

Andrew William Wilson, Ph.D.

Curriculum Vitae

Associate Curator of Mycology

Denver Botanic Gardens – Research and Conservation

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February 2025

I. EDUCATION

2009 Ph.D. Biology – Clark University, Advisor: David Hibbett

2003 M.A. Biology: Ecology and Systematic Biology – San Francisco State University, Advisor: Dennis Desjardin

1999 B.A. Humanities – San Francisco State University

1999 B.S. Biology: Ecology – San Francisco State University

II. PROFESSIONAL APPOINTMENTS

Current

Associate Curator of Mycology – Denver Botanic Gardens. January 2022 – Current

Adjoint Faculty – University of Colorado, Denver. January 2017 – Current

Past

Assistant Curator of Mycology – Denver Botanic Gardens. January 2017 – December 2021

Adjunct Assistant Conservation Scientist – Chicago Botanic Garden. January 2014 – December 2016

Research Associate – Field Museum of Natural History. Spring 2010-2019.

Lecturer – School of the Art Institute Chicago. Fall 2012 – Fall 2016.

Lecturer – Wilbur Wright City College, Chicago. Fall 2012 - Fall 2016.

Postdoctoral Research Assistant – Purdue University. January – December 2013

Postdoctoral Research Associate – Chicago Botanic Garden. May 2009-December 2012

Adjunct Lecturer – Northwestern University. Fall 2012

Adjunct Lecturer – Loyola University Chicago. Spring 2010.

III. PUBLICATIONS

Peer Reviewed (Mentored undergraduate* and graduate† publications)

2023

1. Olds C.G. †, Berta-Thompson J.W., Loucks J.L. †, Levy R.A., and **Wilson A. W.** 2023. Applying a Modified Metabarcoding Approach for the Sequencing of Macrofungal Specimens from Fungarium Collections. *Applications in Plant Sciences* 11, no. 1 (2023): e11508. <https://bsapubs.onlinelibrary.wiley.com/doi/pdf/10.1002/aps3.11508>
2. **Wilson, A. W.**, Eberhardt U., Nguyen N., Noffsinger C.R., Swenie R.A., Loucks J.L. †, Perry B.A., Herrera M., Osmundson T.W., DeLong-Duhon S., Beker H.J., Mueller G.M.. 2023. Does One Size Fit All? Variations in the DNA Barcode Gaps of Macrofungal Genera. *Journal of Fungi* 9, no. 8 (2023): 788. <https://www.mdpi.com/2309-608X/9/8/788>

2022

3. Zhang R. †, Shi X.F., Liu P.G., **Wilson A.W.**, and Mueller G.M. 2022. Host shift speciation of the ectomycorrhizal genus *Suillus* (Suillineae, Boletales) and biogeographic comparison with its host Pinaceae. *Frontiers in Microbiology* 13, 831450.

2020

4. Corrales A., **Wilson A.W.**, Mueller G.M., and Ovrebo C. 2020. Novel *Laccaria* species from Juglandaceae forest in Panama with notes on their ecology. *Frontiers in Microbiology* 11, 1597. <https://doi.org/10.3389/fmicb.2020.01597>
 5. Ullah S., **Wilson A.W.**, Faiz M., Hussain S., Mueller G.M., and Khalid A.N. 2020. *Russula shanglaensis* sp. nov. (Basidiomycota: Russulales), a new species from the mixed coniferous forests in district Shangla, Pakistan. *Turkish Journal of Botany*. 44(1), 85-92. <https://journals.tubitak.gov.tr/botany/issues/bot-20-44-1/bot-44-1-8-1907-3.pdf>
- 2019**
6. Ullah S., **Wilson A.W.**, Tulloss R.E., Fiaz M., Mueller G.M., and Khalid A. N. 2019. *Amanita cinis* and *A. olivovaginata* (Basidiomycota, Amanitaceae), two new species, and the first record of *A. emodotrygon*, from Northwestern Pakistan. *Turkish Journal of Botany*, 43(6), 831-849. <https://dergipark.org.tr/tr/download/article-file/893279>
 7. Fernández-López J. †, Telleria M.T., Dueñas M., **Wilson A.W.**, Padamsee M., Buchanan P.K., Mueller G.M., and Martin M.P. 2019. Addressing the diversity of *Xylodon raduloides* complex through integrative taxonomy. *IMA Fungus* 10(1): 2. <https://doi.org/10.1186/s43008-019-0010-x>
- 2018**
8. Cho H.J., Park M.S., Lee H., Oh S-Y, **Wilson A.W.**, Mueller G.M., and Lim Y.W. 2018. Taxonomic re-evaluation of *Laccaria* (Agaricales, Basidiomycota) in Korea based on morphological and molecular evidence. *Mycologia*. 110:5 948-961 <https://doi.org/10.1080/00275514.2018.1507542>
 9. Aime M. C., Bell C. D., and **Wilson A.W.** 2018. Deconstructing the coevolutionary complexity between rust fungi (Pucciniales) and their plant hosts. *Studies in Mycology* 89: 143-152. <https://doi.org/10.1016/j.simyco.2018.02.002>
 10. Ning C. †, Mueller G.M., Egerton-Warburton L., **Wilson A.W.**, Yan W., and Xiang W. 2018. Diversity and enzyme functioning of ectomycorrhizal fungal communities following nitrogen fertilization in an urban-adjacent pine plantation. *Forests* 9(99). <https://doi.org/10.3390/f9030099>
- 2017**
11. Jabeen S., Kiran M., Ullah S., **Wilson A.W.**, Mueller G. M., Fiaz M., and Khalid A.N. 2017. *Amanita glarea*, a new species in section *Vaginatae* from Pakistan. *Phytotaxa*, 306(2), 135-145.
 12. Koch R.A. †, **Wilson A.W.**, Séné O., Henkel T.O., and Aime M.C. 2017. Biogeography of *Guyanagaster necrorhizus* (Physalacriaceae, Agaricales, Basidiomycota)—the first known gasteroid fungus to have evolved from a pathogenic ancestor. *BMC Evolutionary Biology* 17(1): 33. <https://doi.org/10.1186/s12862-017-0877-3>
 13. **Wilson A.W.**, Hosaka K., and Mueller G.M. 2017. Evolution of ectomycorrhizae as a driver of diversification and biogeographic patterns in the model mycorrhizal mushroom genus *Laccaria*. *New Phytologist* 213(4):1862-1862. <https://doi.org/10.1111/nph.14270>
- 2016**
14. Desai N. †, **Wilson A.W.**, Powers J., Mueller G. M., and Egerton-Warburton L. 2016. Ectomycorrhizal diversity and community structure in stands of *Quercus oleoides* in the seasonally dry tropical forests of Costa Rica. *Ecological Research Letters* 11(12) 125007. <http://iopscience.iop.org/article/10.1088/1748-9326/11/12/125007/pdf>
 15. Leacock P.R., Riddell J., **Wilson A.W.**, Zhang R. †, Ning C. †, and Mueller G. M. 2016. *Cantharellus chicagoensis* sp. nov. is confirmed by molecular and morphological analysis as a new yellow chanterelle in the American Midwest. *Mycologia* 108(4): 765-772. <http://www.tandfonline.com/doi/abs/10.3852/15-230?journalCode=umyc20>
- 2015**

