

Curriculum Vitae

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Education

- 2008 Ph.D. Botany, University of Florida, Gainesville.
2002 M.A. Botany, University of Texas, Austin.
1999 Professional title of Biologist, San Marcos University, Lima, Peru.
1995 B.S. Biology-Botany, San Marcos University, Lima, Peru.

Research Experience

- 2007-2008 Research Assistant, Molecular and Cytogenetic Studies of Esociforms, Ichthyology, Florida Museum of Natural History. Supervisor: Dr. Andres Lopez.
2006-2007 Research Assistant, Phylogenetic studies of the genus *Paspalum* (Poaceae, Panicoideae). Florida Museum of Natural History. In collaboration with Dr. P. Speranza, Univ. de La Republica, and Dr. G. Rua, Univ. de Buenos Aires.
May-Aug 2005 Research Assistant, Tree of Life Web Project, Florida Museum of Natural History. Supervisor: Dr. Pamela Soltis.
May-Aug 2004 Research Assistant, Organization of DNA collection, Tree of Life Project, University of Florida. Supervisor: Dr. Douglas Soltis.
May-Aug 2003 Research Assistant, Paleobiology Database (Deep Time Project). Florida Museum of Natural History. Supervisor: Dr. Hongshan Wang.
May-Aug 2000 Research Assistant, BIOTICA Mexican Biodiversity Database Project, Herbarium University of Texas (TEX). Supervisor: Dr. José Panero.
Feb-Mar 1998 Research Assistant, Rapid Reference Collection, Herbarium of The Field Museum of Chicago. Supervisor: Dr. Robin Foster.
Sept-Oct 1997 Research Assistant, Analysis and identification of Peruvian plants, Herbarium of The Field Museum of Chicago. Supervisor: Dr. Robin Foster.
1997-1998 Member of Conservation International's RAP (Rapid Assessment Program) team: Evaluation of Biodiversity in the Cordillera Vilcabamba Region, Cuzco, Peru. Evaluation of Biodiversity in Pampas del Heath-Madidi National Park, Bolivia. Supervisor: Dr. Thomas Schulemberg.
1996-1998 Research Assistant in diverse projects at Museum of Natural History, San Marcos University, Lima: Botanical research in the zone with lack of information E11, high elevation Andes of Tacna; Seasonal variation in the vegetation of Lomas de Lachay, Lima; Monitoring the biological impact of El Niño Phenomenon on coastal resources and shallow marine areas of Peru; Aquatic and riparian flora of the Yanachaga-Chemillen National Park, Pasco; Flora of the Nasca Valley, Ica; Study of human impacts on natural resources in the central arid coast of Peru.
1995-1999 Flora and vegetation of River Ilo-Moquegua basin and Lomas of Ilo. Thesis to obtain the Professional title of Biologist. Supervisor: Dr. Asunción Cano.
1995-1996 Analysis of botanical archaeological remains, Museo Contisuyo, Moquegua, Peru. Supervisors: Dr. Bruce Owen and Dr. Karen Wise.

Teaching Experience

Teaching Assistant:

Molecular Systematics Lab, Plants in Human Affairs Lab, Integrated Principles of Biology Lab I (University of Florida).

Survey of the Plant Kingdom Lab, The Human Body (University of Texas).

General Botany, Plant Physiology, Plant Geography (San Marcos University, Lima).

Invited Lecturer:

Biogeography of Cactaceae (San Marcos University, Dept. of Botany).

Diversity and taxonomy of Peruvian cacti (Peruvian Cactus and Succulent Society).

Molecular Techniques for Systematic Studies (San Marcos University, Dept. of Zoology).

Field Course Instructor:

Tropical Plant Taxonomy (Tambopata Research Center, Madre de Dios, Peru).

Publications

Vinyalonga, S., Arakaki, M., Garcia-Jacas, N., Susanna, A., Gitzendanner, M., Soltis, D. E. and P.S. Soltis. Isolation and characterization of novel microsatellite markers for *Arctium minus* L. (Compositae) (submitted to *Molecular Ecology Notes*).

Arakaki, M., Soltis, D. E., Soltis, P. and P. Speranza. Isolation of polymorphic microsatellite loci in *Haageocereus* (Trichocereae, Cactaceae) and their use in analyses of genetic diversity (submitted to *Molecular Ecology Notes*).

