

## Jennifer A. Gruhn

---

Department of Biology, Washington University in Saint Louis, 1 Brookings Drive  
Campus Box 1137, Saint Louis, Missouri, 63130  
JenniferAGruhn@gmail.com; Lab phone: 314-935-7230

### EDUCATION AND STUDY ABROAD

Washington University in Saint Louis, Fall 2010-Present

Ph.D. Student in the Department of Evolution, Ecology, and Population Biology

Laboratory of Dr. Barbara A. Schaal; Thesis: Phylogeography and Ecological Niche Modeling of a North American Subalpine Tree, Whitebark pine (*Pinus albicaulis* Engelm.)

The University of North Carolina at Chapel Hill, 2001-2005

Degrees: Bachelors of Science in Biology, concentration in Ecology; Minor in Chemistry

Highlands Biological Field Station of the North Carolina Southern Appalachians, Summer 2005

Field Biology, Botany, and Bryology Courses of the University of North Carolina at Chapel Hill

School of International Training Study Abroad Program in Ecuador, South America, Fall 2003

Country-wide Comparative Ecology and Conservation Courses; Spanish seminars and homestays

### OCCUPATIONAL RESEARCH POSITIONS

Environmental Impact Study Botanist, Montane Rainforests of La Cordillera del Condor, Ecuador, Sept 2009

- Established permanent plots and ascertained botanical diversity to initiate long-term ecological study

Missouri Botanical Garden Ecuador Program Coordinator, Saint Louis, MO, May 2006-May 2009

- Maintained Ecuadorian herbarium specimens and assisted in their curation; trained volunteers/interns

Missouri Botanical Garden Shaw Nature Reserve Intern, Gray Summit, MO, Summer 2004

- Assisted studies on alternative prairie restoration methods; cultivated/planted native Missouri species

### ACADEMIC AND VOLUNTEER RESEARCH

Biogeography of Asian-North American Disjunct Taxa, Washington University in St. Louis, 2011-Present

- Analyzed the relationship between disjunction time and climate distributions of sister lineages

Phylogeography of *Euphorbia pulcherrima*, Washington University in St. Louis, Fall 2011-Spring 2012

- Investigated the geographical origin of cultivated poinsettias using a region of the G3PDH gene

Botanical Expedition for collection of *Espeletia* spp., Colombia, South America, Fall 2009

- Assisted PhD student in the collection of “frailejones” in the páramos of the student’s home country

Botanical Expedition for general collection across botanically unexplored areas, Northern Peru, Summer 2009

- Collected trees, shrubs, and herbs in montane forests and puna with the aid of local guides and pack mules

Studying the expanding range of *Magnolia grandiflora*, University of North Carolina at Chapel Hill, Fall 2005

- Analyzed population establishment and timing with respect to bioclimatic variables in ArcGIS

Assessing seedbank viability of a S. Appalachian exotic, University of North Carolina at Chapel Hill, Spring 2005

- Evaluated the presence and viability of a *Paulownia subtomentosa* (Princess tree) seedbank in Great Smokey Mountains National Park with fieldwork and tests of germination after various seed treatments

Independent study in Andean Ethnobotany, School of International Training, Fall 2003

- Interviewed farmers of Vilcabamba, Ecuador, about ethnobotanical plants and their uses

## PEER-REVIEWED PUBLICATIONS

Trejo, L., T.P. Feria Arroyo, K.M. Olsen, L.E. Equiarte, B. Arroyo, **J.A. Gruhn**, and M.E. Olson. 2012. Poinsettia's wild ancestor in the Mexican dry tropics: Historical, genetic, and environmental Evidence. *American Journal of Botany* 99(7):1146-1157.

**Gruhn, J.A.** & P.S. White. 2011. *Magnolia grandiflora* L. Range Expansion: A Case Study in a North Carolina Piedmont Forest. *Southeastern Naturalist* 10(2):275-288.

Bussmann, R.W., **J.A. Gruhn**, and A. Glenn. 2010. *Axinaea fernando-cabiesii* and *A. reginae* spp. nov. (Melastomataceae) from upper Amazonia of Peru, with notes on the conservation status of *A. flava*. *Nordic Journal of Botany* 28(5):518-522.