16. Dutta A.K., **Wilson A.W.**, Antonín V., and Acharya K. 2015. Taxonomic and phylogenetic study on gymnopoid fungi from Eastern India. I. *Mycological Progress* 14(10):1-18. <http://dx.doi.org/10.1007/s11557-015-1094-3>
17. **Wilson A.W.**, Wickett N., Grabowski P., Fant J., Borevitz J., and Mueller G. M. 2015. Examining the efficacy of a genotyping-by-sequencing technique for population genetic analysis of the mushroom *Laccaria bicolor* and evaluating whether a reference genome is necessary to assess homology. *Mycologia* 107(1): 217-226. <http://www.mycologia.org/content/early/2014/10/30/13-278.abstract>
- 2014**
18. **Wilson A.W.**, and Aime M.C. 2014. The rose rust fungus, *Phragmidium tuberculatum*, is widespread in North and Central America: first reports from California, Oregon, Massachusetts, and Honduras. *Plant Disease* 98(11):1581. <http://dx.doi.org/10.1094/PDIS-03-14-0248-PDN>
19. Phosri C., Watling R., Suwannasai N., **Wilson A.W.**, and Martín M. P. 2014. A new representative of star-shaped fungi: *Astraeus sirindhornii* sp. nov. from Thailand. *PloS ONE* 9(6):e71160. <http://dx.doi.org/10.1371/journal.pone.0071160>
20. Henkel T.W., **Wilson A.W.**, Aime M.C., Dierks J., Uehling J. K., Roy M., Schimann H., Wartchow F., and Mueller G. M. 2014. Cantharellaceae of Guyana II. New species of *Craterellus*, new distribution records for *Cantharellus guyanensis* Mont. and *Craterellus excelsus* TW Henkel & Aime, and a key to the Neotropical taxa. *Mycologia* 106:307-332.
21. **Wilson A.W.**, Beckerman J. L., Aime M. C. 2014. First report of the white pine blister rust fungus, *Cronartium ribicola*, forming telia on *Ribes odoratum* in Indiana. *Plant Disease* 98(2):277. <http://dx.doi.org/10.1094/PDIS-04-13-0442-PDN>
- 2013**
22. Tykhonenko Y., Aime M.C., **Wilson A.W.**, and Korytnianska V. 2013. New records of *Puccinia helianthi* Schw. on *Cyclachaena xanthiifolia* (Nutt.) Fresen. from Ukraine. *Ukrainian Journal of Botany* 70(5): 678-680.
23. **Wilson A.W.**, Hosaka K., Perry B.A., and Mueller G.M. 2013 *Laccaria* (Agaricomycetes, Basidiomycota) from Tibet (Xizang Autonomous Region, China). *Mycoscience* 54(6):406-419. <http://dx.doi.org/10.1016/j.myc.2013.01.006>
24. Trierweiler-Pereira L., **Wilson A W.**, da Silveira R.M.B., and Domingues L S. 2013. Costa Rican gasteromycetes (Basidiomycota , Fungi): Calostomataceae, Phallaceae, and Protophallaceae. *Nova Hedwigia* 96(3-4):533-544. <http://dx.doi.org/10.1127/0029-5035/2013/0090>
- 2012**
25. **Wilson A.W.**, Aime M.C., Dierks J., Mueller G.M., and Henkel T. 2012. *Craterellus* and *Cantharellus* in Guyana I. New species, distribution records, and a synopsis of known taxa. *Mycologia*. 104(6):1466-1477. <http://dx.doi.org/10.3852/11-412>
26. **Wilson A.W.**, Binder M., and Hibbett D.S. 2012. Diversity and evolution of ectomycorrhizal host associations in the Sclerodermatineae (Boletales, Basidiomycota). *New Phytologist* 194(4): 1079-1095. <http://dx.doi.org/10.1111/j.1469-8137.2012.04109.x>
- 2004-2011**
27. **Wilson A.W.**, Binder M., and Hibbett D.S. 2011. Effects of gasteroid fruiting body morphology on diversification rates in three independent clades of fungi estimated using binary state speciation and extinction analysis. *Evolution* 65(5): 1305-1322. <http://dx.doi.org/10.1111/j.1558-5646.2010.01214.x>
28. Desjardin D. E., **Wilson A.W.**, and Binder M. 2008. *Durianella*, a new gasteroid genus in the Boletineae. *Mycologia* 100: 956-961. <http://dx.doi.org/10.3852/08-062>
29. **Wilson A.W.**, Hobbie E.A., and Hibbett D.S. 2007. The ectomycorrhizal status of *Calostoma cinnabarinum* determined using isotopic, molecular and morphological methods. *Canadian Journal of Botany* 85: 385-393. <http://dx.doi.org/10.1139/B07-026>

