

Michael Gutensohn

CURRICULUM VITAE

Division of Plant and Soil Sciences

Davis College of Agriculture, Natural Resources and Design, West Virginia University
3424 Agricultural Sciences Building, Morgantown, WV 26505
Phone: (304) 293 5144, Email: michael.gutensohn@mail.wvu.edu

EDUCATION

- 1994-1999 **Ph.D. in Biology**, Botanical Institute, University of Cologne, Germany
Supervisor: Dr. Ulf-Ingo Flügge
- 1986-1993 **Diploma in Biology**, Julius-Maximilians-University, Würzburg, Germany
Supervisor: Dr. Ulf-Ingo Flügge
- 1990-1991 **Graduate exchange student**, State University of New York at Albany, NY

RESEARCH EXPERIENCE

- since 2022 **Associate Professor of Horticulture**
Division of Plant and Soil Sciences, West Virginia University
- 2015-2022 **Assistant Professor of Horticulture**
Division of Plant and Soil Sciences, West Virginia University
- 2008-2015 **Post-doctoral Research Associate** in Dr. Natalia Dudareva's laboratory
Department of Horticulture and Landscape Architecture, Purdue University
- 2000-2008 **Lecturer and Research Associate** in Dr. Ralf Bernd Klösgen's laboratory
Institute of Biology - Plant Physiology, Martin-Luther-University Halle-Wittenberg, Germany
- 1999-2000 **Research Associate** in Dr. Ulf Ingo Flügge's laboratory
Botanical Institute, University of Cologne, Germany
- 1994-1999 **Research Assistant** and Ph.D. candidate in Dr. Ulf Ingo Flügge's laboratory
Botanical Institute, University of Cologne, Germany
- 1992-1993 **Research Assistant** and Diploma candidate in Dr. Ulf Ingo Flügge's laboratory,
Julius-v.-Sachs-Institute for Biosciences,
Julius-Maximilians-University Würzburg, Germany
- 1990-1991 **Graduate Fellow** in Dr. Joseph Peter Mascarenhas's laboratory
State University of New York at Albany, NY

AWARDS and HONORS

- 2021 Recipient, Gamma Sigma Delta, WVU Chapter, Junior Faculty Award of Merit
- 2015-2021 Recipient, Ray Marsh and Arthur Pingree Dye Professorship

PUBLICATIONS

Google Scholar Profile: <https://scholar.google.com/citations?hl=en&user=4qQ96eIAAAAJ>

* *shared first authorship*, ‡ *corresponding author*

Larcenaire C., Wang F., Holásková I., Turcotte R., **Gutensohn M.**, Park, Y.L.‡ (2022). Effects of forest management on the insect assemblage of black cherry (*Prunus serotina*) in the Allegheny National Forest. *Plants* 11, 2596.

Gutensohn M.‡, Hartzell E., and Dudareva N. (2022). Another level of complex-ity: The role of metabolic channeling and metabolons in plant terpenoid metabolism. *Frontiers in Plant Science* 13, 954083.

Wang F., Park Y.L., and **Gutensohn M.**‡ (2021). Epidermis-specific metabolic engineering of sesquiterpene formation in tomato affects the performance of potato aphid *Macrosiphum euphorbiae*. *Frontiers in Plant Science* 12, 793313.

Larcenaire C., Wang F., Holásková I., Turcotte R., **Gutensohn M.**, and Park Y.L.‡ (2021). Characterization of the insect assemblage and associated floral volatiles of black cherry (*Prunus serotina*). *Plants* 10, 2195.

Wang F., Park Y.L., and **Gutensohn M.**‡ (2021). Glandular trichome-derived mono- and sesquiterpenes of tomato have contrasting roles in the interaction with the potato aphid *Macrosiphum euphorbiae*. *Journal of Chemical Ecology* 47, 204-214.

Gutensohn M.‡, Henry L.K., Gentry S., Lynch J.H., Nguyen T.T.H., Pichersky E., and Dudareva N. (2021). Overcoming bottlenecks for metabolic engineering of sesquiterpene production in tomato fruits. *Frontiers in Plant Science* 12, 691754.

Wang F., Park Y.L., and **Gutensohn M.**‡ (2020). Glandular trichome-derived sesquiterpenes of wild tomato accessions (*Solanum habrochaites*) affect aphid performance and feeding behavior. *Phytochemistry* 180, 112532.

