

# Ignacio Escalante Meza

Email: [iescalante@berkeley.edu](mailto:iescalante@berkeley.edu), phone numbers: 510 701 9670 (US).

Mailing address: 140 Mulford Hall. Berkeley, California, USA. 94720-3114.

Personal research website: <http://iescalante.weebly.com/>

## Personal data

Date and place of birth: 18 August, 1986, San José, Costa Rica.

Physical address: 618 Lexington Ave, Apt 1. El Cerrito, California, USA. 94530

## Education

- **B.S.** in Biology, School of Biology, University of Costa Rica. San José, Costa Rica. 2004-2008.
- **M.Sc.** in Biology, graduated with honors, University of Costa Rica. 2009–2012. Subject: Ontogeny of the feeding behavior in the spider *Physocyclus globosus* (Pholcidae): Effect of experience or maturation? William G. Eberhard, PhD: advisor.
- **Ph.D.**, Department of Environmental Science, Policy, and Management. University of California Berkeley. August 2014 – present (advanced to candidacy 25 April 2016). Damian O. Elias, PhD: Advisor. Partial financial support through the Fulbright Graduate Fellowship Program. Expected dissertation title: *Biomechanical and behavioral implications of autotomy in locomotion, foraging and courtship for daddy long-legs.*

## Languages

Fluent written and spoken English (TOEFL-iBT score 105). Good reading and listening of Portuguese. Native Spanish speaker.

## Area of professional specialization

Behavioral ecology research, and university level teaching.

## Research interests

- Animal behavior & tropical ecology.
- Emphasis on arachnids.
- Behavior, biomechanics, and reproductive ecology of Opiliones (harvestmen, or “daddy long-legs”). Spider learning, web construction, and their reproductive behavior.
- Bird behavioral ecology: nesting, reproduction and sound communication.

## Peer-reviewed publications

1. Escalante, I. & L. Sandoval. 2007. Primeros registros del Piquero Patirrojo (*Sula sula*) en las costas del Pacífico Norte y el Caribe de Costa Rica. [Boletín Sociedad Antioqueña de Ornitología 17:138-140.](#)
2. Sandoval, L. & I. Escalante. 2010. Nest description of the Garden Emerald (*Chlorostilbon assimilis*) from Costa Rica. [Wilson Journal of Ornithology 122: 597-599](#)
3. Moya, J., R. Quesada, W. Eberhard, G. Barrantes, I. Escalante, C. Esquivel, A. Rojas, E. Triana y A. Arias. 2010. Egg sac construction by folding dead leaves in *Pozonia nigroventris* and *Micrathena* sp. (Araneae, Araneidae). [Journal of Arachnology 38: 371-373](#)

