CURRICULUM VITAE

Sarah E. Wyatt

Environmental and Plant Biology
508A Porter Hall
Ohio University
Athens, OH 45701
Facebook: https://www.facebook.com/WyattLabAtOhioUniversity

Telephone: (740) 593-1133
e-mail: wyatts@ohio.edu
Web page: https://www.ohio.edu/cas/wyatts

ACADEMIC BACKGROUND

Ph.D., Interdisciplinary Plant Physiology Program, December 1995
Department of Botany & Plant Pathology, Purdue University, West Lafayette, IN

Master of Science, Plant Pathology, May 1991
University of Kentucky, Lexington, Kentucky 40546

Bachelor of Science (with highest distinction), May 1984
Bachelor of Arts (with highest distinction), December 1980
Honors Program, University of Kentucky, Lexington, KY

ACADEMIC APPOINTMENTS

2021-2023	Steering Committee, Decadal Survey, NASA Biological and Physical Sciences National Academy of Science, Washington DC
2017- present	Director, Interdisciplinary Molecular and Cell Biology Program Ohio University, Athens, Ohio
2013- present	Professor, Department of Environmental and Plant Biology Ohio University, Athens, Ohio
Spring 2016	Faculty Fellowship Leave, GeneLab - Omics Open Science Initiative NASA Ames Research Center, Mountain View, CA
2014-2015	Intermittent Program Director, Molecular & Cell Biology, National Science Foundation, Arlington, VA
2012-2013	'Rotating' Program Director, Integrative Organismal Systems, National Science Foundation, Arlington, VA
2006-2013	Associate Professor, Department of Environmental and Plant Biology Ohio University, Athens, Ohio
2011-2012	Associate Chair, Department of Environmental and Plant Biology Ohio University, Athens, Ohio
2000-2006	Assistant Professor, Department of Environmental and Plant Biology Ohio University, Athens, Ohio
1996-2000	Research Associate, NASA Specialized Center of Research and Training Department of Botany, North Carolina State University, Raleigh, NC

HONORS AND AWARDS

Fellow, Sigma Xi, 2020
Fellow, American Society of Plant Biologists, 2020
Mid Atlantic Conference (MAC) Outstanding Faculty Award for Student Success, 2019-2020
Distinguished Agriculture Alumni Award, Purdue University, 2019
2018 Inspiring Programs in STEM Award, Tech Savvy OHIO.
INSIGHT into Diversity Magazine

Excellence in Education Award, American Society of Plant Biologist, 2017
Presidential Research Scholar, Ohio University, 2016
Presidential Teaching Award, Ohio University, 2014-2017
Outstanding Faculty Leadership and Service Award, College of Arts & Sciences 2013-14
Ann Campbell Brown Service Award, Ohio University, 2011
Presidential Teaching Award, Ohio University, 2007-2010
Dean's Outstanding Teacher Award, College of Arts & Sciences, Ohio University, 2004

GRANTS & CONTRACTS

Research - external

NASA Space Biology. "Comprehensive meta-analysis of multi-g studies on Earth and ISS" Meyers, A.D co-I, $50,000 (Jan 2022-Dec. 2022)

NASA Space Biology. "Spaceflight alters post-transcriptional regulation – extension for refly" S. E. Wyatt $203,711 (May 2022 – February 2023

NASA Space Biology. "BRIC LED Hardware Definition Test – Molecular and physiological responses of *Arabidopsis thaliana*" $48,944 to OU (February 1, 2021-January 31, 2022) Robert Ferl, Anna-Lisa Paul, Elison Blancaflor, Simon Gilroy co-PIs

NASA Space Biology. "Spaceflight alters post-transcriptional regulation" S. E. Wyatt $449,972 (September 2019- August 2022)

NASA Space Biology. "Molecular Dissection of Plant Gravity Perception" Wyatt, S. E., Wolverton, C. (Co-Principal), $96,952 sub-award to OU (September 2018 - May 2020).

NASA Space Biology. "Pilot project: Molecular dissection of Plant Gravity Perception" Wyatt, S. E., Wolverton, C. (Co-Principal), $63,144 to OU (September 2017 – August 2018).