30. Matheny P.B., Wang Z., Binder M., Curtis J.M., Lim Y-W., Nilsson R.H, Hughes K.W., Petersen R.H., Hofstetter V., Ammirati J.F., Schoch C.L., Langer E., McLaughlin D.J., **Wilson A.W.**, Crane P.E., Frøslev T., Ge Z.-W., Kerrigan R.W., Slot J.C., Vellinga E.C., Yang Z.-L., Aime M.C., Baroni T.J., Fischer M., Hosaka K., Matsuura K., Seidl M.T., Vauras J.j, and Hibbett D.S. 2007. Contributions of rpb2 and tef1 to the phylogeny of mushrooms and allies (Basidiomycota, Fungi). *Molecular Phylogenetics and Evolution* 43: 430-451. <http://dx.doi.org/10.1016/j.ympev.2006.08.024>
31. **Louzan R.***, **Wilson A.W.**, Binder M. and Hibbett D.S. 2007. Phylogenetic placement of *Diplocystis wrightii* in the Sclerodermatineae (Boletales) based on nuclear ribosomal large subunit DNA sequences. *Mycoscience* 48: 66-69. <http://dx.doi.org/10.1007/s10267-006-0325-5>
32. James T., ... **Wilson A.W.**, ... (with 68 co-authors). 2006. Reconstructing the early evolution of the Fungi using a six-gene phylogeny. *Nature* 443: 818-822. <http://dx.doi.org/10.1038/nature05110>
33. **Wilson A.W.** and Desjardin D.E. 2005. Phylogenetic relationships in the gymnopoid and marasmioid fungi (Basidiomycota, euagarics clade). *Mycologia* 97:667-679. <https://doi.org/10.1080/15572536.2006.11832797>
34. **Wilson A.W.**, Desjardin D.E., and Horak E. 2004. Agaricales of Indonesia. 5. The genus *Gymnopus* from Java and Bali. *Sydowia* 56:137-210

In Review

35. Herrera M., **Wilson A. W.**, Mueller G. M. Fungal diversity in the Neotropics: Update on the Diversity and Taxonomy of Hydnaceae in Costa Rica. *Mycologia*. (In Revision)

Book Chapters

- **Wilson A. W.**, May T. W., Mueller G. M. *Biogeography of ectomycorrhizal mushroom genus Laccaria*. In Ecological Studies: Biogeography of Mycorrhizal Symbiosis. Editor Leho Tedersoo. Springer Life Sciences. p. 273-297 2017.
- Sánchez-Ramírez S., **Wilson A. W.**, Ryberg M. *Overview of phylogenetic approaches to mycorrhizal biogeography, diversity and evolution*. In Ecological Studies: Biogeography of Mycorrhizal Symbiosis. Editor Leho Tedersoo. Springer Life Sciences. p. 1-37. 2017.

Other Publications

- Filialuna O., Leacock P., Gaswick W., **Wilson A. W.**, “The Voucher Collection Project: Celebrating 26 years of NAMA-supported Community Science.” January/February/March Issue 2024 *Mycophile Quarterly* (The newsletter for the North American Mycological Association)
- Evenson V. S., **Wilson A. W.**, Bates S. T. “Of Mountains, Medicine and Mushrooms: The Life and Legacy of Sam Mitchel” *FUNGI Magazine* (Winter Issue, 2018).
- **Wilson A. W.** 2012. “Hotlips” on the beech. Feature article written for *Mycena News* (Newsletter for the Mycological Society of San Francisco) and *Mycophile* (Newsletter of the North American Mycological Association).
- Bidartondo M, ..., **Wilson A. W.**, ... (and 255 co-authors). 2008. Preserving accuracy in GenBank. *Science* 319: 1616 (*Letter to Science*).

IV. GRANTS

Federal Grants

NSF: Collaborative Research: MRA: Distributions of macrofungi: quantifying ecosystem and climate drivers of fungal reproduction. AKA CLIMUSH 2022-2025. \$173,853.

Completed Grants

Stuntz Memorial Foundation Mycology Grant – Mushrooms of the Lemhi Range, Idaho. Awarded to Justin Loucks. \$5,230.

Jefferson County Open Space (Co-PI with Rebecca Hufft, Ph.D.) – Assessment of soil fungi associated with restoration of Deer Creek riparian communities. 2018. \$5,000.
 NSF: DEB – Systematics and Population Biology (David Hibbett PI for administrative purposes, AWW, Co-PI). Title: Doctoral Dissertation Improvement Grant: Phylogeny, taxonomy, and ecology of *Calostoma* (Boletales, Basidiomycetes). Funding period June 1, 2005-February 28, 2008. DEB- 0508716. \$12,000.

V. FELLOWSHIPS, SCHOLARSHIPS AND AWARDS

Crowdfunding

2018: Colorado Mycoflora Project. Crowdfunding through experiment.com. Successfully funded with \$5571.

Fellowships

2005: Graduate Student Fellowship – \$2000. Mycological Society of America.
 2001-2002: NSF G K-12 Science Teaching Fellow – Department of Biology, San Francisco State University.

