

Curriculum Vitae

Name: Darko Davor Cotoras Viedma
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1.- Education

- 2009 -present: PhD Integrative Biology. University of California, Berkeley
Advisors: David Lindberg - Rosemary Gillespie
- 2008-2009: Master in Biological Sciences with mention in Ecology & Evolutionary Biology, Universidad de Chile. (*Highest distinction*)
Advisors: Miguel Allende – Verónica Cambiazo
- 2004-2007: Bachelor in Sciences with mention in Biology, Universidad de Chile. (*Highest distinction* Ranking: 1st. Final average: 6,5 (been 7,0 the maximum))
- 1991-2003: San Ignacio School

2.- Research interests:

Evolution & Biodiversity, Phylogenetics, Island Biogeography, Population Genetics, Evolutionary Developmental Biology (EvoDevo).

3.- Grants, fellowships and awards

- 2012: Best poster presentation. 36th Annual meeting American Arachnological Society.
- 2012: Summer Research Grant. Graduate Division UC Berkeley (\$3,500)
- 2012: Tinker Grant. Center of Latinamerican Studies. UC Berkeley (\$2,196)
- 2012 and 2011: Reshetko Family Scholarship Fund. UC Berkeley (\$3,000)
- 2012, 2011 and 2010: Walker Grant. Essig Museum of Entomology. UC Berkeley (\$1,000 each)
- 2011: National Tropical Botanical Garden (NTBG) fellowship, McBryde Garden (\$1,250)
- 2011: Honorable Mention Border Crossing Essay Contest 2011. International House UC Berkeley
- 2010: 2nd Place Border Crossing Essay Contest 2010. International House UC Berkeley
- 2009-2013: Fulbright/CONICYT Fellowship
- 2008: Best Student Promotion 2008 Bachelor in Sciences with mention in Biology. Facultad de Ciencias. Universidad de Chile.
- 2008: Líder Fellowship, Fundación Carolina, España.
- 2007 and 2006: Academic Excellence Fellowship, Facultad de Ciencias, Universidad de Chile.
- 2004: Best entry score Bachelor in Sciences with mention in Biology. Facultad de Ciencias Universidad de Chile

4.- Teaching Assistant

- Spring 2011: Biology 1B: Plant Diversity, Ecology and Evolution (UC Berkeley)
- Fall 2010: Evolution (UC Berkeley)
- Spring 2008: Developmental Biology (Universidad de Chile)
- Spring 2008: Evolution & Development. Invited lecturer: “*Urbilateria* and the (possible) origin of the body plans” (Universidad de Chile)
- Fall 2008 and 2009: General Zoology (Universidad de Chile)
- Fall 2007-2009: Comparative anatomy of vertebrates (Universidad de Chile)

5.- Undergraduate research experience

- Spring 2007: Research rotation: "Searching for common genes in vertebrate development of limb and tail" Developmental Biology Lab. PI: Miguel Allende PhD.
- Spring 2006: Research rotation: "Comparison in the gene expression between tail and fin in zebra fish: Evolutionary implications" Developmental Biology Lab. PI: Miguel Allende PhD.
- Spring 2005: Final work in Zoology II course. "Dietary differentiation between island-mainland in *Liolaemus pictus* (Duméril & Bibron, 1873)", Evolutionary Ecology Lab. PI: Rodrigo Medel PhD.
- Fall-Spring 2004: Extracurricular activity in the Cellular Biology course. Developmental Biology Lab. PI: Miguel Allende PhD.

6.- Field experience

- August 2012: Collecting terrestrial invertebrates in Rapa Nui (Isla de Pascua/Easter Island). (3 weeks)
- June 2012: Collecting spiders in Big Island, Moloka'i, and Maui (4 weeks).
- January 2012: Collecting spiders in Big Island of Hawai'i (3 weeks)
- August 2011: Collecting terrestrial invertebrates in Robinson Crusoe Island. Juan Fernández archipelago, Chile. (2 weeks)
- June 2011: Collecting spiders in Big Island of Hawai'i (4 weeks)
- August 2010: Collecting spiders in Big Island of Hawai'i (2 weeks).
- January 2010: Collecting spiders in Maui and Big Island of Hawai'i (2 weeks).
- January 2006: Field assistant in pollination studies in the Andes close to Santiago (day trips).

7.- Publications

- Razeto-Barry P., Díaz J., Cotoras D. and Vásquez R. 2011. Molecular evolution, mutation size and gene pleiotropy: a geometric reexamination. *Genetics* 187: 877-885
- Glavic A., Molnar C., Cotoras D. and de Celis J.F. 2009. *Drosophila* Axud1 is involved in the control of proliferation and displays pro-apoptotic activity. *Mech Dev.* 126: 184-97.