Zhou F.*, Wang C.Y.* , **Gutensohn M.***, Jiang L., Zhang P., Zhang D., Dudareva N.‡, and Lu S.‡ (2017). A recruiting protein of geranylgeranyl diphosphate synthase controls metabolic flux toward chlorophyll biosynthesis in rice. *Proceedings of the National Academy of Sciences USA* 114, 6866-6871.

Rowen E.‡, **Gutensohn M.**, Dudareva N., and Kaplan I. (2017). Carnivore attractant or plant elicitor? Multifunctional roles of methyl salicylate lures in tomato defense. *Journal of Chemical Ecology* 43, 573-585.

Gutensohn M., and Dudareva N.‡ (2016) Tomato fruits – a platform for metabolic engineering of terpenes. *Methods in Enzymology* 576, 333-359.

Widhalm J.R., **Gutensohn M.**, Yoo H., Adebesin F., Qian Y., Guo L., Jaini R., Lynch J.H., McCoy R.M., Jacob T. Shreve J.T., Thimmapuram J., Rhodes D., Morgan J.A., and Dudareva N.‡ (2015). Identification of a plastidial phenylalanine exporter that influences flux distribution through the phenylalanine biosynthetic network. *Nature Communications* 6, 8142.

Henry L.K., **Gutensohn M.**, Thomas S.T., Noel J.P., and Dudareva N.‡ (2015). Orthologs of the archaeal isopentenyl phosphate kinase regulate terpenoid production in plants. *Proceedings of the National Academy of Sciences USA* 112, 10050-10055.

Gutensohn M., Nguyen T.T.H., McMahon R.D., Kaplan I., Pichersky E., and Dudareva N.[‡] (2014). Metabolic engineering of monoterpene biosynthesis in tomato fruits via introduction of the non-canonical substrate neryl diphosphate. *Metabolic Engineering* 24, 107-116.

Gutensohn M., Orlova I., Nguyen T.T.H., Davidovich-Rikanati R., Ferruzzi M., Sitrit Y., Lewinsohn E., Pichersky E., and Dudareva N.[‡] (2013). Cytosolic monoterpene biosynthesis is supported by plastid-generated geranyl diphosphate substrate in transgenic tomato fruits. *Plant Journal* 75, 351-363 (featured article and title page).

Heinig U.*, **Gutensohn M.***, Dudareva N., and Aharoni A.[‡] (2013). The challenges of cellular compartmentalization in plant metabolic engineering. *Current Opinion in Biotechnology* 24, 239-246.

Gutensohn M., Nagegowda D.A., and Dudareva N.[‡] (2013). Involvement of compartmentalization in monoterpene and sesquiterpene biosynthesis in plants. In: Bach T.J. and Rohmer M. (eds) Isoprenoid synthesis in plants and microorganisms: New concepts and experimental approaches, Springer, New York, pp. 155-169.

Gutensohn M.*, Klempien A.*, Kaminaga Y.*, Nagegowda D.A., Negre-Zakharov F., Huh J.-H., Luo H., Weizbauer R., Mengiste T., Tholl D., and Dudareva N.[‡] (2011). Role of aromatic aldehyde synthase in wounding/herbivory response and flower scent production in different *Arabidopsis* ecotypes. *Plant Journal* 66, 591-602.

Ladig R., Sommer M.S., Hahn A., Leisegang M.S., Papasotiriou D.G., Ibrahim M., Elkehal R., Karas M., Zickermann V., **Gutensohn M.**, Brandt U., Klösgen R.B., and Schleiff E.[‡] (2011). A high-definition native polyacrylamide gel electrophoresis system for the analysis of membrane complexes. *Plant Journal* 67, 181-194.