Awards

2023: Mycological Society of America: Alexander H. and Helen V. Smith Research Award – Hidden Diversity in Fungaria: Exploring Cryptic Diversity in Western Bankeraceae . Awarded to Justin Loucks. \$1,200.
 2021: Mycological Society of America: Alexander H. and Helen V. Smith Research Award – Hidden Diversity in Fungaria: A case study in the Russulaceae of the Southern Rockies. Awarded to Gary Olds. \$1,200.
 2018: Colorado Mycological Society donation of \$2500 for the Colorado Mycoflora Project.
 2012: Fungal Environmental Sampling and Informatics Network (FESIN): North American Mycoflora Workshop Travel Award – Mycological Society of America Annual Meeting.
 2011: FESIN: Fungal Teaching Workshop Travel Award – Mycological Society of America Annual Meeting.
 2010: FESIN: Metagenomics Workshop Travel Award – 9th International Mycological Congress.
 2008: Graduate Student Council Travel Award – Clark University.
 2007: DeepHyphae Travel Award – Asian Mycological Congress.
 2006: Best Poster Presentation: Phylogeny, Systematics and Evolution – 8th International Mycological Congress.
 2006: Best Poster Presentation: Mycological Society of America Annual Meeting.
 2005: Forest Fungal Ecology Research Award – \$1500. Mycological Society of America.
 2005: DeepHyphae Travel Award – MSA meeting.

VI. TEACHING AND MENTORSHIP

Graduate Students Advised (*=work published)

Jess Loeffler (Advisor, M.S. Student August 2022 – Current)
Justin Loucks* (Advisor, M.S. Student August 2021 – Current)
Clark Gary Olds* (Advisor, M.S. December 2021) High-Throughput Sequencing of Macrofungal Specimens: A Test Case in Southern Rocky Mountain *Lactarius*.

Dissertation/Thesis Committee

Ashlee Kerber M.S. January 2025-Current – University of Colorado, Denver.
 Amy Honan Ph.D. Fall 2021– University of Washington. “Systematic Diversity, Morphological Evolution and Biogeography of *Tulostoma* in the Southwestern United States.”
Chen Ning Ph.D.* 2018 – Northwestern University. “Structure, diversity and functional traits of ectomycorrhizal fungal communities in pine forest of south-central China.”

Chen Ning M.S. 2014 – Northwestern University. “Functional response of ectomycorrhizal fungal community to nitrogen deposition on slash pine (*Pinus elliottii*) plantation in south-central China.”

Nikhilesh Desai M.S. 2013 – Northwestern University. “Ectomycorrhizal communities associated with *Quercus oleoides* in tropical dry forests of Costa Rica.”

Mentorship (v= visiting researcher, *= work published)

Postdoc: Dr. Mariana Herrera 2021-2023 – co-advised with Dr. Greg Mueller, Chicago Botanic Garden.

Graduate Students Mentored: Klaudia Sowizral (M.S. Regis University, Fall 2023-Spring2024) – Diversity of the Thelphorales in North America. **Sadiq Ullah**^v (Ph.D. Student, Fall 2015 – Spring 2016) – Taxonomic and Systematic survey of Agaricomycetes of Pakistan. **Javier Fernandez**^v (Visiting Ph.D. Student, Spring-Summer 2015) – Systematic diversity of *Schizopora* and the Hymenochaetales. **Chen Ning**^{*} (Ph.D., Fall 2014-2018; Northwestern University) – Functional response of ectomycorrhizal fungal community to nitrogen deposition on slash pine (*Pinus elliottii*) plantation in south-central China. **Rachel Koch**^{*} (Ph.D., Fall 2013-Spring 2017; Purdue University) – Phylogenetic analysis and divergence dating of *Guyanogaster*. **Rui Zang**^{*} (Ph.D. candidate, Fall 2010-2017; Northwestern University) – Taxonomy and systematics of the genus *Suillus* in China. **Nikhilesh Desai**^{*} (Master of Science, 2011-2013; Northwestern University) – Ectomycorrhizal communities associated with *Quercus oleoides* in tropical dry forests of Costa Rica. **Laura Briscoe** (Master of Science, Spring 2012; Northwestern University) – Systematics and evolution of liverwort taxonomy. **Lauren Ulmek** (Ph.D. candidate, Spring 2012; Northwestern University) – Investigating the role of soil microbial communities in restoring plant communities in tallgrass prairie habitats.

Undergraduate Students: Ben Lurie (Spring 2025; University of Colorado Denver), Matthew Johnson (Spring 2025; University of Colorado Denver), Sean Wright (Fall 2017-2018; Colorado State University), Justin Loucks (Spring 2018; Metro State University), Chelsea Charley-Suarez (Spring 2018; University of Colorado - Denver), Austin Erney (Fall 2011), Lauren Bailey (Summer 2010-Spring 2011), Dayani Pieri (Summer-Fall 2010), Anna Beiniek (Summer-Fall 2010), Lindsey Stuhr (Summer-Fall 2010), Darcy Young (Summer 2009), **Rebecca Louzan**^{*} (Summer 2006, Spring 2007), Danielle Stehlik (Fall 2003-Spring 2004).

High School Students: Phoenix Kephart and Aleks Bolotnikov (February 2024 – Rocky Mountain School of Expeditionary Learning); Jenifer Guardado and Edwin Flores (June-July 2023 – KIPP Denver Collegiate); Tyler Mitchem (February 2022 – Evergreen High School); Yazmin Gutierrez-Herrera, Jose Moran-Bermea (February-March 2022 – KIPP Northeast Denver Leadership Academy); Salvador Silva, Aysha Deolarde, Solana Martrinez, Anabelle Palma, Cree Moo, Duilio Lucio Sanchez (Summer 2019 – KIPP Denver Collegiate,); Andrew Hines, Camden Meyer, Jason McDonald (Summer 2019 – Rock Canyon H.S. Colorado); Andrew Luo and Michael Lee (Summer 2016 – Stevenson H.S., Lincolnshire, IL); Justyn Carrasco (Summer 2015).