4. Sandoval, L. & I. Escalante. 2011. Song variation and spatial similarity in males of the Common Pauraque (Nyctidromus albicollis). [Ornitología Neotropical 22:173-185](#)
5. Clark, C. J., T. J. Feo & I. Escalante. 2011. Courtship display and natural history of the Scintillant (Selasphorus scintilla) and Volcano (S. flammula) Hummingbirds. [Wilson Journal of Ornithology 123: 218-228](#)
6. Esquivel, C., I. Escalante & W.G. Eberhard. 2012. The effect of regurgitated digestive fluid on the spider's own legs in Philoponella vicina (Araneae: Uloboridae). [Journal of Arachnology 40: 146-148](#)
7. Escalante, I. 2013a. Ontogenetic and sexual differences in exploration and web construction in the spider Physocyclus globosus (Pholcidae). [Arachnology 16: 61-67](#)
8. Escalante, I. 2013b. Comportamiento de canto, descripción de las vocalizaciones y su posible variación geográfica en Costa Rica en Myiothlypis fulvicauda (Parulidae: Aves). [Zeledonia 17: 35-53](#)
9. Escalante, I. 2013c. Protected nests in Acacia trees possibly avoid vertebrate predation in the Rufous-napped Wren (Campylorhynchus rufinucha: Passeriformes: Troglodytidae). [Ornitología Colombiana 13: 13-20](#)
10. Escalante, I., A. Albín & A. Aisenberg. 2013. Lacking sensory (rather than locomotive) legs affects locomotion but not food detection in the harvestman Holmbergiana weyenberghi. [Canadian Journal of Zoology 91: 726-731](#)
11. Escalante, I. & M. Masís-Calvo. 2014. The absence of gumfoot threads in webs of early juveniles and males of Physocyclus globosus (Pholcidae) is not associated with spigot morphology. [Arachnology 16: 214-218](#)
12. Hebets, E.A., A. Aceves-Aparicio, S. Aguilar-Argüello, V.P. Bingman, I. Escalante, E.J. Gering, J.A. Sánchez-Ruiz, L. Segura, V. Settepani, D.D. Wiegmann, & J. Stafstrom. 2014. Multimodal sensory reliance in the nocturnal homing of the amblypygid Phrynos pseudoparvulus (Class Arachnida, Order Amblypygi)? [Behavioral Processes 108: 123-130](#)
13. Escalante, I., A. Aisenberg, & F.G. Costa. 2015. Risky behaviors by the host could favor araneophagy of the spitting spider Scytodes globula on the hacklemesh weaver Metaltella simoni. [Journal of Ethology 33: 125-136](#)
14. Escalante, I. 2015. Predatory behaviour is plastic according to prey difficulty in naïve spiderlings. [Journal of Insect Behavior 28: 635-650](#)
15. Coelho, L., I. Escalante, and A. Aisenberg. 2015. Mordidas cariñosas: descripción de cortejo y cópula en la araña escupidora Scytodes globula (Scytodidae). [Boletín Sociedad Zoológica del Uruguay 24: 146-157](#)
16. Domínguez, M., I. Escalante, F. Carrasco-Rueda, C.E. Figuerola-Hernández, M. M. Ayup, N. Umaña, D. Ramos, A. González, C. Brizuela, W. Delgado, & J. Pacheco-Esquivel. 2016. Loosing legs and walking hard: effects of autotomy and substrate roughness in the locomotion of Prionostemma spp. harvestmen. [Journal of Arachnology 44: 76-82](#)

### Outreach publications and activities

1. Escalante, I. 2008. Abundancia, uso de sustrato y forrajeo agrupado de aves limícolas en una playa lodosa intermareal. [Journal of Undergraduate Research Opportunities. University of Georgia.](#)
2. Escalante, I. 2009. Campylorhynchus rufinucha. Boletín Avis, Unión de Ornitólogos de Costa Rica 3: 5–6.
3. Escalante, I. 2010. El canto de la reinita *Phaeothlypis fulvicauda*. Boletín Avis, Unión de Ornitólogos de Costa Rica 5: 13–15.
4. 2014, October 12. Live arthropods booth during Homecoming Weekend UC Berkeley. With the Essig Museum of Entomology and Entomology Students Organizations (UC Berkeley).
5. 2015, April 18. Arachnid research display. CalDay, UC Berkeley. With the Essig Museum of Entomology and Entomology Students Organizations (UC Berkeley).
6. 2015, April 29. Dinner with a Scientist. With the Oakland Unified School District.

