Curriculum Vitae

Name: Fernanda S. Valdovinos

Academic addresses: Department of Ecology and Evolutionary Biology, University of Arizona, Tucson, USA;
Pacific Ecoinformatics and Computational Ecology Lab, 1604 McGee Avenue, Berkeley, CA 94703, USA

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EDUCATION

2004-2007 Lic. Environmental Science m/Biology, Faculty of Science, University of Chile.

2008 Professional degree in Environmental Biology, Faculty of Science, University of Chile.

2009-2014 PhD on Ecology and Evolutionary Biology, Faculty of Science, University of Chile. **Supervisors: Rodrigo Ramos-Jiliberto, Diego Vázquez**

2012 Research visit to Pacific Ecoinformatics and Computational Ecology Lab, Berkeley, CA, USA. **Supervisor: Neo Martinez**. 27 March-27 April.

2012 Research visit to Estación Biológica de Doñana, CSIC, España. **Supervisor: Jordi Bascompte**. 15 May-30 July.

2012 Research visit to Pacific Ecoinformatics and Computational Ecology Lab, Berkeley, CA, USA. **Supervisor: Neo Martinez**. 2 September-30 November.

2013 Research Intern at University of Arizona and Pacific Ecoinformatics and Computational Ecology Lab, USA. **Supervisor: Neo Martinez**.

SUMMER SCHOOLS AND WORKSHOPS

2006 Networks in Cognitive Systems / Trends and Challenge in Biomedicine: From Cerebral Process to Mathematical Tools Design. Valparaíso, Chile. Valparaiso Complex Systems Institute (ISCV). December 11-15.

2006 Networks in Statistical physics, Social and Ecological Systems. Valparaíso, Chile. Valparaiso Complex Systems Institute (ISCV). December 11-15.

2006 Statistical physics models, networks and Complex Systems. Valparaíso, Chile. Valparaiso Complex Systems Institute (ISCV). December 18-22.

2007 2nd Discrete Mathematics Summer School. Valparaíso, Chile. Valparaiso Complex Systems Institute (ISCV). January 8-12.

2007 5th Complex Systems Summer School. Valparaíso, Chile. Valparaiso Complex Systems Institute (ISCV). January 15-19.

2007 2nd ISCV Thematic Workshop: Biologically-Inspired Computing. Valparaíso, Chile. Valparaiso Complex Systems Institute (ISCV). December 3-7.

2008 3rd Discrete Mathematics Summer School Valparaíso, Chile. Valparaiso Complex Systems Institute (ISCV). January 15-19.

2008 Complex System Summer School Bariloche, Argentina. Santa Fe Institute. December 1-15.

2009 Species Interactions and Global Change Impacts. Coyhaique, Chile. Institute of Ecology and Biodiversity (IEB). January 5-20.

2009 Workshop on Theoretical Ecology and Global Change. ICTP - The Abdus Salam International Centre for Theoretical Physics, Trieste, Italy. March 2-13.

2011 Sao Paulo Advanced Science School on Ecological Networks, Sao Paulo, Brazil, September 16-25.

AWARDS

2004 Irma Salas Award for the first four female postulations who applied to all college programs of the University of Chile, University of Chile.

2007 Selected for Research Experiences for Undergraduates (REU), Santa Fe Institute, USA.

2008 Ranked first among graduates from Lic. Environmental Science with mention in Biology, University of Chile, Chile.

2008 Ranked first among graduates from Environmental Biology, University of Chile, Chile.

2008 First selected applicant for doctoral program of Ecology and Evolutionary Biology, University of Chile, Chile.

2009-2013 CONICYT doctoral scholarship for a PhD program in Chile (10th among 500 selected postulants for all disciplines).

2011 Grant for developing PhD thesis, CONICYT, Chile.

2011 Fellowship for visits abroad program MECESUP "Consolidation and globalization of the doctoral program in Ecology and Evolutionary Biology (EBE), UCH 0803", Government of Chile.