Courses

Undergraduate

Mycology (BIOL 3137) – Department of Integrative Biology, University of Colorado Denver, Denver, CO. (Fall 2020)

Botany: Plant Biology – School of the Art Institute. Chicago, IL. – A non-majors course providing students with an appreciation for the diversity and complexity of the botanical world (Fall 2015-Spring/Fall 2016)

Mushrooms, Molds and Medicine – School of the Art Institute. Chicago, IL. – A non-majors course using Fungi to demonstrate fundamental concepts on the Scientific Method and Biology, and the importance of mycology and Fungi. (2012- December 2016)

General Biology – Wilbur Wright City College. Chicago, IL. – An introductory course in Biology concentrating on cell, molecular biology and genetics, for majors in Biology and the life sciences. (2012- December 2016)

Ecology – Loyola University. Chicago, IL – Teaching fundamental concepts and theories in Ecology for Biology majors. (2010)

Upper Division Undergraduate/Graduate

Advanced Topics in Biology – Fungal Biology (BIOL 4050/5050) Co-taught with Dr. Sara Branco. I was responsible for coordinating the laboratories. Department of Integrative Biology, University of Colorado Denver, Denver, CO. (Fall 2023)

Field and Laboratory Methods in Conservation Biology – Northwestern University. Evanston, IL. (team-taught course) – My part of the course covered mycology and molecular laboratory methods and another section on analyzing molecular sequence data with phylogenetic analysis. (2012)

Certificate & General Interest Courses Taught

Mushroom Identification – Aspen Center for Environmental Studies, Aspen, CO – Two day course on mushroom identification. (August, 2017 – 2019, 2022-2024)

Mushroom Identification – Chicago Botanic Garden, Glencoe, IL – Introduction to mushroom diversity and process of identification. (September 2012 and 2016)

Botany 1 – Chicago Botanic Garden, Glencoe, IL – Introductory Botany, plant systematics and taxonomy. (2014)

Teaching Assistant (U = undergraduate course, G= graduate course)

Graduate Teaching Assistant at Clark University: Seminar in Molecular Evolution^G (Spring 2009), First Year Biology Research Seminar^U (Fall 2007 and 2008), Conservation Biology Seminar^{U,G} (Spring 2007), Botanical Diversity^U (Spring 2007), Biodiversity^U (Fall 2006), Introductory Biology 1st Semester^U (Fall 2002, 2005) and 2nd Semester^U (Spring 2005, 2006, 2009)

Graduate Teaching Assistant at San Francisco State University: Fungi of the Sierra Nevada^{U,G} (June 2001), World of Plants Lab Teaching Assistant^U (Spring 2001) and Lab Preparation Assistant (Summer 2001), Introductory Biology Laboratory I^U (Fall 2000).

VII. PROFESSIONAL SERVICE

Committees

Mycological Society of America

2018-2021: MSA Research Awards Committee- Chair 2021

2011-2017: Membership Committee - Chair

2010-2013: Amateur Society Liaison Committee - Chair 2013

2009-2011: MSA Annual Meeting judge for student presentations

North American Mycological Association

2020-current: Voucher Collections Chair.

2017-2019: Voucher Collections Coordinator.

2023-Current: Foray Committee

2023-Current: DNA Sequencing Committee (DNAMA)

Professional Society Memberships

Mycological Society of America

Society for the Preservation of Natural History Collections

Editorial service

Associate Editor for *Mycologia* 2018-2023

Reviewer for *Cladistics*, *Evolution*, *Fungal Diversity*, *Journal of Biogeography*, *Mycologia*, *Mycological Progress*, *Phytotaxa*, *Mycorrhiza*, *Mycoscience*, *Mycotaxon*, *Mycosphere*, *New Phytologist*, *PLoS one*, and *TAXON*.

VIII. PRESENTATIONS

Invited Presentations

- Mycological Society of America Annual Meeting, Flagstaff, Arizona – *Elevating Fungaria Symposium* “Elevating Fungal Diversity Research Through Molecular Barcoding of Fungarium Collections.” July 2023.
- Kansas State University, Division of Biology – *Departmental Seminar* “How many millions?!?! The existential problem of describing fungal diversity.” April 2023.
- Mycological Society of America Annual Meeting, Gainesville, Florida. – *Citizen Science Symposium* – “The NAMA Voucher Collection Project and its twenty-five years of public and professional research, outreach, and training in macrofungal diversity.” July 2022. Co-Authors: Leacock P., Gaswick W., and Filialuna O.
- Telluride Mushroom Festival, Telluride, CO. Invited Speaker August 2018-2023.
- University of Colorado Anschutz Medical Campus, Aurora, CO – “Using Next Generation Sequencing Approaches in Metabarcoding to Document Fungal Diversity from Museum Specimens.” 22 February 2022.
- Western Colorado State University, Gunnison, CO. – “How the Colorado Mycoflora Project will lead to a greater understanding of Rocky Mountain macrofungal diversity.” 6 March 2020.
- University of Colorado, Boulder, CO – “Assembling a Colorado Mycoflora” 2 May 2018.
- University of Colorado, Denver – “Finding Fungi with Phylogenetics: Exploring the diversity and evolutionary ecology of mushroom forming fungi”. 15 September 2017.
- Latin American Mycological Congress - Exploring the South American origins of *Laccaria*: challenges in species delimitation and in reconstructing its biogeographic history. Lima, Peru, August 2017.
- Northwestern University - Plant Biology and Conservation Seminar: “Perfect Strangers: Exploring How the Association With Plants Affects the Diversity and Distribution of Ectomycorrhizal Fungi.” Evanston, Illinois. November 2011.
- Field Museum of Natural History - A. Watson Armour Research Seminar: “Phylogenetic Studies in the Sclerodermatineae (Boletales, Basidiomycota): Diversification, Biogeography and Ancestral Host Reconstruction of an Enigmatic Group of Ectomycorrhizal Fungi.” Chicago, Illinois. April 2011.