Arakaki, M., Soltis, D. E. and P. Speranza. 2007. New chromosome counts and evidence of polyploidy in *Haageocereus* and other taxa of tribe Trichocereae (Cactaceae). *Brittonia* 59(3): 290-297.

Edwards, C. E., Arakaki, M., Quintana-Ascencio, P. F., Soltis, D. E. and P. Soltis. 2007. Isolation and characterization of microsatellite loci from the endangered highlands scrub hypericum (*Hypericum cumulicola*). *Molecular Ecology Notes* 7:1135-1137.

Arakaki, M., Ostolaza, C., Cáceres, F. and J. Roque. 2006. Cactaceae endémicas del Perú. In: B. León, J. Roque, C. Ulloa-Ulloa, N. Pitman, P. Jørgensen and A. Cano (eds.). El Libro Rojo de las Plantas Endémicas del Perú. *Revista Peruana de Biología*, especial issue 13(2):193-219.

Soltis, P., Soltis, D. and M. Arakaki. 2006. core Caryophyllales. Caryophyllales sensu stricto. Version 07 June 2006. URL: http://tolweb.org/core_Caryophyllales/20965/2006.06.07 in The Tree of Life Web Project, <http://tolweb.org/>

Soltis, P., Soltis, D. and M. Arakaki. 2006. non-core Caryophyllales. Polygonales. Version 07 June 2006. URL: http://tolweb.org/non-core_Caryophyllales/20968/2006.06.07 in The Tree of Life Web Project, <http://tolweb.org/>

Soltis, D., Soltis, P. and M. Arakaki. 2006. Saxifragales. Version 27 February 2006. URL: <http://tolweb.org/Saxifragales/20698/2006.02.27> in The Tree of Life Web Project, <http://tolweb.org/>

Arakaki, M., Panero, J. and B. Crozier. 2003. Relaciones taxonómicas en el género peruano *Weberbauerocereus* Backeb. (Cactaceae). *QUEPO* 17: 62-72.

Arakaki, M. and A. Cano. 2003. Composición florística de la cuenca del Río Ilo-Moquegua y Lomas de Ilo, Perú. *Revista Peruana de Biología* 10 (1): 5-19.

Arakaki, M. 2002. Técnicas de colección y preparación de especímenes de cactáceas para herbario y estudios taxonómicos II. *QUEPO* 16:34-39.

Arakaki, M. 2001. Técnicas de colección y preparación de especímenes de cactáceas para herbario y estudios taxonómicos. *QUEPO* 15:38-45.

Cano, A., Arakaki, M., Roque, J., La Torre, M. I., Refulio, N. and C. Arana. 2001. Flora vascular en las Lomas de Ancón y Carabayllo (Lima, Perú) durante El Niño 1997-98. In: J. Tarazona, W. E. Arntz and E. Castillo de Maruenda (eds.). El Niño en América Latina: Impactos Biológicos y Sociales. Consejo Nacional de Ciencia y Tecnología, Lima.

- Arakaki, M. y A. Cano. 2001. Vegetación y estado de conservación de la Cuenca del Río Ilo-Moquegua, Moquegua, Perú. *Arnaldoa* 8(1):49-63.
- Alonso, L. E., Alonso, L., Schulemberg, T. S. and F. Dallmeier (eds.). 2001. RAP Working Paper 12: A Biological and Social Assessment of the Northern Cordillera Vilcabamba, Perú. University of Chicago Press, Chicago.
- Arakaki, M. 1999. Microherbario de las plantas de Moquegua (Perú). Field Museum of Chicago, Environmental and Conservation Programs. URL: <http://www.fieldmuseum.org/plantguides/microherbaria.asp>.
- Cano, A., Young K., León B., La Torre M., Arakaki M. and J. Roque. 1998. Estudio comparativo de la flora vascular de los principales humedales de la zona costera del Departamento de Lima, Perú. *In*: Cano A. and K. Young (eds.) Los Pantanos de Villa, Biología y Conservación, Museo de Historia Natural, serie de divulgación N° 11.
- Young, K., León B., Cano A., La Torre M., Arakaki, M. and J. Roque. 1997. Botanical exploration and conservation in Peru: The plants of Cerro Blanco, Nazca. *Biollania*, especial edition N° 6. Bio Centro - Asomuseo, Smithsonian Institution, Caracas.