Clark, J.L., D.A. Neill, **J.A. Gruhn**, A. Weber, and T. Katan. 2010. *Shuaria* (Gesneriaceae), An Arborescent New Genus from the Cordillera del Cóndor and Amazonian Ecuador. *Systematic Botany* 35(3):662-674

## MANUSCRIPTS IN PREPARATION

**Gruhn, J.A.**, I. Jimenez, K.M. Hiser, J. Wen, and R.E. Ricklefs. (*in prep*). Conservatism of Plant Distributions in Climate Space over Millions of Years.

Bostrom, V., **J.A. Gruhn**, and B.A. Schaal. (*in prep*). Neutral Genetic Variation Across Altitudinal and Latitudinal Gradients in Lodgepole Pine (*Pinus albicaulis*).

## POSTER PRESENTATIONS

**Gruhn, J.A.**, I. Jimenez, K.M. Hiser, J. Wen, and R.E. Ricklefs. 2012. *Plants Conserve their Climate Niche over Geologic Time*. Evolution, Ecology, and Conservation Retreat. Elsayh, Illinois.

**Gruhn, J.A.**, I. Jimenez, K.M. Hiser, J. Wen, and R.E. Ricklefs. 2012. *Time of Separation and Cold Tolerance of Asian-American Disjunct Plants*. Botanical Society of America Symposium. St. Louis, Missouri.

## TEACHING AND COMMUNITY SERVICE

Young Scientists Program teacher (and officer since 2012), *volunteer position*, St. Louis, MO, Fall 2010-Present

- Organize and instruct interactive evolution/ecology seminars and field trips for inner city students

Forest Park Bioblitz Team Leader, *volunteer position*, St. Louis, Missouri, Fall 2012

- Catalogued and recorded native and nonnative flora with a group of interested Saint Louis residents

Teaching Assistant for Undergraduate Course *Evolution*, Washington University in St. Louis, Fall 2011

- Led discussion section for 13 students and graded exams/papers for a course taught by Dr. Kenneth Olsen

Virginia Master Naturalist Program Seminar Instructor, *volunteer position*, Wytheville, Virginia, Summer 2010

- Presented workshop on the taxa and traits of invasive and exotic plants of the Appalachian Mountains

Libros for Learning facilitator and instructor abroad, *volunteer position*, Cabo Corrientes, Mexico, Fall 2009

- Implemented 4 primary school libraries and presented reading workshop, in Spanish, to 25+ local teachers

English as a Second Language (ESL) Reading Program Mentor, *volunteer position*, Chapel Hill, NC, 2003-2004

- Partnered with recently-immigrated students from Spanish-speaking countries to read English material

Carolina Tiger Rescue Assistant, *volunteer position*, Pittsboro, NC, 2003

- Prepared food as well as fed and watered animals of the Carnivora order

Instructor for Earth Day Events, *volunteer position*, University of North Carolina at Chapel Hill, 2002

- Organized and taught interactive lessons on sustainable energy to visiting elementary school students

## MENTORING

Valerie Bostrom, undergraduate student at Washington University in St. Louis, Fall 2012-Present

Outcomes: (1) Manuscript (in prep.) on neutral genetic variation in lodgepole pine; (2) Poster (in prep.) for Undergraduate Research Symposium at Washington University in St. Louis

John M. Snodgrass, active volunteer at Missouri Botanical Garden, 2008-2009

Outcomes: (1) Preparation of hundreds of unidentified herbarium specimens for shipping to taxonomic specialists; (2) Garden database TROPICOS updated to reflect new species identifications

Elisa Arteaga, summer intern at Missouri Botanical Garden, 2008

Outcomes: (1) Reorganization of Ecuadorian herbarium specimens; (2) Preparation of hundreds of unidentified herbarium specimens for shipping to taxonomic specialists

## PROFESSIONAL AFFILIATIONS

Botanical Society of America, *member*

Ecological Society of America, *member*

Tree Campus USA, *graduate student representative for Washington University in St. Louis committee*

## SKILLS AND CERTIFICATIONS

Proficient in R Project, ArcGIS, Adobe Photoshop Elements, and Microsoft Office software

Knowledgeable about the flora and ecosystems of temperate North America and northwestern South America

Completed Wilderness First Aid and CPR Courses at the University of North Carolina at Chapel Hill

Experienced in leading short- and long-term outdoor trips for field biology classes and fieldwork

## LANGUAGES

Proficient in reading, speaking, and writing Spanish

Experienced in writing botanical species diagnoses in Latin