

Curriculum Vitae

Andrew William Wilson, Ph.D.

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Education

Ph.D. Biology – 2009, Clark University, Advisor: David Hibbett
M.A. Biology, Systematics and Ecology – 2003, San Francisco State University, Advisor: Dennis Desjardin
B.A. Humanities – 1999, San Francisco State University
B.S. Biology: Ecology – 1999, San Francisco State University

Professional Affiliations

Postdoctoral Research Associate – Chicago Botanic Garden. May 2009-current.
Research Associate – Field Museum, Chicago. Spring 2010-current.
Adjunct Faculty – Loyola University Chicago. Spring 2010-current.

Research

- Postdoctoral Research– Chicago Botanic Garden.
 - Systematics and Biogeography of *Dicymbe*-associated Chantrelles.
 - Phylogenetic analysis of the ectomycorrhizal fungal genus *Laccaria*.
 - Population genetics of *Laccaria bicolor*.
 - Fungi of the Eastern Himalayas.
- Ph.D. dissertation – Clark University
 - Ecology of *Calostoma*, Malaysia, 2006 and 2007.
 - Molecular systematics and ecology of the Sclerodermatineae.
- Masters thesis – A monograph of *Gymnopus* from Java and Bali, Indonesia, 1999 and 2000.
- Sea Turtle conservation – Asociacion Pretoma, Playa San Miguel, Costa Rica, 1998.
- Migratory avian population surveys (MAPS) – SFSU Sierra Nevada Field Campus, Sierra City, California, 1996 and 1997 and Redwood Sciences Laboratory, Tortuguero, Costa Rica, 1998.

Peer Reviewed Publications (Mentored undergraduate* publications)

1. **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*. DOI: 10.1111/j.1558-5646.2010.01214.x
2. Desjardin D. E., **Wilson A. W.**, and Binder M. 2008. *Durianella*, a new gasteroid genus in the Boletineae. *Mycologia* 100: 956-961.
3. **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.
4. 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. & 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.
5. 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.
6. James T., Kauff F., Schoch C., Matheny P. B., Hofstetter V., Cox C., Celio G., Gueidan C., Fraker E., Miadlikowska J., Lumbsch T., Rauhut A., Reeb V., Arnold A. E., Amtoft A., Stajich J., Hosaka K., Sung G.-H., Johnson D., O'Rourke B., Binder M., Curtis J., Slot J., Wang Z., **Wilson A. W.**, Schüßler A., Longcore J., O'Donnell K., Mozley-Standridge S., Porter D., Letcher P., Powell M., Taylor J., White M., Griffith G., Davies D., Sugiyama J., Rossman A., Rogers J., Pfister D., Hewitt D., Hansen K., Hambleton S., Shoemaker R., Kohlmeyer J., Volkmann-Kohlmeyer B., Spotts R., Serdani M., Crous P., Hughes K., Matsuura K., Langer E., Langer G., Unterreiner W., Lücking R., Büdel B., Geiser D., Aptroot A., Crockett M., Humber R., Diederich P., Morton J., Schmidt I., Schultz M., Yahr R., Hibbett D. S., Lutzoni F.,

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- McLaughlin D., Spatafora J. and Vilgalys R. 2006. Reconstructing the early evolution of the Fungi using a six gene phylogeny. *Nature* 443: 818-822.
7. **Wilson, A. W.** and Desjardin D. E. 2005. Phylogenetic relationships in the gymnopoid and marasmioid fungi (Basidiomycota, euagarics clade). *Mycologia* 97:667-679.
 8. **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.

Other Publications

9. **Wilson A. W.** 2009. Molecular Ecology and Evolution in the Sclerodermatineae (Boletales, Basidiomycota), doctoral dissertation, Clark University, 119p. Available from ProQuest (<http://www.proquest.com/>).
10. Bidartondo M, ..., **Wilson A. W.** et al. 2008. Preserving accuracy in GenBank. *Science* 319: 1616 (*Letter to Science*).

Manuscripts in Progress

11. **Wilson A. W.**, Binder M. and Hibbett D. S. Diversity and evolution of ectomycorrhizal host associations in Sclerodermatineae (Boletales, Basidiomycota). (*In preparation*).
12. **Wilson A. W.**, Hosaka K. and Mueller G. M. *Laccaria* from the Eastern Himalayas. (*In preparation*).
13. **Wilson A. W.**, Aime M. C., Dierks J., Mueller G. M. and Henkel T. A new species, new combination, and new range records for *Craterellus* from Guyana. (*In preparation*).