Abstracts and Presentations

- Arakaki, M., Soltis, D. E. and P. Soltis. 2008. Systematics of tribe Trichocereae (Cactaceae) and population genetics of *Haageocereus*. Presented at Evolution 2008, Minneapolis, Minnesota.
- Lopez, J. A., Arakaki, M. and P. Rab. 2008. Retrotransposon diversity and genome size changes in esociform fishes. Presented at Evolution 2008, Minneapolis, Minnesota.
- Rua, G., Speranza, P., Arakaki, M. and M. Vaio. 2007. Phylogenetic studies of the genus *Paspalum* (Poaceae, Panicoideae) based on sequences of four chloroplast regions. Presented at VII Reunión Argentina de Cladística y Biogeografía. Buenos Aires, Argentina.
- Speranza, P., Rua, G., Arakaki, M. and M. Vaio. 2007. Phylogenetic analyzes of the genus *Paspalum* (Poaceae) based on morphology and cpDNA sequence data. Presented at XII Jornadas de la Sociedad Uruguaya de Biociencias, Montevideo, Uruguay.
- Arakaki, M., Soltis, D. E. and P. Soltis. 2005. Use of microsatellites to examine intergeneric hybridization *Haageocereus* x *Espositoa*, and population structure in *Haageocereus*. Presented at Botany 2005, Austin, Texas.
- Arakaki, M., Panero, J. and B. Crozier. 2003. Systematics of the Peruvian genus *Weberbauerocereus* (Trichocereae, Cactaceae). Presented at Botany 2003, Mobile, Alabama.
- Cano, A., Arana, C., La Torre, M. I., Roque, J., Arakaki, M. and N. Refulio. 1999. Diversidad florística de las lomas de Lachay (Lima) durante el evento "El Niño 1997-98". Presented at Primer Encuentro de la Red de Impacto Biológico de los Eventos El Niño (RIBEN).
- Cano, A., Ramírez, R., Arana, C., Severino, R., Alban, J., Shiga, B., La Torre, M. I., Arakaki, M., Roque, J., Caro, K., Córdova, S. and J. Duárez. 1997. Observaciones sobre el impacto del "turismo ecológico" en la Reserva Nacional de Lachay. Presented at VII Reunión Científica del Instituto de Ciencias Biológicas Antonio Raimondi, ICBAR-UNMSM.
- Cano, A., La Torre M. I., León, B., Young, K. R., Arakaki, M. and J. Roque. 1995. Avances en el estudio de la flora y vegetación del valle del río Nasca, Ica. Presented at V Reunión Científica del Instituto de Ciencias Biológicas Antonio Raimondi, ICBAR-UNMSM.
- Suni, L., Díaz, L., Mendoza, H., Rosa, R., Terrazas, A. and M. Arakaki. 1993. Evaluación del camote (*Ipomoea batatas*) bajo condiciones de déficit hídrico. Presented at III Reunión Científica del Instituto de Ciencias Biológicas Antonio Raimondi, ICBAR-UNMSM.

Additional Courses

- June 2008 Conservation Genetics Workshop, Organization for Tropical Studies (OTS), Palo Verde Biological Station-Santa Rosa National Park, Costa Rica.
- May 2001 Use of Scanning Electron Microscope, ICMB Microscopy Facility, University of Texas, Austin.
- June 1997 Rapid Assessment Program (RAP) training, Pampas del Heath (Peru) and Madidi National Park (Bolivia).

Grants and Awards

- 2008 American Genetics Association Tuition Aid Scholarship, through OTS.
- 2007 Outstanding International Graduate Student Award, University of Florida.
- 2006 National Science Foundation Dissertation Improvement Grant, PI Douglas Soltis.
- 2004 Botanical Society of America Graduate Student Research Award.
- 2004 Cactus and Succulent Society of America Research Grant.
- 2004 Chicago Board of Trade Endangered Species Grant, PI Carlos Ostolaza.
- 2004 International Association for Plant Taxonomy Research Grant.
- 2003 American Society of Plant Taxonomists Graduate Student Research Grant.
- 2000 David Bruton Jr. Graduate Fellowship, University of Texas at Austin.
- 1999 Fulbright-Laspau Scholarship.