Timothy J. Pegg

Midwestern State University 3410 Taft Blvd. Wichita Falls, TX 76308 (513) 404-9936 timothy.pegg@msutexas.edu

EDUCATION

Doctor of Philosophy, Botany; August 13, 2021 Miami University, Oxford, OH

Master of Science, Plant Biology; Concentration: Botany; May 13, 2016 University of Oklahoma, Norman, OK

Bachelor of Science, Biology; Concentration: Biotechnology; May 16, 2009 Frostburg State University, Frostburg, MD

Bachelor of Science, Chemistry; Concentration: Biochemistry; May16, 2009 Frostburg State University, Frostburg, MD

RELEVANT EMPLOYMENT Assistant Professor, Dept. of Biology, Midwestern State University, Wichita Falls, Texas 2022 - Present General Life 1 (BIOL 1114) Botany: Plant Life (BIOL 3214) Plant Systematics (BIOL 3534) Plant Anatomy (BIOL 4463) Visiting Assistant Professor, Dept. of Biology & Environmental Science, Marietta College, Marietta, OH 2021 - 2022Modern Biology (BIOL 101) Flowering Plants (BIOL 311) Intro Bio Lab I (BIOL 105) Doctoral Dissertation Fellowship, Dept. of Biology, Miami University, Oxford, OH 2020 - 2021Teaching Assistant, Dept. of Biology, Miami University, Oxford, OH 2016 - 2020General Biology (BIO 115) Plant & Fungal Diversity (BIO 314) Introduction to Botany (BIO 191) Plant Physiology (BIO 425W/525) Teaching Assistant, Dept. of Microbiology and Plant Biology, University of Oklahoma, Norman, OK 2014 - 2016General Botany (BIOL 1114) Research Assistant, Dept. of Microbiology and Plant Biology, University of Oklahoma, Norman, OK 2013 - 2015Adjunct Faculty Member, Dept. of Biological Sciences, Allegany College of Maryland, Cumberland, MD 2012 - 2013General Biology (BIO 101) Human Physiology & Anatomy (BIO 207/208) Science Lab Tutor, Student Success Center, Allegany College of Maryland, Cumberland, MD 2012 - 2013Graduate Teaching Assistant, Dept. of Biological Sciences, Virginia Tech, Blacksburg, VA 2009 - 2010General Biology (BIOL 1006) Lab Assistant, Dept. of Chemistry, Frostburg State University, Frostburg, MD 2006 - 2007Undergraduate Chemistry & Biology Tutor, Frostburg State University, Frostburg, MD 2005

AWARDS

- Heimsch Award in Botany: June 2021
- 1st Place Poster Award, Biological Sciences Microscopy & Microanalysis Conference (Portland, Oregon): August 2019
- Jerry W. McClure Award in Botany for Outstanding Graduate Student: May 2019
- \$1000 Student Scholar Award Microscopy& Microanalysis Conference: August 2019
- 1st Place, MSA Micrograph Competition (Baltimore, Maryland): August 2018
- 1st Place Poster Award, Biological Sciences Microscopy & Microanalysis Conference (Baltimore, Maryland): August 2018
- 1st Place Poster & McNair Award OU Student Research and Creativity Day: March 2016
- President's Scholarship: 2003 2007

PUBLICATIONS

- **Pegg, T. J.,** Gladish, D. K., Baker, R. L. 2021. "Algae to angiosperms: Autofluorescence for rapid visualization of plant anatomy among diverse taxa" *Applications in Plant Sciences*. DOI: https://doi:10.1002/aps3.11437
 - **Pegg**, **T.J.**, Gladish, D.K., Baker, R. L. 2021. "Modification of Cell Wall Hemicelluloses during Fabaceae Root Aerenchyma Formation" *The Plant Cell. In Prep*.
- **Pegg, T. J.**, Edelmann, R. R., Gladish, D. K. 2020. "Immunoprofiling of Cell Wall Carbohydrate Modifications during Flooding-Induced Aerenchyma Formation in Fabaceae Roots" *Frontiers in Plant Science* DOI: https://doi.org/10.3389/fpls.2019.01805
- **Pegg, T. J.**, Edelmann, R. R., Gladish, D. K. 2018. "Progression of Cell Wall Matrix Alterations during Aerenchyma Formation in Pisum sativum Root Cortical Cells" *Proceedings of Microscopy & Microanalysis* DOI: https://doi.org/10.1017/S1431927618007377