NASA supplement to BRIC 20. "Definition: Proteomics Analysis of Arabidopsis seedlings in microgravity. $50,000 (4/2016-12/2016)

NASA, GeneLab supplement to BRIC 20. "Proteomics Analysis of Arabidopsis seedlings in microgravity. $63,000 (1/2015-12/2015)

NASA, Research Opportunities in Space Flight. "Proteomics Analysis of Arabidopsis seedlings in microgravity. $383,052 (9/2013-8/2015)

National Science Foundation, Organism and Environment Cluster, IOS. "Gravitropic Signal Transduction: A network approach to identifying the regulatory mechanisms," $250,000 (6/2012-5/2014).

National Science Foundation, Functional and Regulatory Systems, "Functional characterization of a cytochrome P450 involved in gravitropic signal transduction", $360,000 (9/2006-8/2010).

Ohio Plant Biotechnology Consortium, "Microsatellite molecular markers for cultivar development, potential bioremediation and basic research in the violets", Wyatt, S. E. (co-PI), Ballard, Harvey (co-PI, OU) and Culley, Theresa (co-PI, U Cincinnati), $10,000 (7/2004-6/2005).

National Aeronautics and Space Administration, "Molecular cloning and characterization of the GPS genes of Arabidopsis", $460,000 (1/2003-12/2005).

United States Department of Agriculture, "Characterization of the *gps* mutants of Arabidopsis" $80,000, (11/2002- 12/2003).

American Society for Gravitational and Space Biology "Characterization of auxin transport in the *gps* mutants of Arabidopsis" $10,110, (11/2001-10/2002).

Research Infrastructure

Ohio University 1804. "Acquisition of Covaris Instrumentation to Enhance Research Infrastructure" Wyatt, S. E., Kopchick, J. J., Berryman, D., Burdick, M., Murphy, E., Vis-Chiasson, M., Hua, Z. $63,545(August 2017 - July 2018).

National Science Foundation, Major Research Instrumentation "Acquisition of Plant Growth Chambers to Enhance Research Infrastructure at Ohio University", Showalter, A., Wyatt, S. E., Ballard, H.E., Faik, A., Kieliszewski, K., $389,726 (9/2013-8/2016)

Ohio Plant Biotechnology Consortium, "A High Performance Computational Biology Pipeline for Regulatory Genomics", Wyatt, S. E. (co-PI), Welch, Lonnie (co-PI, OU) and Stahlberg, Eric (co-PI, Ohio State University), $50,000 (7/2008-6/2009).

Ohio University 1804 Fund, "A laser dissection microscope to enhance research infrastructure at OU", Wyatt, S.E. (co-PI), Nadella, Vijay (senior personnel) $40,000 (7/2007-6/2008)

National Science Foundation, Major Research Instrumentation "Acquisition of equipment for a Core Genomics Facility at Ohio University", Wyatt, S. E. (co-PI) and Vis, Morgan (co-PI), $448,509, (7/2006-6/2009).

PUBLICATIONS

(**Graduate students** indicated in bold, *Undergraduates* in italics, *Authors contributed equally.)

Barker R, Kruse C, Johnson C, ….. Wyatt, SE, Fogle, H (in review) The Matrix: Meta-analysis of the space flight and microgravity response of the Arabidopsis plant transcriptome. *Nature Microgravity*

Meyers, A., Wyatt, SE (2022) Plant Space Biology in the Genomics Age. *Annual Plant Reviews Online* (accepted; invited) *(available on-line now)*

Kruse CPS, Wyatt SE (2022) Nitric Oxide, gravity response, and a unified schematic of plant signaling, *Plant Science* 314: 111105 *(available on-line now)*

Basu P, Kruse CPS., Luesse D.R, Wyatt SE (2021) A Guide to plant proteomic data acquisition and data analyses. *Plant Gravitropism: Methods and Protocols (invited)*

Meyers AD, Scinto-Madonich N, Wyatt SE, Wolverton SC (2021) Plant Growth and Dissection on Polyethersulfone Membranes. *Plant Gravitropism: Methods and Protocols (invited)*

Overbey et al. (2020) NASA GeneLab RNA-Seq Consensus Pipeline: Standardized Processing of Short-Read RNA Seq Data. *Cell Reports*; preprint on *BioArxiv* (2020) (https://www.biorxiv.org/content/10.1101/2020.11.06.371724v1)

Kruse CPS, Meyers AD, Basu P, Hutchinson S, Luesse DR, Wyatt SE (2020) Spaceflight induces novel regulatory responses in Arabidopsis as revealed by combined proteomics and transcriptomic analyses, *BMC Plant Biology* 20:237 (https://doi.org/10.1186/s12870-020-02392-6)

