, L., McDaniel, S., Carey, S., & **Davis, E.** 2020. Collaborative Design Reasoning in a Large Interdisciplinary Learning Tool Design Project. *International Journal of Designs for Learning*, 11(1), 85-97.

Luo, F., Antonenko, P., & **Davis, C.** 2019. Computational thinking integration: Curriculum design for leveraging robotics in elementary science class. 2019 CoNECD - the Collaborative Network for Engineering and Computing Diversity, American Society for Engineering Education.

Presentations in last 5 years

Davis, E.C. Cultivating Equity in STEM Classrooms at UF. University of Florida Chief Diversity Officer's Building Inclusive Excellence Fall Retreat 2022. October 18, 2022.

Davis, E.C. What it Means to Me: Teaching at UF in 2022. Department of Biology Promotion Seminar, University of Florida. August 23, 2022.

Elkin, L., Mansour, I., Kollar, L., Antonenko, P., Sessa, E., **Davis, C.** (2019). Combating plant blindness with web-based modules that teach flagellate plant morphology. Presented at the 2019 Botany Conference, Tuscon, AZ.

Valle, N., Antonenko, P., Endara, L., **Davis, C.**, Somarriba, G., Sessa, E., Luo, F., Carey, S., Dogan, S., Burleigh, G., von Konrat, M., & McDaniel, S. (April 2019). *Inquiry learning, storytelling or citizen science? Exploring perceptions of learning in an online Biology course.* Presented at the 2019 Conference of the American Educational Research Association, Toronto, CA.

Luo, F. & Antonenko, P., & **Davis, C.** (April 2019). Evolution of children's conceptions and skills in computational thinking in science: A multiple-case study. Presented at the 2019 Conference of the American Educational Research Association, Toronto, CA.

Valle, N., Antonenko, P., Endara, L., **Davis, C.**, Luo, F., Sessa, E.,...McDaniel, S. Cyberlearning Activities on Flagellate Plants to Improve Learners' Knowledge of Flagellate Botany and Perceptions of Science Learning. Presented at the International Molecular Moss Science Society (iMOSS) meeting, St. Petersburg, FL. June, 2018.

Honors

College of Liberal Arts and Sciences Professional Development Leave Award – 2020

College of Liberal Arts and Sciences Teacher of the Year - 2018

Nominee - University of Florida Teacher of the Year - 2018

National Academies Education Mentor in the Life Sciences - 2015-2016.
National Academies Education Fellow in the Life Sciences - 2014-2015.

Research grants and travel awards in last 10 years

January 2021-December 2021. PI. **\$60,000**. Award in Advancing Racial Justice Through Inclusion, Diversity, Equity, and Access at UF. Cultivating equity in STEM classrooms at UF: A multidisciplinary collaboration to create a training course in inclusive, antiracist teaching practices for Learning Assistants (LAs) in STEM courses.

July 2020 – June 2023. Co-PI. **\$1,120,163**. NSF DRL: RIEL Biology: Responsive Instruction for Emergent Bilingual Learners in Biology.

May-July 2019. Co-PI. **\$14,000**. NSF REU: Cultivating Botanical Engagement Using Innovative Technology.

May-July 2019. Co-PI. **\$19,703**. NSF RET: Building a Comprehensive Evolutionary History of Flagellate Plants. UF IRB #1900103.

January 2016-December 2020. Co-PI. **\$2,233,768**. NSF GoLife. Collaborative Research: Building a Comprehensive Evolutionary History of Flagellate Plants.

2015-2016. **\$29,313**. Co-PI. College of Liberal Arts and Sciences, UF - Funding for internal grant proposal “Promotion of active and collaborative learning in the introductory biology course series – a proposal to incorporate undergraduate learning assistants in the classroom.”

Major leadership and service roles at UF

Department of Biology

- Associate Chair of Biology (2021- 2024)
- Antiracism Reading Group founder (2020)
- Coordinator of Introductory Biology (2017-2020)
- Biology Learning Assistants Program – Director (2015 -)
- Biology Major Executive Committee (2014 - 2017)

Service for the College and University

- CLAS Faculty Council (elected terms: 2017 – 2019; 2020 – 2022; 2024-2026)
 - CLAS Faculty Council – Chair (2017 – 2018; co-chair 2024 – 2025)
 - Founder, CLAS Continuing our Conversation Mentoring Series (coordinated from 2019 - 2021)
 - Chair, CLAS Best Practices for Faculty Mentorship Initiative Subcommittee (2018 – 2019)
- Racial Justice Symposium Steering Committee (2022 - 2023)
- ASPIRE Inclusive Hiring Practices Task Force (2022 - 2023)
- Preview Advisor (2019 -)
- CLAS Assembly Chair (2019 – 2020)
- CLAS T&P Criteria Revision Committee (2019)
- CLAS 2019 Teacher of the Year Awards Committee
- University Curriculum Committee (2017 - 2019)