CONFERENCES AND SEMINARS

- **Pegg, T. J.,** Gladish, D. K., Baker, R. L. *Autofluorescence for rapid visualization of plant anatomy among diverse taxa*. Botanical Society of America 2021 Conference Virtual (Online Oral Presentation)
- 2020 Pegg, T. J., Gladish, D. K., Baker, R. L. Immunoprofiling of Cell Wall Carbohydrate Modifications during Aerenchyma Formation in Fabaceae Roots. American Society of Plant Biologists Conference – Washington, DC (Online Oral Presentation)
- **2019 Pegg, T. J.**, Edelmann, R. R., Gladish, D. K. *Immunoprofiling of Cell Wall Carbohydrate Modifications during Aerenchyma Formation in Fabaceae Roots*. Microscopy & Microanalysis Conference Portland, Oregon (Poster)
- 2018 Pegg, T. J., Edelmann, R. R., Gladish, D. K. Progression of Cell Wall Matrix Alterations during Aerenchyma Formation in Pisum sativum Root Cortical Cells. Microscopy & Microanalysis Conference – Baltimore, Maryland (Poster)
- **Pegg, T. J.**, Bartley, L. E. *Pectic Polysaccharide Cell Wall Compositional Alterations during Lateral Root Emergence in Oryza sativa*. Oklahoma Academy of Science: 104th Annual Technical Meeting Oklahoma City, Oklahoma (Oral Presentation)
 - **Pegg**, **T. J.**, Bartley, L. E. *Deformation of Root Cortex Cells during Rice Lateral Root Emergence: Examination of Cell Wall Remodeling During Development*. Graduate Student Research & Performance Day: 2015 Norman, Oklahoma (Poster)

- Waters, C. L., **Pegg, T. J.**, Lin, F., Wan, S., Jentoft, R., Resasco, D., Lobban, L., Bartley, L. E., Mallinson, R. G. *Correlation of Switchgrass Biomass Composition to Thermochemical Biofuel Product Distribution*. 1st International Workshop on Engineered Crops Des Moines, Iowa (Poster)
- **Pegg, T. J.**, Biser, P. S. General ELISA Protocol for Incorporation into Undergraduate Lactate Dehydrogenase Purification Regimens. 237th American Chemical Society National Meeting & Exposition Salt Lake City, Utah (Poster)
- **Pegg, T. J.**, Smith, C., Shipe, R., Croner, A., Brosi, S. L. *Maple Syrup Production in Western Maryland: An Overview.* 49th Annual Society for Economic Botany Conference Durham, North Carolina (Oral Presentation)

INVITED PRESENTATIONS

Pegg, T. J. *Immunoprofiling of Cell Wall Carbohydrate Modifications during Flooding-Induced Aerenchyma Formation in Fabaceae Roots.* The Pennsylvania State University – State College, Pennsylvania (Oral Presentation)

PUBLIC OUTREACH

- Pegg, T. J. Red River Regional Science and Engineering Fair. Midwestern State University Wichita Falls, Texas (Science Fair Judge)
 - Pegg, T. J. Texas Master Naturalist Program Rolling Plains Chapter. Midwestern State University Wichita Falls, Texas (Botany & Invasive Species Seminar Presenter)
- 2023 Pegg, T. J. Red River Regional Science and Engineering Fair. Region 9 Education Service Center Wichita Falls, Texas (Science Fair Judge)
 - Pegg, T. J. Texas Master Naturalist Program Rolling Plains Chapter. Midwestern State University Wichita Falls, Texas (Botany & Invasive Species Seminar Presenter)
 - Pegg, T.J. Texas Future Farmers of America (FFA) Range Evaluation & Management CDE Competition. Iowa Park Consolidated Independent School District Iowa Park, Texas (Texas Native Grass ID Training Session)
- 2020 Pegg, T. J. *Clermont County Science Fair*. Clermont County Public Library Owensville, Ohio (Science Fair Judge)
 - Pegg, T. J. Hamilton Rotary Science Fair. Miami University Hamilton, Ohio (Science Fair Judge)
- 2019 Pegg, T. J. *Clermont County Science Fair*. Clermont County Public Library Owensville, Ohio (Science Fair Judge)
- Pegg, T. J. Breakthrough Cincinnati Program. University of Cincinnati Cincinnati, Ohio (SEM and Light Microscopy Demonstration)

PROFESSIONAL AFFILIATIONS

- American Society of Plant Biologists, 2019 Present
- Botanical Society of America, 2018 Present
- Arbor Day Foundation, 2016 Present
- Microscopy Society of the Ohio River Valley, 2016 Present
- Microscopy Society of America, 2015 Present
- Oklahoma Microscopy Society, 2014 2016
- American Chemical Society, 2009 Present

- Gamma Theta Upsilon (International Geography Honors Society), 2008 2009
- Gamma Sigma Epsilon (National Chemistry Honors Society), 2008 2009
- Tri-Beta (National Biology Honors Society), 2006 2009
- Student Affiliates of the American Chemical Society, 2004 2009
- National Honors Society, 2003 2009