Sternberger AL, Ruhil AVS, Rosenthal DM, Ballard H.E Jr, Wyatt SE (2020) Environmental impact on the temporal production of chasmogamous and cleistogamous flowers in the mixed breeding system of *Viola pubescens*. *PLOS One* 15(3): e0229726 (https://doi.org/10.1371/journal.pone.0229726)

Kiss John Z, Wolverton SC, Wyatt SE, Hasenstein KH, van Loon JWA (2019) Comparison of Microgravity Analogs to Spaceflight in Studies of Plant Growth and Development. *Frontiers in Plant Science* 10: 1577 (https://doi.org/10.3389/fpls.2019.01577)

Sternberger AL, Bowman MJ, **Kruse CPS,** Ballard HE, Childs KL, Wyatt SE (2019) Transcriptomics identifies modules of differentially expressed genes and novel cyclotides in *Viola pubescens*. *Frontiers in Plant Biology* 10:15 (https://doi.org/10.3389/fpls.2019.00156)

Basu P, Kruse CPS, Luesse DR, Wyatt SE (2017) Growth in spaceflight hardware results in alterations to the transcriptome and proteome. *Life Science in Space Research* 15: 88–96 (10.1016/j.lssr.2017.09.001)

Kruse CPS, **Basu P,** Luesse DR, Wyatt SE (2017) Transcriptome and Proteome Stability in RNAlater® Preserved Tissue of *Arabidopsis thaliana. PLOS One 12*, e0175943 (https://doi.org/10.1371/journal.pone.0175943)

Wang Y, Ballard HE, Stockinger EJ, Nadella V, **Sternberger A**., Wyatt SE (2017) The role of two LEAFY orthologs in the chasmogamous/cleistogamous mixed breading system of *Viola pubescens* (Violaceae), *Journal of the Torrey Botanical Society* 144: 206-217 (https:doi.org/10.3159/TORREY-D-16-00023R2)

Hutchinson S, Basu P, Wyatt SE, Luesse DR (2016) Methods for on-orbit germination of *Arabidopsis thaliana* for proteomic analysis. *Gravitational and Space Research* 4: 20-17 (DOI: https://doi.org/10.2478/gsr-2016-0009)

Cook CA, Tucker A, **Shen K** and Wyatt SE. (2015) Microarray identifies transcription factors potentially involved in gravitropic signal transduction. *Gravitational and Space Research 3:18-27 (http://gravitationalandspaceresearch.org/index.php/journal/article/view/694)*

Basu P, Luesse DR, Wyatt SE (2015) Proteomic approaches and their application to plant gravitropism IN: *Methods in Molecular Biology* Elison Blancaflor (Ed.) Springer – Humana Press (DOI: 10.1007/978-1-4939-2697-8_10)

Rothwell, GR, Wyatt, SE, Tomescu AMF (2014) Plant evolution at the interface of paleontology and developmental biology: an organism centered paradigm. *American Journal of Botany* 101: 899-913 (cover) (DOI: 10.3732/ajb.1300451)

Tomescu AMF, Wyatt SE, Hasebe M, Rothwell GR (2014) Early evolution of the vascular plant body plan - the missing mechanisms. *Current Opinion in Plant Biology* 17:126–136 https://doi.org/10.1016/j.pbi.2013.11.016

Wyatt SE, Kiss JZ (2013) Plant Tropisms: From Darwin to the International Space Station. *American Journal of Botany* 100:1-3 (cover) (DOI: 10.3732/ajb.1200591)

Schenck CA, Nadella V, Clay SL, *Lindner J, Abrams Z*, Wyatt SE (2013) A proteomics approach identifies proteins involved in gravitropic signal transduction. *American Journal of Botany* 100:194-202 (DOI: 10.3732/ajb.1200339)

Withers JC, *Shipp MJ*, Rupasinghe SG, **Sukumar P,** Schuler M, Muday G, Wyatt SE (2013) GRAVITY PERSISTENT SIGNAL 1 (GPS1) reveals a novel cytochrome P450 involved in gravitropism. *American Journal of Botany* 100:183 -193 (DOI: 10.3732/ajb.1200436)

Wang Y, Ballard HE, *McNally RR*, Wyatt SE (2013) Gibberellic acid is involved in, but not sufficient to invert the closed status of the cleistogamous flowers in *Viola pubescens. Journal of the Torrey Botanical Society* 140: 1-8 (https://www.jstor.org/stable/43286981)