### Grants

2017. Glaxo Centro America Fellowship. \$4 650. Granted by the Organization for Tropical Studies to conduct field work in Costa Rica in summer 2017. Topic: "Compensation for bodily damage: consequences of losing legs in habitat use and sexual behavior in daddy long-legs".
2017. Bob Lane and Sandy Purcell Graduate Summer Award. \$ 3 500. Granted by the division of Organisms and Environment, department of ESPM, UC Berkeley to cover field research expenses.
2016. Arachnological Research Fund, \$325. Granted by the American Arachnological Society, to cover research expenses for the summer 2016 field season in Panamá.
2016. Travel Grant, \$525. Granted by the Department of Environmental Sciences, Policy and Management at UC Berkeley, to attend the International Congress of Arachnology, in Colorado, USA, July 2-9, 2016.
2016. Tinker Field Research Grant, \$ 700. Granted by the Center of Latin American Studies at UC Berkeley, to cover research expenses for the summer 2016 field season in Panamá.
2016. Pre-dissertation Research Grant, \$1 530. Granted by the Institute for International Studies (IIS) at UC Berkeley, to cover research expenses for the summer 2016 field season in Panamá.
2016. Travel Grant, \$2 000. Granted by the International Society for Behavioral Ecology to attend the XVI meeting of the International Society of Behavioral Ecology, in Exeter, England, 28 July – 3 August, 2016.
2016. Souja Graduate Student Prize. Granted by the division of Organisms and Environment, department of ESPM, UC Berkeley to cover field research expenses. \$ 1 000.
2016. Graduate Division Conference Travel Grant. \$1 145. Granted by Graduate Division, University of California – Berkeley. Used to attend the XVI meeting of the International Society of Behavioral Ecology, in Exeter, England, 28 July – 3 August, 2016.
2015. Short-term Fellowship, \$3 000. Granted by the Smithsonian Tropical Research Institute. To cover research expenses, travel and field work in Barro Colorado Island, Panamá. Topic: "Compensatory behaviors in locomotive performance induced by autotomy in *Prionostemma* daddy long-legs (Arachnida: Opiliones)".
2015. Spieth Travel Award, \$750. Granted by Dr. Phillip Spieth, University of California Berkeley. Travel to the Society for Integrative and Comparative 2016 Meeting in Portland, Oregon, USA.
- 2015 and 2016. Margaret C. Walker Fund for Teaching and Research in Systematic Entomology. University of California Berkeley. To cover research expenses \$1 200.
2014. "Travel Grant", \$1 250. Granted by the International Society for Behavioral Ecology to attend the XV meeting of the International Society of Behavioral Ecology, in New York City, 31 July – 5 August, 2014; in which I presented a poster.
2014. Starter Grant Program, \$1 000. Granted by the Department of Environmental Science, Policy, and Management, University of California Berkeley. To cover research expenses. Topic: "Compensatory behaviors in locomotive performance induced by autotomy in *Prionostemma* daddy long-legs (Arachnida: Opiliones)".
2013. Pilot Research Fellowship Grant \$1 726. Granted by the Organization for Tropical Studies. Topic: "Dynamics of costs and benefits in aggregations: mite infection and predation escape in *Prionostemma* sp. harvestmen (Opiliones: Sclerosomatidae)".
2013. Diversity Award and Latin American Travel Grant. \$720. Given by the Animal Behavior Society of the United States of America. These grants covered the plane flight and part of the expenses to attend the Animal Behavior Society Meeting in Boulder, Colorado, USA, 28 July – 1 August, 2013; in which I presented an oral talk.
- 2013 - 2015. Fulbright Foreign Student Program, \$ 37 000. Granted by the Bureau of Educational and Cultural Affairs of the Department of State of the United States of America. The fellowship covered one year of non-resident tuition and partial stipend support during the first two years of the PhD program at UC Berkeley.
2010. Alexander F. Skutch for ornithological research in Costa Rica fund. \$600. Granted by the Costa Rican Ornithological Association. Topic: "River noise interference avoidance in the songs of the Buff-rumped warbler (*Phaeothlypis fulvicauda*)".

2008. Financial Support for Education. \$1 500. Granted by the Ministerio de Ciencia y Tecnología of Costa Rica. To attend a field course with the Organization of Tropical Studies, in Costa Rica.