8.- Participation in Congress

- "Another event of independent evolution in color polymorphism on Theridiidae spiders in the Pacific Ocean?" Cotoras D., Brewer M, Lindberg D. and Gillespie R. (poster) 36th Annual meeting American Arachnological Society meeting. July 20th-24th, 2012. Green bay, WI. USA
- "Hypothesis about speciation processes on Hawaiian *Tetragnatha* spiders" Cotoras D., Lindberg D. and Gillespie R. (Oral presentation) Hawai'i Ecosystems Meeting. July 2nd and 3rd, 2012. Hilo, HI. USA
- "Early stages of the *Tetragnatha* adaptive radiation in the Hawaiian archipelago" Cotoras D., Lindberg D. and Gillespie R. (Oral presentation) Hawai'i Ecosystems Meeting. June 30 – July 1st, 2011. Hilo, HI. USA
- "Diversification patterns of *Tetragnatha* spiders in remote archipelagos on the Pacific Ocean" Cotoras D., Casquet J. and Gillespie R. (Poster) Evolution of Life on Pacific Islands and Reefs: Past, present, and future. May 26-30, 2011. Honolulu, HI. USA
- "Conserved gene networks as a tool to predict gene expression: An example from Animal appendages" Cotoras D., Cambiazo V., Allende M. (Oral Presentation) Genetics, Development, and Molecular Evolution Supergroup Symposium. May 18. UC Berkeley.
- "Theoretical and experimental comparisons of gene network involved appendage development in arthropods (*Drosophila melanogaster*) and vertebrates (*Danio rerio*)" Cotoras D., Cambiazo V., Allende M. (Poster) 1st meeting of Chilean Scientists in USA: Nexos Chile-USA 2010. October 29. 2010, Washington D.C., USA
- "Molecular evolution, mutation size and gene pleiotropy in fluctuating environments: a geometrical model" Razeto-Barry P., Díaz J., Cotoras D., Vásquez R. (Poster) IV Binational Meeting in Ecology. August 08-13, 2010. Buenos Aires, Argentina.

- "Phylogeography, diversity and colonization history of the Hawaiian happy-face spider" Croucher P., Lam A., Cotoras D., Mody N. y Gillespie R.. (Poster) Annual symposium American Genetic Association: "Conservation Genomics". July 26-28, 2010. Hilo, HI. USA.
- "In the footsteps of *Urbilateria*" Cotoras D., Cambiazo V., Allende M. (Poster) LI Annual meeting Chilean Society for Biology. November 26-29, 2008. Pucón, Chile
- "Evolution of the gene network involved in appendages development in arthropods (*D. melanogaster*) and vertebrates (*D. rerio*)" Cotoras D., Cambiazo V., Allende M. (Poster) XXII Annual meeting Chilean Society for Cell Biology. October 5-9, 2008. Pucón, Chile

9.- Thesis (Master's degree)

"In the footsteps of *Urbilateria*, or Evolution of the gene network involved in appendage development in arthropods (*Drosophila melanogaster*) and vertebrates (*Danio rerio*)"

10.- Invited Presentations

- Parque Nacional Rapa Nui. August, 2012
- Universidad Metropolitana de Ciencias de la Educación – Instituto de Entomología. July, 2012
- Pacific Coast Entomology Society. February, 2012
- California Academy of Science – Arachnology Dept. September, 2011
- Universidad de Chile – Laboratorio de Ecología Evolutiva. August, 2011
- Universidad Metropolitana de Ciencias de la Educación – Instituto de Entomología. August, 2011

11.- Professional development and Certifications

- SSI Specialty Course: Enriched Air NITROX. Bamboo Reef School. San Francisco, CA (February 22, 2012)
- SSI Specialty Course: Diver Stress & Rescue. Bamboo Reef School. Monterey, CA (May 08, 2011)
- SSI Specialty Course: Dry Suit Diving. Bamboo Reef School. Monterey, CA (May 08, 2011)
- Workshop on Comparative Genomics. University of California, Berkeley (April 19, 2011)
- Wilderness First Aid. Foster Calm–First Aid and Leadership Trainings. Nevada City, CA. (April 02, 2011)
- Cardiopulmonary resuscitation (CPR) and automated external defibrillator (AED) for the Community and Workplace. American Safety & Health Institute. Foster Calm–First Aid and Leadership Trainings. Nevada City, CA. (April 02, 2011)
- PADI Advance SCUBA Diver. Seattle SCUBA School. Seattle, WA. (October 03, 2010)
- Webinar Short Course on Modeling Patterns and Dynamics of Species Occurrence. US Geological Survey and Proteus Wildlife Research Consultants. (August 23-27, 2010)
- NAUI Open water Diver. Cal Dive and Travel. Berkeley, CA (June 1st, 2010)
- Workshop on Modeling of Genetic Regulatory and Metabolic Networks. Instituto de Sistemas Complejos de Valparaíso (ISCV). Valparaíso, Chile. (March 27-28, 2008)
- VI Complex Systems Summer School. Instituto de Sistemas Complejos de Valparaíso (ISCV). Valparaíso, Chile. (January 07-11, 2008)

12.- Outreach

- "Humedal Rano Kau. Manavai de Biodiversidad" Interviewee in documentary from Parque Nacional Rapa Nui
- "Field work during a mass extinction" Publication in the blog of UCMP (March 26th, 2012)
- "The eternal value of Natural History and the dazzling molecular promise" Publication in the blog of UCMP (November 23th, 2011)
- "El eterno valor de la historia natural y la encandilante promesa molecular" Publication in the web site RedCiencia.cl (August 4th, 2011)

- "Ciencia Básica VS Ciencia Aplicada: Una ilusión basada en la no comprensión" Publication in the web site RedCiencia.cl (May 26th.2011)
- "Dinner with a Scientist" Oakland Zoo, CA. (June 3nd, 2010; May 4th, 2011)
- "¿Calentamiento global o cambio global? Publication in the web site Conexioniberoamerica.wordpress.com (Feb 26th.2010)

13.- Professional Societies

- American Arachnological Society
- Phi Beta Kappa Academic Honor Society
- Sigma Xi, The Scientific Research Society

14.- Other interests

Skateboarding, Bodyboarding, Mountain bike, Hiking, Mythology and Tropical ornamental fish



UPDATED: November 2012