Banks J.A., Nishiyama T., Hasebe M., Bowman J.L., Gribskov M., dePamphilis C., Albert V.A., Aono N., Aoyama T., Ambrose B.A., Ashton N.W., Axtell M.J., Barker E., Barker M.S., Bennetzen J.L., Bonawitz N.D., Chapple C., Cheng C., Correa L.G., Dacre M., DeBarry J., Dreyer I., Elias M., Engstrom E.M., Estelle M., Feng L., Finet C., Floyd S.K., Frommer W.B., Fujita T., Gramzow L., **Gutensohn M.**, Harholt J., Hattori M., Heyl A., Hirai T., Hiwatashi Y., Ishikawa M., Iwata M., Karol K.G., Koehler B., Kolukisaoglu U., Kubo M., Kurata T., Lalonde S., Li K., Li Y., Litt A., Lyons E., Manning G., Maruyama T., Michael T.P., Mikami K., Miyazaki S., Morinaga S., Murata T., Mueller-Roeber B., Nelson D.R., Obara M., Oguri Y., Olmstead R.G., Onodera N., Petersen B.L., Pils B., Prigge M., Rensing S.A., Riaño-Pachón D.M., Roberts A.W., Sato Y., Scheller H.V., Schulz B., Schulz C., Shakirov E.V., Shibagaki N., Shinohara N., Shippen D.E., Sørensen I., Sotooka R., Sugimoto N., Sugita M., Sumikawa N., Tanurdzic M., Theissen G., Ulvskov P., Wakazuki S., Weng J.K., Willats W.W., Wipf D., Wolf P.G., Yang L., Zimmer A.D., Zhu Q., Mitros T., Hellsten U., Loqué D., Ottillar R., Salamov A., Schmutz J., Shapiro H., Lindquist E., Lucas S., Rokhsar D., and Grigoriev I.V. (2011). The *Selaginella* genome identifies genetic changes associated with the evolution of vascular plants. *Science* 332, 960-963.

Orlova I., Nagegowda D.A., Kish C.M., **Gutensohn M.**, Maeda H., Varbanova M., Fridman E., Yamaguchi S., Hanada A., Kamiya Y., Krichevsky A., Citovsky V., Pichersky E., and Dudareva N.[‡] (2009). The small subunit of snapdragon geranyl diphosphate synthase modifies the chain length specificity of tobacco geranylgeranyl diphosphate synthase in planta. *Plant Cell* 21, 4002-4017.

Jakob M., Kaiser S., **Gutensohn M.**, Hanner P., and Klösgen R.B.[‡] (2009). Tat subunit stoichiometry in *Arabidopsis thaliana* challenges the proposed function of TatA as the translocation pore. *Biochimica et Biophysica Acta* 1793, 388-394.

Nagegowda D.A., **Gutensohn M.**, Wilkerson C.G., and Dudareva N.[‡] (2008). Two nearly identical terpene synthases catalyze the formation of nerolidol and linalool in snapdragon flowers. *Plant Journal* 55, 224-239.

Heeg C., Kruse C., Jost R., **Gutensohn M.**, Ruppert T., Wirtz M., and Hell R.[‡] (2008). Analysis of the *Arabidopsis* O-acetylserine(thiol)lyase gene family demonstrates compartment-specific differences in the regulation of cysteine synthesis. *Plant Cell* 20, 168-185.

Gutensohn M., Fan E., Frielingsdorf S., Hanner P., Hou B., Hust B., and Klösgen R.B.[‡] (2006). Toc, Tic, Tat et al.: Structure and function of protein transport machineries in chloroplasts. *Journal of Plant Physiology* 163, 333-347.

Hust B., and **Gutensohn M.**[‡] (2006). Deletion of core components of the plastid protein import machinery causes differential arrest of embryo development in *Arabidopsis thaliana*. *Plant Biology* 8, 18-30.

Voigt A., Jakob M., Klösgen R.B., and **Gutensohn M.**[‡] (2005). At least two Toc34 protein import receptors with different specificities are also present in spinach chloroplasts. *FEBS Letters* 579, 1343-1349.

Zhbanko M., Zinchenko V., **Gutensohn M.**, Schierhorn A., and Klösgen R.B.[‡] (2005). Inactivation of a predicted leader peptidase prevents photoautotrophic growth of *Synechocystis* sp. strain PCC 6803. *Journal of Bacteriology* 187, 3071-3078.

Klösgen R.B.[‡], Molik S., Frielingsdorf S., **Gutensohn M.**, Jakob M., Marques J., and Hou B. (2004). Protein transport across the thylakoid membrane. *Endocytobiosis and Cell Research* 15, 518-526.

Gutensohn M.[‡], Pahnke S., Kolukisaoglu Ü., Schulz B., Schierhorn A., Voigt A., Hust B., Rollwitz I., Stöckel J., Geimer S., Albrecht V., Flügge U.I., and Klösgen R.B. (2004). Characterization of a T-DNA insertion mutant for the protein import receptor atToc33 from chloroplasts. *Molecular Genetics and Genomics* 272, 379-396.

Gutensohn M., Schulz B., Nicolay P., and Flügge U.I.[‡] (2000) Functional analysis of the two *Arabidopsis* homologues of Toc34, a component of the chloroplast protein import apparatus. *Plant Journal* 23, 771-783.