Contributed Papers

- Levy R.A., Berta-Thompson J.W., Olds C.G, **Wilson A.W.**, “Specimods: A demo of a new web-based tool for producing Genbank sequence submission files for sequences from vouchered specimens.” – Mycological Society of America Annual Meeting, Gainesville, Florida. July 2022.
- Wilson A.W.**, Sheedy E., May T., Mueller G. M. “Population genetics of *Laccaria* sp. A: the promise and challenge of next gen SNP generation in fungi.” – Mycological Society of America. July 2015, Edmonton, Alberta, CANADA.
- Wilson A.W.**, Wicket N., Grabowski P., Fant J., Borevits J., Mueller G. M. “Using genotyping-by-sequencing techniques for population genetic studies in mushroom forming fungi.” – Mycological Society of America. July 2012, New Haven, CT.
- Wilson A.W.**, Binder M. and Hibbett D. S. “Evolution and biogeography of ectomycorrhizal associations in an enigmatic group of fungi, the Sclerodermatineae (Boletales, Basidiomycota)” – Botanical Society of America. July 2011, St. Louis, MO.
- Wilson A.W.**, Binder M. and Hibbett D. S. “Diversity and evolution of ectomycorrhizal host associations in the Sclerodermatineae” – Mycological Society of America. August 2009, Snowbird, UT.
- Wilson A.W.**, Binder M. and Hibbett D. S. “Effects of fruiting body morphology on diversification rates in three independent clades of fungi estimated using binary state speciation and extinction analysis.” – Mycological Society of America. August 2008, State College, PA.
- Wilson A.W.**, Binder M. and Hibbett D. S. “Is gasteromycetization in the Agaricomycotina an evolutionary dead end? A sample study from the Sclerodermatineae.” – Asian Mycological Congress. December 2007, Pahang, Malaysia.
- Wilson A.W.**, Hobbie E. K. and Hibbett D. S. “Saprotrophic or symbiotic? Establishing the ecological role of *Calostoma cinnabarinum*.” – Mycological Society of America, July 2004, Ashville, NC.

Contributed Posters (Mentored graduate[†] and undergraduate^{*} presentations)

- Loucks, J.J.[†], **Wilson, A.W.** 2023. Exploring Cryptic Diversity in Western North American Bankeraceae. Mycological Society of America. Flagstaff, AZ.
- Olds, C.G.[†], Berta-Thompson, J.W., **Wilson, A.W.** 2023. Diversity in Russulaceae (*Lactarius* and *Russula*) of the Southern Rockies measured using MOTUs from nrITS2 sequence data. Mycological Society of America. Flagstaff, AZ.
- Honan, A., Branco, S., Mondo, S., Barry, K., **Wilson, A.W.**, Wangeline, A., Stewart, J., Talag, J., Quandt, C.A., Lofgren, L., Bunting, V.M. 2023. Myco-Ed: Mycological Curriculum for Education and Discovery. Mycological Society of America. Flagstaff, AZ.
- Carolyn A. Delevich, Heather A. Dawson, Bitty A. Roy, Jeffrey M. Diez, John Conery, Serita D. Frey, Matthew E. Smith, Peter G. Kennedy, A. Elizabeth Arnold, Jana U'Ren, **Andrew W. Wilson**, D. Jean Lodge. Distributions of macrofungi: quantifying ecosystem and climate drivers of fungal reproduction. Mycological Society of America. Flagstaff, AZ. Mariana Herrera, Gregory M. Mueller, **Andrew W. Wilson**, "Preliminary results of the diversity and taxonomy of family Hydnaceae in Costa Rica" – Mycological Society of America Annual Meeting, Gainesville, Florida. July 2022.
- Carolyn A. Delevich, Bitty A. Roy, Jeffrey M. Diez, Krista McGuire, John Conery, Serita D. Frey, Matthew E. Smith, Peter G. Kennedy, A. Elizabeth Arnold, Jana U'Ren, **Andrew Wilson**, D. Jean Lodge. "Distributions of macrofungi: quantifying ecosystem and climate drivers of fungal reproduction." – Mycological Society of America Annual Meeting, Gainesville, Florida. July 2022.
- Olds C.G., Berta-Thompson J. W., Loucks J. J., Levy R. A., **Wilson A.W.** "Applying a Modified Metabarcoding Approach for the Sequencing of Macrofungal Specimens." – Mycological Society of America Annual Meeting, Online. July 2021.
- Loucks J.J., Olds C.G., Berta-Thompson J.W., **Wilson A. W.** "Macrofungi of the Lemhi Range (Idaho, USA) Documenting Diversity In An Underexplored Region of North America" – Mycological Society of America Annual Meeting, Online. July 2021.
- Berta-Thompson J.W., Olds C.G., Loucks J.J., Levy R.A., **Wilson A.W.** "Exploring variation in deep short-read sequencing of preserved fungal specimen nrITS2 barcodes: What's in a fungarium specimen?" – Mycological Society of America Annual Meeting, Online. July 2021.
- Wilson A. W.**, Wright S., Evenson V. E. "Assembling a Colorado Mycoflora" – International Mycological Congress, San Juan, Puerto Rico. July 2018.
- Charley-Suarez C., Evenson V. E., **Wilson A. W.** "Systematic Diversity of *Laccaria nobilis*" – International Mycological Congress, San Juan, Puerto Rico. July 2018
- Loucks J., Evenson V. E., **Wilson A. W.** "Tales of the Pale Panther: Systematics of the Rocky Mountain *Amanita pantherina* var. *multisquammosa*" – International Mycological Congress, San Juan, Puerto Rico. July 2018.
- Wilson A. W.**, Hosaka K., Mueller, G. M. "Phylogeny and Diversification of *Laccaria*." –International Congress on Mycorrhiza. August 2015, Flagstaff, Arizona.
- Wilson A. W.**, Bell C. D., Aime M. C. "Deconstructing the co-evolutionary complexity of rust fungi (Pucciniales) and their plant hosts." – Mycological Society of America. June 2014 East Lansing MI.
- Koch R.[†], **Wilson A. W.**, Aime M. C. "The recent speciation of gasteromycete *Guyanagaster necrorhiza* suggests endemism." – Mycological Society of America. June 2014, East Lansing MI.
- Desai N.[†], **Wilson A. W.**, Mueller G. M., and Egerton-Warburton L. "Ectomycorrhizal communities of *Quercus oleoides* in a Costa Rican dry tropical forest" – Mycological Society of America. August 2012, New Haven CT.
- Wilson A. W.**, Hosaka K. and Mueller G. M. "*Laccaria* from the eastern Himalaya" – Mycological Society of America. August 2011, Fairbanks AK.
- Pieri D. S.^{*}, Bailey L. A.^{*}, **Wilson A. W.**, Larkin D. J., and Egerton-Warburton L. S. "The effects of invasive European buckthorn and restoration on microbial, metabolic processes and fungal communities in an oak woodland" – Ecological Society of America Annual Meeting, August 2011, Austin, TX. (Contributed Poster)
- Wilson A. W.**, Aime M. C., Henkel T. W. and Mueller G. M. "Systematics and Biogeography of *Dicymbe*-associated Cantharellaceae from the Guiana Shield" – 9th International Mycological Congress. August 2010, Edinburgh, Scotland.

