

Daniel Medina López

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EDUCATION

M.S., September 2011. Evolutionary Biology, Universidad Complutense de Madrid.

Thesis: A Preliminary Analysis of the Pattern of Infection of the Pathogenic Fungus *Batrachochytrium dendrobatidis* in *Salamandra salamandra almanzoris* in the Peñalara Natural Park, Madrid, Spain. Advisor: Dr. Jaime Bosch.

B.S., May 2009. Biology with emphasis in Zoology, Universidad de Panamá.

Thesis: Inventory of the Amphibians of the Serranía de Majé, Panamá. Advisor: Dr. Roberto Ibáñez.

RESEARCH INTERESTS

- Biogeography, phylogeny and systematics of Neotropical amphibians.
- Population genetics and ecology.
- Community ecology
- Disease ecology

PUBLICATIONS

Medina, D., Hite J. L., Bosch J. Disease and life-history stages: potential for life-history stage as a reservoir of the Pathogenic Fungus *Batrachochytrium dendrobatidis* in *Salamandra salamandra almanzoris* in the Peñalara Natural Park, Madrid, Spain. *In Prep.*

Medina, D., A. Sosa Bartuano, R. Ibáñez D., and E. Osburn. 2011. Distribution Record. *Dermophis glandulosus*. *Herpetological Review* 42(3): 387.

Medina, D., C. A. Jaramillo, and R. Ibáñez D. 2010. Distribution Record. *Craugastor tabasarae*. *Herpetological Review* 41(4): 506-507.

Roberto Ibáñez D., **Daniel Medina**, Andrew J. Crawford, and Karen R. Lips. A Molecular Analysis of Frogs of the Genus *Scinax* (Anura: Hylidae) with Taxonomic Comments and Description of Two New Species from Panama. *In prep.*

Medina, D.; Rivera, M; Cossio, R; Medina, E; Bermúdez, S. 2009. First record of myiasis by Sarcophagidae (Diptera: Oestroidea) in *Hyalinobatrachium fleischmanni* (Anura: Centrolenidae) from Panama. *Revista Mexicana de Biodiversidad* 80: 263- 264.

Araúz, J., **Daniel Medina**, Ovidio Jaramillo. 2009. Las Aves de la Reserva Forestal La Tronosa, provincia de Los Santos, Panamá (pp: 113-122). En: Garibaldi, C. (ed.). Evaluación de la Biodiversidad en la Reserva Forestal La Tronosa, provincia de Los Santos, Panamá. Editora Novo Art. S.A., Panamá.

Woodhams, D; Kilburn, V; Reinert, L; Voyles, J; **Medina, D**; Ibáñez, R; Hyatt, A; Boyle, D; Pask, J; Green, D; and Rollins-Smith, L. 2008. Chytridiomycosis and Amphibian Populations Declines Continue to Spread Eastward in Panama. *EcoHealth* 5(3): 268-74.

RESEARCH EXPERIENCE

7/12-7/13 Intern at the Smithsonian Tropical Research Institute on the project **“Diversity and Symbiosis: Examining the taxonomic, genetic, and functional diversity of amphibian skin microbiota”**. Conducting field surveys collecting amphibian skin microbiota samples, and laboratory experiments. Mentors: Dr. Lisa K. Belden and Dr. Myra Hughey.

1-5/12. Scientific consultant on the project **“Programa Forestal Comunitario del Darién (USAID/FCD)”**. **United States Agency for International Development and Chemonics International. Sustainable forestry program development.** Developing community monitoring programs for birds and mammals populations, and conducting birds and mammals inventories in the Embera-Wounnan reserve, Darién. Panamá.

12/09-7/10. Intern at the Smithsonian Tropical Research Institute on the project **“Panama Amphibian Rescue and Conservation Project”**. Collaborative research with American and Panamanian non-government agencies to investigate amphibian declines and conservation efforts in Panamá. Mentors: Dr. Roberto Ibáñez and Dr. Brian Gratwicke.

5/07-7/11. Research Assistant at El Valle Amphibian Conservation Center (EVACC), Panama. Amphibian husbandry, field collections and long-term monitoring of amphibian populations. Mentors: Heidi Ross and Edgardo Griffith.

8/09-7/10. Intern at the reptiles and amphibians reference collection of the Circulo Herpetológico de Panamá and the Smithsonian Tropical Research Institute. Preparation of museum specimens and animal tissue for molecular analyses, species identification and conducting studies about Panamanian amphibians systematic.