Kammerer B., Fischer K., Hilpert B., Schubert S., **Gutensohn M.**, Weber A., and Flügge U.I.[‡] (1998). Molecular characterization of a carbon transporter in plastids from heterotrophic tissues: the glucose 6-phosphate/phosphate antiporter. *Plant Cell* 10, 105-117.

Fischer K., Kammerer B., **Gutensohn M.**, Arbinger B., Weber A., Häusler R.E., and Flügge U.I.[‡] (1997). A new class of plastidic phosphate translocators: A putative link between primary and secondary metabolism by the phosphoenolpyruvate/phosphate antiporter. *Plant Cell* 9, 453-462.

Weber A., Menzlaff E., Arbinger B., **Gutensohn M.**, Eckerskorn C., and Flügge U.I.[‡] (1995). The 2-oxoglutarate/malate translocator of chloroplast envelope membranes: Molecular cloning of a transporter containing a 12-helix motif and expression of the functional protein in yeast cells. *Biochemistry* 34, 2621-2627.

SEMINARS and PRESENTATIONS (years 2006 - 2022)

Chair

- 2019 ASPB Midwest Section Meeting, West Virginia University, WV
2016 Gordon Research Seminar, “Plant volatiles – novel functions and emerging applications”, Ventura, CA

Oral presentations

- 2022 Entomology 2022, ESA Annual Meeting, Vancouver, BC, Canada (short talk)
2022 Cannabis Conference, Las Vegas, NV (invited speaker)
2022 Meeting of the Phytochemical Society of North America, Blacksburg, VA (short talk)
2022 WV Master Gardener Conference, Wheeling, WV (invited speaker)
2020 Entomology 2020, ESA Annual Meeting, virtual (short talk)
2020 ASHS Annual Conference, virtual (short talk)
2019 TERPNET 2019 Meeting, Halle (Saale), Germany (short talk)
2019 WV Master Gardener Conference, Morgantown, WV (invited speaker)
2019 ASPB Midwest Section Meeting, WVU, WV (short talk)
2018 Davis College/Extension Research Symposium, WVU, WV (invited speaker)
2018 ASHS Annual Conference, Washington, DC (short talk & session chair)
2018 ASPB Midwest Section Meeting, Iowa State University, IO (short talk)
2017 ASPB Midwest Section Meeting, Purdue University, IN (short talk)
2014 Meeting of the Phytochemical Society of North America, Raleigh, NC (short talk)
2013 Biochemistry Departmental Seminar Series, Purdue University, IN (invited speaker)
2013 Horticulture Department Retreat, Purdue University, IN (invited speaker)
2012 Horticulture Department Retreat, Purdue University, IN (short talk)
2012 Interdepartmental Plant Science Seminar, Purdue University, IN (invited speaker)
2011 ASPB Midwest Section Meeting, Purdue University, IN (short talk)
2008 Meeting ‘Molecular Biology of Plants’, Dabringhausen, Germany (short talk)
2007 Forschungszentrum Jülich, Jülich, Germany (invited speaker)
2006 Plant Genetics Conference, Kiel, Germany (session speaker)
2006 Washington University, St. Louis, MO (invited speaker)
2006 Purdue University, West Lafayette, IN (invited speaker)
2006 Michigan State University, East Lansing, MI (invited speaker)

Poster presentations

- 2022 Entomology 2022, ESA Annual Meeting, Vancouver, BC, Canada
2022 Meeting of the Phytochemical Society of North America, Blacksburg, VA
2020 Entomology 2020, ESA Annual Meeting, virtual
2020 IFT International Conference, Institute of Food Technologists, virtual (poster prize)
2019 ASPB Midwest Section Meeting, WVU, WV (poster prize)
2018 Entomology 2018, ESA Annual Meeting, Vancouver, BC, Canada
2018 ASHS Annual Conference, Washington, DC
2018 CiderCon 2018, Baltimore, MD
2017 Entomology 2017, ESA Annual Meeting, Denver, CO
2017 Plant Biology 2017, ASPB Meeting, Honolulu, HI
2016 Gordon Research Conference on Plant Volatiles, Ventura, CA
2014 Horticulture Department Retreat, Purdue University, IN (poster prize)
2014 Biochemistry Department Retreat, Purdue University, IN
2012 3rd Banff Conference on Plant Metabolism, Banff, Canada