Shen K, Wyatt SE, Nadella V (2012) ArrayOU: a web application for microarray data analysis and visualization. *Journal of Biomolecular Techniques* 23: 37-39 (doi: 10.7171/jbt.2012-2302-001)

Sanders H, Rothwell GW, Wyatt SE. (2011) Parallel Evolution of Auxin Regulation in Rooting Systems. *Plant Systematics and Evolution*. 291: 221-225. (DOI:10.1007/s00606-010-0383-1)

*Luesse DR, **Schenck CA, Berner BK*, **Justus B**, Wyatt, SE (2010) GPS4 is allelic to ARL2: Implications for gravitropic signal transduction. *Gravitational and Space Biology* 23: 95-97.

Lev-Yadun S, Wyatt SE, Flaishman MA, (2010) Unconscious selection and domestication in "wild-type" *Arabidopsis thaliana* (*Brassicaceae*). *Int. J. of Plant Breeding* 4: 76-77.

Liang X, Shen K, Lichtenberg J, Wyatt SE, Welch LR (2010) An integrated bioinformatics approach to the discovery of cis-regulatory elements involved in plant gravitropic signal transduction. *International Journal of Computational Bioscience* 1:33-54. (DOI: 10.2316/Journal.210.2010.1.210-1013)

Wyatt SE, Sederoff R, Flaishman M, Lev-Yadun S (2010) *Arabidopsis thaliana* as a model for gelatinous fiber formation. *Russian Journal of Plant Physiology* 57:384-388. (https://doi.org/10.1134/S1021443710030076)

Sanders HL, Rothwell GW, Wyatt SE (2009) Key Morphological alterations in the evolution of leaves. *Int. J. Plant Sci.* 170:860-868 (https://doi.org/10.1086/600135)

Lichtenberg J, Alam M, Bitterman T, Drews F, Ecker K, Elnitski L, Evans S, Grotewold E, Gu G, Jacox E, Kurz K, Lee SL, Liang X, **Majmudar PM,** Morris P, Nelson C, Stockinger E, *Welch JD,* Wyatt SE, Yilmaz A, Welch LR (2009) Construction of genomic regulatory encyclopedias: Strategies and case studies. *Proceedings of the Ohio Collaborative Conference on Bioinformatics*, IEEE Computer Society Press 67-70. (doi: 10.1109/OCCBIO.2009.9.)

Sanders HL Wyatt SE (2009) Leaf Evolution and Development: Advancing Technologies, Advancing Understanding. *BioScience*59: 17-26. (https://doi.org/10.1525/bio.2009.59.1.6)

Rothwell GW, **Sanders HL**, Wyatt S., Lev-Yadun S. (2008) A fossil record for growth regulations: the role of auxin in wood evolution. *Ann. Missouri Bot. Gard.* 95, 121-134.

Roberts DR, **Nadella V**, Wyatt SE (2007) ARF9 and the gravitropic persistence signal response. *Gravitational and Space Biology* 20: 103-104.

Sanders HL, Rothwell GW, and Wyatt SE (2007) A paleontological context for the developmental mechanisms of evolution. *Int. J. Plant Sci.* 168:719-728. (https://doi.org/10.1086/513519)

Nadella V, *Hildenbrand CD*, and Wyatt SE (2006) Transcription profiling of the *gps1* mutant of Arabidopsis. *Gravitational and Space Biology* 20:155-156.

Nadella V, Shipp MJ, Muday GM, and Wyatt SE (2006) Evidence for altered polar and lateral auxin transport in the *gravity persistent signal* (*gps*) mutants of Arabidopsis. *Plant Cell and Environment* 29:682-690. (cover) (doi: 10.1111/j.1365-3040.2005.01451.x.)

Lev-Yadun S**,** Wyatt SE, and Flaishman MA (2005) The inflorescence stem fibers of *Arabidopsis thaliana* revoluta (ifl1) mutant. *Journal of Plant Growth Regulation* 23, 301-306 (cover).