2012 Fellowship for research short stays abroad for doctoral and master students of the University of Chile, Chile.

2012 Fellowship for research stays abroad for PhD students, Becas-Chile, Government of Chile.

COMMUNICATIONS IN SCIENTIFIC MEETINGS

2013 **Valdovinos, F.S.,** Brosi B.J., Briggs H.M., Ramos-Jiliberto R., Martinez, N.D. Adaptive Foraging Stabilizes Pollination Networks via Apparent Altruism. In: Food webs: science with impact. Justus Liebig University Giessen, Germany, Nov 13-15.

2013 **Valdovinos, F.S.** Adaptive foragers in pollination networks: Stability, invasions and apparent altruism. In: Structure and dynamics of meta-food webs, Bielefeld, Germany. September 16-18.

2013 **Valdovinos, F.S.** and Martinez, N.D. Adaptive foraging stabilizes pollination networks via apparent altruism. 98th Annual Meeting of the Ecological Society of America, Minneapolis, Minnesota, USA, August 4-9.

2012 **Valdovinos, F.S.** and Martinez, N.D. Adaptive foraging yields apparent altruism in pollination networks. First Joint Meeting of Botany, Ecology, and Evolution Societies, XXIII Annual Meeting of the Botanical Society of Chile, XIX Annual Meeting of the Ecological Society of Chile and Sixth Annual Meeting of the Chilean Society of Evolution, Concepcion, Chile, October 6-9.

2012 **Valdovinos, F.S.** Adaptive foraging in pollination networks. GlobalWeb II, Barcelona, Spain, July 10-12.

2011 **Valdovinos, F.S.**, Moisset de Espanés, P., Flores, J.D., Ramos-Jiliberto, R. The effect of adaptive behavior on the robustness of pollination networks against species extinctions. Sao Paulo Advanced Science School on Ecological Networks, Sao Paulo, Brazil, September 16-25.

2011 **Valdovinos, F.S.**, Flores, J.D., Ramos-Jiliberto, R. Adaptive behavior in pollination networks: relevance for network robustness against species extinctions. 96th Annual Meeting of the Ecological Society of America, Austin, Texas, USA, August 7-12.

2010 **Valdovinos, F.S.**, Ramos-Jiliberto, R., Flores, J.D. Topological plasticity in a pollination network increases its robustness against species loss. 4th Binational Ecology Meeting, Buenos Aires, Argentina, August 8-13.

2009 Garay-Narváez, L., Urbani Reininger, P., González-Barrientos, J., **Valdovinos, F.S.**, Ramos-Jiliberto, R. Effect of a pollutant as disturbance agent in a system of one predator-two prey. 9th Chilean Annual Meeting of Biomathematics. Olmué, Chile. November 5-7.

2009 **Valdovinos, F.S.,** Ramos-Jiliberto, R., Flores, J.D. Effects of alien plants on the dynamics of a pollination network. 16th Anual Meeting of Ecological Society of Chile. Valdivia, Chile. October 8-10.

2009 **Valdovinos, F.S.**, Ramos-Jiliberto, R., Flores, J.D. Structure and dynamics of pollination networks: the role of alien plants. Workshop on Theoretical Ecology and Global Change. ICTP - The Abdus Salam International Centre for Theoretical Physics, Trieste, Italy. March 2-13.

2007 **Valdovinos, F.S.**, Valdovinos, C.E., Ramos-Jiliberto, R., Mattar, C., Sotomayor, P. Stream contamination and nested subset theory. 4th Congress of Limnology Chilean Society. Santiago. Chile. October 22-25.

2007 **Valdovinos, F.S.**, Valdovinos, C.E., Ramos-Jiliberto, R., Mattar, C., Sotomayor, P. Nested Subset Theory applied to Environmental Impact Estimations: The case of Aconcagua river (Chile). 7th Congress of Society of Environmental Toxicology and Chemistry Latin America (SETAC LA). Montevideo. Uruguay. October 8-11.

2007 Ramos-Jiliberto, R. Oyanedel, JP. Vega-Retter, **Valdovinos, F.S.** Nested Structure of freswater planctonic communities of Chile. 50th Anual Meeting of Biology Society of Chile. Pucón. Chile. October 7-11.