- 2011 Gordon Research Conference on Plant Metabolic Engineering, Waterville Valley, NH
 2010 2nd Banff Conference on Plant Metabolism, Banff, Canada
 2010 ASPB Midwest Section Meeting, Purdue University, IN
 2008 Annual East-German Meeting on Plant Physiolgy, Jena, Germany
 2007 German Botanical Conference, University Hamburg, Germany
 2007 FEBS Congress ‘Molecular machines’, Vienna, Austria
 2007 International Meeting ‘Communication in plants and their response to the environment’, Halle, Germany
 2007 Annual East-German Meeting on Plant Physiolgy, Leipzig, Germany
 2006 17. International Conference on Arabidopsis Research, Madison, WI
 2006 3. International Symposium ‘Signals, Sensing and Plant Primary Metabolism’, Potsdam, Germany
 2006 Meeting ‘Molecular Biology of Plants’, Dabringhausen, Germany
 2006 Annual East-German Meeting on Plant Physiolgy, Dresden, Germany

PERSONAL and RESEARCH GRANTS

- 2022 **Faculty Development Grant**, Kaye C. Daniel Faculty Development Fund, Davis College of Agriculture, Natural Resources and Design, WVU
PI with Co-PI Dr. Y.L. Park (Division of Plant and Soil Sciences, WVU)
- 2022-2023 **Research Grant**, West Virginia University, Program to Stimulate Competitive Research (PSCoR)
 “Development of a novel aphid control strategy utilizing tissue-specific engineering of terpenes in tomato”
PI with Co-PI Dr. Y.L. Park (Division of Plant and Soil Sciences, WVU)
- 2021-2023 **Equipment Grant**, USDA NIFA, Equipment Grant Program (EGP)
 “Acquisition of a Gas Chromatograph/Mass Spectrometer with Front-End Gerstel Line for Automated Sample Preparation/Introduction and Increased Sensitivity”
PI with Co-PIs Dr. T. Kijimoto, E. Pena-Yewtukhiw, J. Jaczynski, and J. Hubbart (all Davis College, WVU)
- 2020-2023 **Research Grant**, USDA NIFA Agriculture and Food Research Initiative, Foundational Program, Foundational Knowledge of Plant Products Program
 “Characterization of the Terpene-Cannabinoid Metabolic Network and its Genetic Regulation in Industrial Hemp”
PI with Co-PI Dr. N. Kovinich (Biology Department, York University, Canada)
- 2019-2020 **Conference Grant**, USDA NIFA Agriculture and Food Research Initiative, Foundational Program, Physiology of Agricultural Plants Program
 “2019 ASPB Midwestern Section Meeting”
PI (and chair of the local conference organizing committee)
- 2019-2022 **Research Grant**, West Virginia Speciality Crop Block Grant Program
 “Initiative to Develop a Cider Apple and Cider Production Economy in West Virginia”
Co-PI with Dr. M. Bulatovic-Danilovich (Cooperative Extension Service, WVU)

2019-2024	Research Grant , USDA NIFA Hatch “Characterization and Modification of Volatile Organic Compound Traits in Horticultural Crops to Improve Biotic Interactions and Fruit Flavor” <i>PI</i>
2018-2021	Research Grant , USDA NIFA Agriculture and Food Research Initiative, Foundational Program, Pests and Beneficial Species in Agricultural Production Systems Program “Tissue-specific Engineering of Terpenes with Activity against Aphids in Cultivated Tomato” <i>PI with Co-PI Dr. Y.L. Park (Division of Plant and Soil Sciences, WVU)</i>
2018-2019	Research Grant , West Virginia University, Research and Scholarship Advancement Grant “Characterization of the Apple Fruit Surface Chemistry and its Associated Microbiome” <i>PI with Co-PI Dr. E. Morrissey (Division of Plant and Soil Sciences, WVU)</i>
2016	Faculty Development Grant , Daniel & Elizabeth C. Brown Faculty Development Fund, and F. Waldo Craig New Faculty Endowment, Davis College of Agriculture, Natural Resources and Design, WVU <i>PI with Co-PI Dr. K.M. Ku (Division of Plant and Soil Sciences, WVU)</i>
2015-2021	Ray Marsh and Arthur Pingree Dye Professorship , Endowment, Davis College of Agriculture, Natural Resources and Design, WVU
2014-2015	Research Grant , AgSEED competitive grant program, College of Agriculture, Purdue University <i>Co-PI with Dr. I. Kaplan (Entomology, Purdue University) and Dr. N. Dudareva (Biochemistry, Purdue University)</i>
2006-2009	Research Grant within the Network of Excellence „Structures and mechanisms of biological information processing“, Federal State of Saxonia-Anhalt, Germany
2005-2008	Research Grant within the Network of Excellence „Structures and mechanisms of biological information processing“, Federal State of Saxonia-Anhalt, Germany
2002-2004	Research Grant within the Collaborative Research Center SFB363 „Molecular cell biology of plant systems“, German Science Foundation (DFG)
1990-1991	Stipend as exchange student at the SUNY Albany, USA, German Academic Exchange Service (DAAD)