Wyatt SE, Rashotte A, *Shipp M*, Robertson D, Muday GK (2002) Mutations in the GPS loci in Arabidopsis disrupt the perception and/or signal transduction of gravitropic stimuli. *Plant Physiology* 130, 1426-1435 (Featured in "On the Inside"). (doi: 10.1104/pp.102.010579)

Wyatt SE, **Tsou P-L**, Robertson D (2002) Expression of the high capacity calcium-binding domain of calreticulin increases bioavailable calcium stores. *Transgenic Research* 11, 1-10. (DOI: 10.1023/a:1013917701701)

***Perrson S**, *Love J, *Wyatt S E, Thompson W, Robertson D, Boss WF (2001) The Ca^{+} status of the endoplasmic reticulum is altered by induction of calreticulin expression in transgenic plants. *Plant Physiology* 126, 1092-1104. (DOI: 10.1104/pp.126.3.1092)

Collings DA, *Carter CN, Rink JC*, **Scott AC**, Wyatt SE, Allen NS (2000) Plant nuclei can contain extensive grooves and invaginations. *Plant Cell* 12, 2425-2439. (DOI: https://doi.org/10.1105/tpc.12.12.2425)

Scott A, Wyatt SE, **Tsou P-L**, Robertson D, Allen NS (1999) A model system for plant cell biology: GFP imaging in living onion epidermal cells. *BioTechniques* 26, 1127-1132 (cover). (DOI: 10.2144/99266st04)

Collings DA, Winter H, Wyatt SE, Allen NS (1998) Growth dynamics and cytoskeleton organization during stem maturation and gravity-induced stem bending in *Zea mays*. *Planta* 207, 246-258. (DOI: 10.1007/s004250050480)

Gorshkova TA, Wyatt SE, Salnikov VV, Gibeaut DM, Ibragimov MR, Lozovaya VV, Carpita NC (1996) Cell-wall polysaccharides of developing flax (*Linum usitatissimum* L.) plants. *Plant Physiology* 110, 721-729 (cover). (doi: 10.1104/pp.110.3.721)

Wyatt SE, *Dolph A.,* Avery AA, Carpita NC (1995) Plasma membrane to cell wall adhesion and its role in response to biotic and abiotic stresses. IN: *Current Issues in Plant Molecular and Cellular Biology*, Vol. 22 (M. Terzi, R. Cella, A. Falavigna, eds.). Dordrecht: Kluwer Press. p. 19-29. (https://link.springer.com/chapter/10.1007/978-94-011-0307-7_3)

Wyatt S. Carpita NC (1993) Plant cytoskeleton-exocellular matrix continuum. *Trends in Cell Biology* 3, 413-417 (cover). (doi: 10.1104/pp.103.027250)

Zhu JK, Shi J, Singh U, Wyatt S., Bressan RA, Hasegawa PM, Carpita NC (1993) Enrichment of vitronectin- and fibronectin-like proteins in NaCl-adapted plant cells and evidence for their involvement in plasma membrane-cell wall adhesion. *Plant Journal* 3, 637-646.

Wyatt SE Kuc J (1992) The accumulation of β-ionone and 3-hydroxy esters of β-ionone in tobacco immunized by foliar inoculation with tobacco mosaic virus. *Phytopathology* 82, 580-582. (DOI: 10.1094/Phyto-82-580)

Wyatt SE, Pan SQ, Kuc J (1991) β-1,3-Glucanase, chitinase, and peroxidase activities in tobacco tissues resistance and susceptible to blue mold as related to flowering, age, and sucker development. *Physiological and Molecular Plant Pathology* **39**, 433-440. (https://doi.org/10.1016/0885-5765(91)90009-7)