Teaching and Mentorship

- Instructor for Ecology at Loyola University – Chicago, Spring 2010. Responsibilities include developing the curriculum, writing the syllabus, writing lectures, composing exams, and managing student grades.
- Thesis Committee: Nikhilesh Desai (Summer 2011 – current) M.S. Student – Ectomycorrhizal communities associated with *Quercus oleoides* in tropical dry forests of Costa Rica.
- Mentorship and training for student research:
 - Rui Zang (Fall 2010 – current) Ph.D. Student – Taxonomy and systematics of the genus *Suillus* in China.
 - Dayani Pieri and Lauren Bailey (Summer 2010 – current) Undergraduate Students – Fungal richness in Buckthorn (*Rhamnus cathartica*) leaf litter.
 - Anna Beiniek and Lindsey Stuhr (Summer – Fall 2010) Undergraduate Students – Population genetics of *Laccaria bicolor*.
 - Darcy Young (Summer 2009) REU Summer Intern – Ectomycorrhizal fungal communities associated with *Larix laricina*.
 - Rebecca Louzan (Summer 2006, Spring 2007) Undergraduate Student – Systematics of *Diplocystis wrightii*.
 - Danielle Stehlik (Fall 2003 – Spring 2004) REU student – Sampling ectomycorrhizal root tips of *Calostoma cinnabarinum*.
- Graduate Teaching Assistant at Clark University: Seminar in Molecular Evolution (Spring 2009), First Year Biology Research Seminar (Fall 2007 and 2008), Conservation Biology Seminar (Spring 2007), Botanical Diversity (Spring 2007), Biodiversity (Fall 2006), Introductory Biology 1st Semester (Fall 2002 and 2005) and 2nd Semester (Spring 2005, 2006 and 2009).
- NSF G K-12 Science Teaching Fellow 2001-2002 – Department of Biology, San Francisco State University.
- Graduate Teaching Assistant at San Francisco State University: Fungi of the Sierra Nevada (June 2001), World of Plants Lab Teaching Assistant (Spring 2001) and Lab Preparation Assistant (Summer 2001), Introductory Biology Laboratory I (Fall 2000).

Grants

NSF Doctoral Dissertation Improvement Grant 2005-2007 – \$12,000. DEB-0508716 PI: David S. Hibbett (for administrative purposes).

Funding and Awards

- FESIN: Fungal Teaching Workshop Travel Award – Mycological Society of America Annual Meeting, 2011.
- FESIN: Metagenomics Workshop Travel Award – 9th International Mycological Congress, 2011.
- Graduate Student Council Travel Award 2008 – Clark University.
- DeepHyphae Travel Award 2007 – Asian Mycological Congress 2007.

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- Best Poster Presentation: Phylogeny, Systematics and Evolution – 8th International Mycological Congress 2006.
- Best Poster Presentation: Mycological Society of America Annual Meeting 2006.
- Graduate Student Fellowship 2005 – \$2000. Mycological Society of America.
- Forest Fungal Ecology Research Award 2005 – \$1500. Mycological Society of America.
- DeepHyphae Travel Award 2005 – MSA meeting 2005.

Outreach

- Planting Science: Science Teaching Mentor 2010. <http://www.plantingscience.org/index.php>
- Assembling the Fungal Tree of Life, Research Assistant 2003-2004 – Organizing a workshop in fungal biology for high school teachers and managing Teaching the Fungal Tree of Life (TFTOL) webpage. (<http://www.clarku.edu/faculty/dhibbett/TFTOL/index.html>).

Memberships and Service

- President of the Illinois Mycological Association. 2010-current.
- Membership committee. Mycological Society of America. 2011-current
- Amateur society liaison. Mycological Society of America. 2010-current.
- FESIN: Fungal Teaching Workshop. Fairbanks, AK. August 2011.
- FESIN: Metagenomics Analyses Workshop. Edinburgh, Scotland. August, 2010
- Legume Systematics Working Group: *Perl* Scriptwriting Workshop. University of Arizona. May, 2010
- Mycological Society of America. 2001-current.
- Society for the Study of Evolution. 2008-current.
- Ecological Society of America. 2008-current.
- Botanical Society of America. 2008-current.
- Judge for student poster presentations. Mycological Society of America annual meeting, 2009-11.
- Editorial service: Reviewer for *Mycoscience*, *New Phytologist*, *Journal of Biogeography*, *Mycologia*, *Fungal Diversity*, *Mycorrhiza*, *PLoS one* and *Cladistics*.

Presentations (Mentored undergraduate* presentations)

- **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. (Contributed Paper)
- **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.** “Phylogenetic studies in the Sclerodermatineae: Diversification, biogeography and ancestral host reconstruction of an enigmatic group of ectomycorrhizal fungi” – A. Watson Armour Research Seminar: Field Museum of Natural History. April 2011, Chicago, Illinois. (Invited presentation)
- Annual Meetings of the Mycological Society of America. 2002-2006, 2008-2011. Contributed Papers 2004, 2008 and 2009. Contributed Posters 2002, 2003, 2005, 2006, 2010 and 2011.
- **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. (Contributed Poster)
- **Wilson A. W.** "The enigmatic puffball genus, *Calostoma*." – Illinois Mycological Association. May 2010, Chicago, Illinois. (Invited presentation)
- **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. (Contributed Poster)
- **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. (Contributed Paper)
- **Wilson A. W.** and Hibbett D. S. "Molecular Ecology and Evolution of *Calostoma* (Sclerodermatineae, Boletales)" – 8th International Mycological Congress. August 2006, Cairns, Australia. (Contributed Poster)

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- **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. (Contributed Poster)
- **Wilson A. W.** "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. (Invited presentation)
- **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. (Contributed Poster)