TEACHING EXPERIENCE

since 2015 Assistant/Associate Professor, Division of Plant and Soil Sciences,
West Virginia University

- PLSC105 “Plants and People” (undergraduate lecture), Summer/Fall Semesters
- PLSC 206 “Principles of Plant Science” (undergraduate lecture & lab), Spring Semesters
- PLSC460/560 “Plant Biochemistry” (undergraduate/graduate lecture), Fall Semesters
- HORT 495 “Independent Study”, Spring/Summer/Fall Semesters
- research supervisor of graduate students and undergraduate students

2014 - 2015 Guest lecturer, Department of Biochemistry,
Purdue University, USA

- BCHM 690 “Seminar in Biochemistry” (graduate seminar), Fall 2014

2008 - 2015 Guest lecturer, Department of Horticulture and Landscape Architecture,
Purdue University, USA

- HORT 640 “Plant Metabolic Biochemistry “ (graduate lecture), Fall 2011 & 2013
- HORT 301 “Introductory Plant Physiology“ (undergraduate lecture), Fall 2009 & 2010
- HORT 301 “Independent Research Projects“ (undergraduate lab), Fall 2009 & 2010

2000 - 2008 Lecturer, Institute of Biology - Plant Physiology
Martin-Luther-University Halle-Wittenberg, Germany

- “Introduction to Plant Anatomy, Morphology and Systematics“ (undergraduate lab & seminar)
- “Introductory Plant Physiology“ (undergraduate lab & seminar)
- “Introductory Plant Genetics and Molecular Biology“ (undergraduate lab & seminar)
- “Introductory Molecular Biology for Bioinformatic Students“ (undergraduate lab)
- “DNA and protein methods for high school teachers“ (lab & seminar)
- “Advanced Plant Physiology“ (graduate lab & seminar)
- “Plant Physiology for Biochemistry/-informatic students“ (graduate lab & seminar)
- “Recent Advances in Photosynthesis Research“ (graduate literature seminar)
- “Protein Targeting into Eukaryotic Organelles“ (graduate lab)
- “Independent Research Projects“ (graduate lab)
- research supervisor of PhD students and Diploma students

1994 - 2000 Graduate Teaching Assistant
Botanical Institute, University of Cologne, Germany

- „Introduction to Plant Anatomy, Morphology and Systematics“ (undergraduate lab)
- „Advanced Plant Biochemistry“ (graduate lab)

PROFESSIONAL ACTIVITIES

Editorial Board Member for *Plants (MDPI)* (since 2022)

Associate Editor for *Frontiers in Plant Science, Section: Plant Metabolism & Chemodiversity* (since 2017)

Review Editor for *Frontiers in Plant Science, Section: Plant Physiology* (2011-2017)

Ad hoc Reviewer (Manuscripts) for *Biochim Biophys Acta, Biological Research, BMC Plant Biology, Current Opinion in Plant Biology, FEBS Letters, FEBS Journal, Frontiers in Plant Science, Functional Plant Biology, Horticulture Research, Journal of Asia-Pacific Entomology, Journal Biological Chemistry, Journal Molecular Biology, Molecular and General Genetics, Molecular Plant, Phytochemistry, Planta, Plants, Plant and Cell Physiology, Plant Biology, Plant Biotechnology Journal, Plant Cell, Plant Journal, Plant Physiology*

Reviewer for the chapter on “Secondary Metabolites and Plant Defense” of the “Plant Physiology” textbook by Taiz and Zeiger (sixth edition), Sinauer Associates, Inc. Publishers (2014)

Ad hoc Reviewer (Proposals) for *USDA NIFA, Netherlands Organization for Scientific Research (NWO), German Research Foundation (DFG)*

Conference Chair and Organizer for *Gordon Research Seminar (GRS) on Plant Volatiles 2016, Ventura, CA; American Society of Plant Biologists (ASPB) Midwestern Section Meeting 2019, Morgantown, WV*

MEMBERSHIPS PROFESSIONAL SOCIETIES

American Society of Plant Biologists (ASPB)

Entomological Society of America (ESA)