INVITED TALKS

Ohio University Science Café (Ohio University; October 14, 2021)
NASA GeneLab for High School Students (TEAMS; July 15, 2021)
International Space Station Research and Development (ISS R&D) Conference (on-line, June 23, 2021)
Mount St. Joseph University (TEAMS, March 1, 2021)
NASA Spaceflight Technologies, Application, and Research (STAR) Workshop (TEAMS; Jan 13, 2021)
Department of Biology, University of North Carolina Greensboro (TEAMS; Sept. 17, 2020)
Columbus Science Pub (Columbus, OH; March 7, 2019)
Physics and Astronomy, Ohio University (Athens, OH; Jan 25, 2019)
Science Café, Ohio University (Athens, OH; Nov 14, 2018)
Evergreen Arts & Humanities Series (Marietta, OH; Nov. 7, 2018)
Teen Science Café, Athens Public Library (Athens, OH; Feb.26, 2018)
Norm Cohn Symposium, Ohio University (Athens, OH; Sept. 9, 2017)
Midwestern Regional, American Society of Plant Biologists (West Lafayette, IN; Feb 4, 2017)
Chemical and Biomolecular Engineering, Ohio University (Athens, OH; Sept 27, 2016)
XO Seminar, NASA Ames Research Center (Mountain View, CA; July 2016)
Plant Biology Europe 2016 (Prague, Czech Republic; June 2016)
GeneLab, NASA Ames Research Center (Mountain View, CA; Sept. 2015)
Tech Savvy Michigan, keynote (May 2015)
40th COSPAR (Committee on Space Research) Scientific Assembly (Moscow, Russia: Aug 2014)
Tech Savvy OHIO, keynote (Athens, OH; May 2014)
Howard University, Department of Biology, (Washington, D.C.; Nov 16, 2011)
Purdue University, Department of Botany and Plant Pathology (West Lafayette, IN; Sept 2011)
Evolution of Plant Patterns (Moose, WY; March 28-29, 2011)
Ohio Collaborative Conference on Bioinformatics (Columbus, OH; June 2010).
37th COSPAR (Committee on Space Research) Scientific Assembly (Montreal, Canada: July 2008)
Ohio Collaborative Conference on Bioinformatics (Toledo, OH: June 2008).
Gordon Conference on Mechanotransduction in Biological Systems (New London, CT, July 2007).
Westminster College, Department of Biology (New Wilmington, PA: March 2007).
Ohio University Molecular and Cell Biology Program Retreat (Hocking Hills, OH: Oct 2006).
Molecular and Computational Biology, USC (Los Angeles, CA: March 2005).
University of Maryland, Baltimore County (Baltimore, MD: February 2005).
Plant Cellular & Molecular Biology, Ohio State University (Columbus, OH: February 2005).
35th COSPAR (Committee on Space Research) Scientific Assembly (Paris, France: July 2004).
Duquesne University, Department of Biological Sciences (Pittsburgh, PA: April 2004).
Gordon Conference on Mechanotransduction in Biological Systems (New London, CT, July 2003).
Plant Gravitational Genomics Group, North Carolina State University (Raleigh, NC: Sept. 2002).
Plant Growth Regulation Society of America (Miami Beach, FL: July 2001).
NCSU Forest Biotechnology Research Consortium (Raleigh, NC: April 2001).
Department of Botany, Miami University (Miami, OH: Feb 2001).
American Society of Gravitational and Space Biology (Montreal, Canada: Oct 2000).

SERVICE

National/International

Plant Analysis Working Group, NASA GeneLab, Dec 2016- present
Plant Science Definition Team, NASA, Aug 2016 – present

Grant Panels

NASA, International Life Science Research, Washington, DC
Spaceflight; NASA Fundamental Space Biology

National Science Foundation, Division of Biological Sciences
Physiological and Structural Systems Cluster, IOS;
Molecular and Cell Biology; Major Research Instrumentation
Division of Undergraduate Education; IGERT
United States Department of Agriculture, Washington, DC
European Space Agency, ILSRA
American Society of Plant Biologists Summer Undergraduate Research Fellowship

Manuscript Reviews – numerous journals
Advances in Space Biology, American Journal of Botany, Gravitational and Space Biology ISRN Botany, Journal of the Torrey Botanical Society, J. Biological Chemistry, J. Experimental Botany, Physiologia Plantarum, Plant Cell, Plant Cell Reports, Plant Cell and Environment, Plant Physiology, Plant Signaling and Behavior, PLOS One, International Journal of Plant Science, Trends in Plant Science

Editorial Boards
BMC Plant Biology, American Journal of Botany, Gravitational and Space Biology

TEACHING AND OUTREACH

Teaching - Ohio University
MCB 7410 MCB Seminar, Fall and Spring annually, 2017- present
PBIO 6972 Genomics Journal Club, Fall and Spring annually, 2015- present
PBIO 1140 Foundations of Plant Biology, Fall term annually
PBIO 4/5180 Writing in the Life Sciences, Fall annually
PBIO 4181J Writing for Biologists, Spring biannually
PBIO 4940 Undergraduate Research, each semester as needed

Outreach
Tech Savvy OHIO, Organizing Committee Chair and presenter, annually May 2014 - present
Ohio University's Women in Science and Engineering Day presenter, annually 2001-2012
Numerous talks/demos/workshops in 1996-present serving ca. over 4000 6-12th graders, 1200 elementary school students, and 400 adults.

PROFESSIONAL AFFILIATIONS

American Society of Plant Biologists, since 1991
Association for Women in Science, since 1992
American Society for Gravitational and Space Biology, since 1996
Botanical Society of American, since 2004
International Society for Computational Biology, since 2009