- Wilson A. W.**, Aime M. C., Henkel T. W. and Mueller G. M. “Systematics and Biogeography of *Dicymbe*-associated Cantharellaceae from the Guiana Shield” – Mycological Society of America. July 2010, Lexington, KY.
- Young D. A.***, **Wilson A. W.**, Mueller G. M., “Root-associated fungal communities of a threatened Illinois conifer, *Larix laricina*” – Chicago Botanic Garden REU presentation, August 2009, Glencoe, IL. Clark University Fall Fest, 2009, Worcester, MA.
- Wilson A. W.** and Hibbett D. S. “Molecular Ecology and Evolution of *Calostoma* (Sclerodermatineae, Boletales)” – 8th International Mycological Congress. August 2006, Cairns, Australia.
- Wilson A. W.** and Hibbett D. S. “Molecular Ecology and Evolution of *Calostoma* (Sclerodermatineae, Boletales)” – Mycological Society of America. July 2006, Quebec City, Canada.
- Wilson, A. W.** and Hibbett D. S. “Toward a phylogeny of the Sclerodermatineae with an emphasis of the phylogenetic position of *Calostoma*” – Mycological Society of America. July 2005, Hilo, HI.
- Wilson A. W.** Hobbie E. A. and Hibbett D. S. “Modern Detectives: Exploring the ecology of the local fungus 'Hotlips', AKA *Calostoma cinnabarinum*.” – Northeastern Ecology and Evolution Conference. March 2004, Storrs, CT.
- Wilson A. W.** and Desjardin D. E. “Phylogenetic analysis of gymnopoid and marasmioid fungi” – Mycological Society of America. August 2003, Pacific Grove, CA.
- Wilson A. W.** and Desjardin D. E. “A monograph of the Genus *Gymnopus* from Java and Bali including identification with nrDNA ITS sequences.” – 7th International Mycological Congress. August 2002, Oslo, Norway.
- Wilson A. W.** and Desjardin D. E. “A monograph of the Genus *Gymnopus* from Java and Bali including identification with nrDNA ITS sequences.” – Mycological Society of America. July 2002, Corvallis, OR.

Invited Presentations (Clubs and Amateur Organizations)

- “Why do we make collections? The science of studying mushrooms” Webinar for the North American Mycological Association. 12 December 2024. [YouTube](#).
- “Who, What, Where, and Why of Fungi.” DBG Connectors Meeting. Denver, CO. 11 November 2024, Denver, CO.
- “Bioluminescent Fungi: Life with Light.” DBG Lunch and Learn. Denver, CO. 7 October 2024, Denver, CO.
- “Mushroom Medical Matters: Varied ways fungi impact human health.” 910 Arts. Denver, CO. 23 September 2024, Denver, CO.
- “Bioluminescent Fungi: Life with Light.” 910 Arts. Denver, CO. 9 August 2024, Denver, CO.
- “Bioluminescent Fungi: Life with Light.” Denver MCA Mixed Taste. Denver, CO. 17 June 2024, Denver, CO.
- “When you grow plants, you grow mushrooms too.” Perennial Garden Club of Denver. 17 April 2024, Denver, CO.
- “One Size Does Not Fit All: The Divergent Nature of DNA Barcoding Mushrooms” SOMA Camp. 13 January 2023, Occidental, CA.
- “Why Fungi? Documenting Macrofungi in the Southern Rockies” Crestmore Hilltop Garden Club. 13 January 2022, Denver, CO.
- “The Mysterious and Magical Movement of Mushrooms on Mountains” – Denver Master Gardeners. 9 November 2019, Denver, Colorado.
- “Assembling a Colorado Mycoflora” – Pikes Peak Mycological Society. 21 May 2018, Colorado Springs, Colorado.
- “The Mysterious and Magical Movement of Mushrooms on Mountains” – Colorado Mycological Society. 11 April 2017, Denver, Colorado.
- “Illinois Mushrooms” – Illinois Mycological Association. September 2016, Glencoe, Illinois.
- “Documenting fungal biodiversity in the Midwest and beyond.” – Illinois Native Plant Society. March 2016.
- “The enigmatic puffball genus, *Calostoma*.” – Illinois Mycological Association. May 2010, Chicago, Illinois.
- “Taxonomy and Systematics of the genus *Gymnopus*.” – The Mycological Society of San Francisco, The Fungus Federation of Santa Cruz, and the Sonoma Mycological Association. May 2005.