2007 Guerrero-Bosagna, C.M., **Valdovinos, F.,** Valladares, L.E, Sabat, P. Consequences of a Continuous Pre and Post Natal Exposure to Dietary Isoflavones on Life History and Morphometric Characters in an Experimental Population of Mice. Endocrine Society's 89th Annual Meeting. Toronto. Canada. June 2-5.

2007 **Valdovinos, F.S.,** Valiente, A., Razeto-Barry, P. & Ramos-Jiliberto, R. Revisiting Paradox of Enrichment by mean of a Logistic Model Reconstruction. 7th Chilean Annual Meeting of Biomathematics. Valparaíso. Chile. March 29-30.

2006 **Valdovinos, F.,** Simonetti, J.A., Chiappa, E. Effect of the Forest Fragmentation on the Richness and Abundance of Bees in an endemic forest of Chile. 28th Annual Meeting of the Chilean Entomological Society. Temuco. Chile. November 29-December 1.

PUBLICATION LIST

2013 **Valdovinos, F.S.**, Moisset de Espanés, P., Flores J.D, Ramos-Jiliberto, R. Adaptive foraging allows the maintenance of biodiversity of pollination networks. Oikos 122: 907-917.

2012 Ramos-Jiliberto, R., **Valdovinos, F.S.**, Moisset de Espanés, P., Flores J.D. Topological plasticity increases robustness of mutualistic networks. Journal of Animal Ecology 81: 896-904.

2011 Ramos-Jiliberto, R., **Valdovinos, F.S.**, Arias, J., Alcaraz, C., García-Bertho, E. A network-based approach to the analysis of ontogenetic diet shift: an example with the endangered fish *Aphanius iberus*. Ecological Complexity 8: 123–129.

2010 **Valdovinos, F.S.**, Ramos-Jiliberto, R., Urbani, P., Garay-Narváez, Dunne, J.A. Consequences of adaptive behavior for the structure and dynamics of food webs. Ecology Letters 13: 1546–1559.

2010 **Valdovinos, F.S.**, Urbani, P, Ramos-Jiliberto, R. Analysis of the consequences of individual adaptive behavior on population stability: The case of optimal foraging. Revista Chilena de Historia Natural 83: 207-218.

2010 Ramos-Jiliberto, R., Domínguez, D., Espinoza, C., López, G., **Valdovinos, F.S.**, Medel, R., Bustamante, R.O. Topology of Andean plant-pollinator networks along an altitudinal gradient. Ecological Complexity 7: 86-90.

2009 **Valdovinos, F.S.**, Ramos-Jiliberto, R., Flores, J.D., Espinoza, C., López, G. Structure and dynamics of pollination networks: the role of alien plants. Oikos 118: 1190-1200.

2009 Ramos-Jiliberto, R., Albornoz, A., **Valdovinos, F.S.**, Smith-Ramírez, C., Arim, M., Armesto, J., Marquet, P. A network analysis of plant-pollinator interactions in temperate rain forests of Chiloé Island, Chile. Oecologia. 160: 697-706.

2009 Ramos-Jiliberto, R., Oyanedel, J.P., Vega-Retter, C., **Valdovinos, F.S.** Nested structure of plankton communities from Chilean freshwaters. Limnologica 39: 319-324.

2009 **Valdovinos, F.S.**, Chiappa, E., Simonetti, J.A. 2009. Nestedness of bee assemblages in an endemic South American forest: the role of pine matrix and small fragments. Journal of Insect Conservation 13: 449-452.

2008 Guerrero-Bosagna, C., Sabat, P., **Valdovinos, F.S.**, Valladares, L. and Clark, S.J. Epigenetic and Phenotypic Changes Derived from a Continuous Pre and Post Natal Dietary Exposure to Environmental Estrogens in an Experimental Population of Mice. BMC physiology, 8:10, doi: 10.1186/1472-6793-8-17. Available in http://www.biomedcentral.com/1472-6793/8/17.