5/08-7/09. Intern at the Smithsonian Tropical Research Institute on the project **“Conservation Genetics of Neotropical frogs”**. Conducting phylogenetic analysis of neotropical amphibians. Mentors: Dr. Andrew Crawford and Dr. Roberto Ibáñez.

6/ 07-10/08. Intern at the Smithsonian Tropical Research Institute on the project **“Frogs on the route of an epidemic: Quantifying the Amphibian Diversity and Monitoring the Advance of the Chytrid fungus eastward in Panama”**. Mentors: Dr. Roberto Ibáñez and Dr. Andrew Crawford.

6/07-1/08. Intern at the Smithsonian Tropical Research Institute on the project **“Gavilán Biological Inventory”**. Herpetological component. Field collections, preparation of museum specimens and animal tissue for molecular analyses, and monitoring the presence of the Chytrid fungus. Mentors: Dr. Andrew Crawford and Mg. Cesar Jaramillo.

10/08. Scientific consultant on the Environmental Management Plan of the Santa Fe National Park, Panamá. Conducting herpetological and ornithological rapid ecological evaluations.

1/07. Intern at the Smithsonian Tropical Research Institute on the project “**Dynamic Interactions of Microbes and Peptides in Amphibians Skin**”. Mentor: Dr. Douglas C. Woodhams.

06/06. Volunteer at the Smithsonian Tropical Research Institute in the Howler Monkeys census across Barro Colorado Island, Panama. Mentor: Dr. Katharine Milton.

07-11/06. Research Assistant conducting ornithological surveys on the project **PROBIO of the University of Panama and the Japan International Cooperation Agency (JICA)**. Estimating ornithological diversity: Mist netting and species identification. Peninsula de Azuero, Provincia de los Santos, Panamá. Mentor: Mg. Jacobo Araúz.

04/05-06/06. Naturalist Interpreter at Punta Culebra Marine Exhibition Centre of the Smithsonian Tropical Research Institute. Panamá. Conducting environmental educational programs for local schools. Mentors: Lidia Valencia.

RELEVANT COURSES AND PROFESSIONAL WORKSHOPS

- **Amphibian Ark Husbandry Essentials Workshop.** Sponsored by Amphibian Ark, Houston Zoo and the Smithsonian Tropical Research Institute. Given at the El Valle Amphibian Conservation Centre (EVACC), El Valle de Antón, Provincia de Coclé, Panamá. October, 2009. Instructors: Dr. Ron Gagliardo, Dr. Alan Pessier, Dr. Joseph Mendelson III, Dr. Brad Wilson and Robert Hill.
- **Seminar-Workshop “Training and Application of the molecular technique Real Time PCR for the study of amphibian epidemics.** Sponsor by Secretaria Nacional de Ciencias, Tecnología e Innovación (SENACYT), Circulo Herpetológico de Panamá and the Houston Zoo. Site: Molecular Biology and Evolution Lab, Smithsonian Tropical Research Institute. October 2009.
Instructor: Dr. Kerry M. Kriger.
- **Participation on the Panama Amphibian Species Prioritization Workshop.** Organized by Amphibian Ark. Site: Smithsonian Tropical Research Institute, Panama City. November 2008. Panama.
- **Tropical Ecology Field Course.** Sponsored by Princeton University, Smithsonian Tropical Research Institute, and Universidad de Panamá. February-May 2007. Panamá.
- **Course on Banding and Telemetry of Migratory shorebirds.** Site: Bay of Panama, March 2006. Panama. Instructor: Patricia Baird. Simon Fraser University, Centre for Wildlife Ecology and Partners in flight.

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- **Naturalists Guides of Barro Colorado Island Natural Monument, Punta Culebra and Punta Galeta, of the Smithsonian Institute.** October, 2005. Panamá.
- **Training and Workshop for Teaching-Guides “Didactic Strategies: Tools for the Educative Quality”.** Smithsonian Tropical Research Institute, Punta Culebra Marine Exhibition Center. April 2005, Panamá.
- **Course on the establishment and operation of stations for Assessing Habitat-Specific Overwintering Survival and advance techniques for sexing and determining the age of migratory landbirds.** Pájaro Campana biological station, Monteverde, Costa Rica, Central America, October 2003.

Languages

- Spanish (First language)
- English (Fluent; Internet-based TOEFL score: 94)

References:

Dr. Roberto Ibáñez

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