Media

2024

[DBG Instagram: Five Proposed Colorado State Mushrooms](#)

[DBG TicTok: Tyler Thrasher Video: Intro to the Fungarium](#)

[ABC Science Show: Meeting mummified mushrooms and the importance of fungi diversity.](#)
[DBG blog: Appreciating Mycology Volunteers](#)

2023

[DBG blog: The Eclectic, Eccentric Nature of Mushrooms & the People Who Love Them](#)
[DBG blog: Mushrooms Sprang in the Wet Spring](#)
[DBG blog: What Is DNA Barcoding?](#)
[Life on Cap Hill article: A wet Spring is springing up mushrooms.](#)
[Inside the Gardens article: Making of a Mushroom Specimen.](#)

2022

[YouTube: "Andrew Wilson: An Oral History for Mycology".](#)
[Mushroom Hour Podcast: Ep. 130: Fungal Systematics, Mushroom Ancestry & Recognizing Patterns \(feat. Dr. Andrew Wilson\)](#)
[DBG Instagram "A Day in the Life: Fungi Research"](#)
[KUNC Radio: Wild mushrooms, DNA and citizen scientists in Colorado's Mountains](#)
[NPR: All Things Considered "With so many undiscovered mushrooms, citizen scientists find new species all the time."](#)
[YouTube: "How to collect macrofungal specimens for scientific research"](#)
[DBG blog: "Mushroom Madness in Telluride, 2022 Edition"](#)

2021

[DBG blog: Like A Phoenix: The Fungi That Arise from The Ashes of Forest Fires.](#)
[CMS Expo: Mushroom Identification](#)
[Denver Botanic Gardens - Life Without Fungi](#)
[Ski-Hi News - Grand County furnishes fruitful fungi forays for the North American Mycological Association](#)

2020

[Denver Post - Mushrooms are healing the earth, starting with Colorado's forests](#)
[CMS Expo: History of the Colorado Mycological Society](#)
[CMS Expo: What the tek?](#)
[Bleat Network Interview - TUE 12.1. 20 Show](#)
[DBG Blog: Colorado Mycological Society's Online Expo](#)
[DBG Blog: *Lactarius* of the Colorado Rockies](#)
[DBG Blog: Documenting Macrofungi in the Lemhi Range](#)
[Center For Plant Conservation Science - Entagled by Rocky Mountain Fungi](#)

2019

[Facebook Post: Wacky Wednesday Decriminalization of Psilocybin mushrooms](#)

2018

[Denverite - Yes, Colorado has fireflies, but also look at these glowing scorpions](#)
[Colorado Community Media - DMNS exhibit lets there be lights](#)
[DBG Facebook Live: Creatures of Light Collaboration with DMNS](#)
[North American Mycological Association - YouTube: "Discover NAMA"](#)
[North American Mycological Association - YouTube: Vouchering and the North American Mycoflora project](#)
[CMS Blog: Life that lights at Denver Museum of Nature and Science](#)
[Aspen Public Radio - Mushroom Fair Puts the "Fun" in Fungi](#)
[Telluride Inside and Out - Dr. Andrew Wilson on the Colorado Mycoflora Project](#)
[Telluride Mushroom Festival - State of the State's Fungi](#)
[Why Fungi?: Colorado Mycoflora Project](#)
[PBS Show Urban Conversion - Season 3 Episode 2 "Let it Rot". Clip on \[DBG's Facebook Page.\]\(#\)](#)

2017

[9 News - Mushrooms popping up on lawns could be toxic](#)
[Aspen Daily News - The Fungus Among Us](#)
[Boulder Weekly - Fungi in the Sun: How mushrooms connect everything in nature.](#)

Canyon Courier - CUSP plants third round of wood-eating mushrooms
 Colorado Mycological Society - SporesAfield Interview with Dr. Andy Wilson
[DBG Blog - Spring Fungi at the Sierra Nevada Field Campus](#)

IX. SYNERGISTIC ACTIVITIES

Workshops Contributed

2003-2004: Assembling the Fungal Tree of Life – Workshop in fungal biology for high school teachers.

Website Management

2018-Current: Colorado Mycoflora Project. coloradomycoflora.org

2003-2004: Assembling the Fungal Tree of Life –Teaching the Fungal Tree of Life (TFTOL) webpage.
 (<http://www.clarku.edu/faculty/dhibbett/TFTOL/index.html>).

2000-2002: Harry D. Thiers Herbarium Website. San Francisco State University.

Office (Amateur Societies)

2019-2022: Colorado Mycological Society presidential appointments: 2019 President Elect, 2020 President, 2021 Past President, 2022 Past Past President.

2010-2012: President of the Illinois Mycological Association.

2018-2020: Colorado Mycological Society (CMS) Program Committee.

Conservation Biology Research Experience

Sea Turtle conservation – Asociacion Pretoma, Playa San Miguel, Costa Rica, 1998.

Migratory Avian Productivity and Survivorship (MAPS) – SFSU Sierra Nevada Field Campus, Sierra City, California, Summer 1996 and 1997 and Redwood Sciences Laboratory, Tortuguero, Costa Rica, August–September 1998.

Mentoring

Sunaina Mehrota – Post-Bac Fashion Student, School of the Art Institute Chicago, Spring 2015. We worked together on developing a method for dyeing/staining fabrics using live fungal cultures.

X. PROFESSIONAL DEVELOPMENT

Workshops/Courses Attended

2013: Preparing Future Faculty. Purdue University. West Lafayette, IN.

2012: Laboratory Methods in Genotyping by Sequencing Workshop. Field Museum, Chicago, IL.

2011: FESIN: Fungal Teaching Workshop. Fairbanks, AK.

2010: FESIN: Metagenomic Analyses Workshop. Edinburgh, Scotland.

2010: *Perl* Scriptwriting Workshop with the Legume Systematics Working Group. University of Arizona.