

YI-HSIN ERICA TSAI

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Department of Biology, Duke University, Box 90338, Durham, NC, 27708, USA

Education

- 2009 Ph.D. Duke University
(anticipated) Department of Biology
Advisor: Paul S. Manos
Concentration: Evolutionary Ecology
Dissertation: The invasion and migration history of the parasitic plant *Epifagus virginiana*.
- 2002 B.A. University of Colorado at Boulder
Majors: Environmental, Population, and Organismic Biology, and Biochemistry
Summa Cum Laude, With Distinction
Advisor: Jeffry B. Mitton
Honors Thesis: A recent natural history of quaking aspen, *Populus tremuloides*: A phylogeography using organellar DNA.

Grants Funded

- 2006-2009 \$12,000 Doctoral Dissertation Improvement Grant, National Science Foundation
- Sum 2007 \$4,500 Summer of Code: Phyloinformatics Summer of Code, Google, National Evolutionary Synthesis Center (NESCent)
- Sum 2007 \$500 Conference Travel Grant to Botany 2007, Deep Time Project
- 2006-2007 \$4,000 Eloise Gerry Fellowship, Sigma Delta Epsilon/Graduate Women in Science
- 2006-2007 \$1,000 Amy Lutz Rechel Award, Association for Women in Science
- 2006-2007 \$700 Graduate Student Research Grant, American Society of Plant Taxonomists
- 2006-2007 \$400 Grant in Aid, Sigma Xi
- 2006-2007 \$1,000 Grant in Aid, Department of Biology, Duke University
- 2006-2007 \$2,200 Graduate School International Research Travel Award, Duke University
- 2005-2006 \$1,000 Graduate School International Research Travel Award, Duke University
- 2004-2005 \$1,000 Grant in Aid, Department of Biology, Duke University
- 2003-2004 \$2,900 Grant for Training in Plant/Fungal Systematics, Duke University, Mellon Foundation (3 separate awards)

Fellowships and Awards

- 2008 One-Semester Fellowship, Department of Biology, Duke University
- 2002-2007 Graduate Research Fellowship, National Science Foundation
- 2002-2006 James B. Duke Fellowship, Duke University
- 2002 Outstanding Graduate for the College of Arts and Sciences, University of Colorado

Teaching Experience

- 2007, 2008 Teaching Assistant Genetics and Molecular Biology, Dept. of Biology, Duke Univ.
2005, 2009 Teaching Assistant Organismal Diversity, Dept. of Biology, Duke Univ.
2001-2002 Teaching Assistant Data Structures, Dept. of Computer Science, Univ. of Colorado

Publications

- Tsai, Y.E.** and P.S. Manos. In prep. The post-glacial colonization patterns of the parasitic plant, *Epifagus virginiana*, based on cpDNA.
Tsai, YE, and JB Mitton. 2002. A recent natural history of quaking aspen, *Populus tremuloides*: A phylogeography using organellar DNA. Honors Thesis. University of Colorado at Boulder.

Presentations

- Tsai, YE,** and PS Manos. Host constraints on the post-glacial migration of the parasitic plant, *Epifagus virginiana*. [Poster]. Sigma Delta Epsilon/Graduate Women in Science National Business Meeting; Raleigh, NC; 20 June 2009.
Tsai, YE, and PS Manos. [Global change, parasites, and community assembly: How a parasite expanded its range in the shadow of its host.](#) [Presentation]. Oosting Memorial Symposium; Durham, NC; 17 April 2009.
Tsai, YE, and PS Manos. Beechdrops on the move: A parasitic plant's tale of host influences on post-glacial recolonization. [Presentation]. Botany Conference; Vancouver, BC; 28 July 2008.
Tsai, YE, and PS Manos. Host constraints on the post-glacial migration of the parasitic plant, *Epifagus virginiana*. [Presentation]. Evolution Conference; Minneapolis, MN; 23 June 2008.
Tsai, YE, and D Kidd. PhyloGeoViz: Want to put pie charts on a map? Then PhyloGeoViz is the application for you. [Presentation]. NESCent Phyloinformatics End-of-Summer-of-Code Meeting; Durham, NC; 16 August 2007.
Tsai, YE, and PS Manos. The hitchhiker's guide to the forest: A parasitic plant's account of the range expansion of its host. [Presentation]. Botany Conference; Chicago, IL; 10 July 2007.
Tsai, YE, and PS Manos. Do hosts and their obligate parasites co-migrate? Inferences from the post-glacial phylogeographies of beech (*Fagus grandifolia*) and beechdrop (*Epifagus virginiana*). [Presentation]. Botany Conference; Chico, CA; 2 August 2006.

Synergistic Activities

- Summer 2007 Developer of PhyloGeoViz, a phylogeographic visualization tool. National Evolutionary Synthesis Center (NESCent), sponsored by the Google Summer of Code Program. <http://phylogeoviz.org>
2005-present Planning Committee Chair (2007-), Webmaster (2005-), PC Member (2005-) Women in Science and Engineering, Duke University
Sum 2007, 2008 Assistant Coordinator, Howard Hughes Precollege Program
Sum '04, '05, '06 Mentor, NSF-Research Experience for Undergraduates Program, Duke University

Professional Memberships

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| Society for the Study of Evolution | Sigma Xi |
| American Society of Plant Taxonomists | Graduate Women in Science/Sigma Delta Epsilon |
| Botanical Society of America | Association of Women in Science |