### Meeting posters and talks

2017. Society for Integrative and Comparative Biology (SICB). meeting. 4-8 January. New Orleans, LA, USA. One poster.
2016. XVI International Society for Behavioral Ecology meeting. 28 July – 3 August. Exeter, England. One oral presentation.
2016. International Congress of Arachnology (ICA). 2-9 July. Golden, Colorado, USA. One oral presentation and 2 poster co-authorships.
2016. Society for Integrative and Comparative Biology (SICB). meeting. 3-7 January. Portland, OR, USA. One oral presentation.
2014. IV Latino American Arachnological Congress. Morelia, Michoacán, México. 20 – 25 July. One poster and one oral presentation.
2014. XV International Society for Behavioral Ecology meeting. 31 July – 5 August. New York City, USA. One poster.
2013. 50<sup>th</sup> Anniversary meeting Association of Tropical Biology and Conservation. 23-27 June. Symposium organizer: Behavioral Ecology of Neotropical Arachnids, and one oral presentation.
2013. 50<sup>th</sup> Anniversary Animal Behavior Society Meeting. 28 July – 1 August. Boulder, Colorado, USA. One oral presentation.
2012. II Uruguayan Congress of Zoology. 9-14 December. Montevideo, Uruguay. One oral presentation.
2012. III Costa Rican Ornithology Congress. 16-18 July. Two oral presentations.
2011. III Latino American Arachnology Congress. Montenegro, Quindío, Colombia. 4-9 December. Two oral presentations.
2010. XIV Congress of the Mesoamerican Society for Biology & Conservation. San José, Costa Rica. 11-18 November.
2010. II Costa Rican Ornithology Congress. 28-30 July. Co-organizer & one oral presentation.
2008. II Undergraduate International Research Symposium. University of Georgia. UGA Campus San Luis, Monteverde, Costa Rica. 11-21 May. One oral presentation.

### International courses and internships

- Course: Introduction to Conservation Biology in Latin America. 12 - 27 July, 2008. La Tirimbina Biological Station. La Virgen de Sarapiquí, Heredia, Costa Rica.
- Course: Tropical Ecology and Conservation (OTS 09-2). 14 January to 23 February, 2009. Organization for Tropical Studies. Heredia, Puntarenas, Guanacaste & San José, Costa Rica.
- First Caribbean School of Neuroethology. 9 to 19 May, 2011. International Brain Research Organization (IBRO) & University of La Habana. La Habana, Cuba.
- Research internship: Spider behavior. Laboratory of Ethology, Ecology & Evolution. Clemente Estable Biological Research Institute (IIBCE). Montevideo, Uruguay. Advisors: Fernando Costa & Anita Aisenberg. September – December, 2012.
- Short Course: Arachnids Biology. 9 to 14 December, 2012. II Uruguayan Congress of Zoología. Hosted by the Uruguayan Zoological Society. Montevideo, Uruguay.
- Short graduate course: Ecology and Evolution of Arachnids. 3 – 14 January, 2014. Organization for Tropical Studies (OTS). La Selva Biological Station. Sarapiquí, Heredia, Costa Rica.

### Teaching experience

## I. Teaching assistantships

Undergraduate teaching assistant, courses: General Biology Lab, General Zoology Lab. School of Biology, Universidad de Costa Rica. March 2006 to December 2008.

Graduate teaching assistant. School of Biology, Universidad de Costa Rica. Introductory Biology I & II, General Ecology Lab. March 2009 to June 2011.

Teaching assistant. Graduate level Course: "Tropical Biology: an Ecological Approach". Organization for Tropical Studies (OTS). Costa Rica, 6 June - 29 July, 2011; 23 January – 11 March, 2012; June 7 – July 29, 2013.

Graduate Student Instructor, University of California – Berkeley. Course: ESPM 50AC Introduction to Culture and Natural Resource Management. Instructor: Kurt Spreyer. Fall, 2015 and Spring, 2016.

Graduate Student Instructor, University of California – Berkeley. Course: ESPM C107 Biology and Geomorphology of Tropical Islands. Instructor: Patrick O'Grady. Fall, 2016.

## II. lecturer positions

Lecturer. Universidad Latina de Costa Rica, Campus San Pedro, San José, Costa Rica. Courses: "General Ecology", and "Biostatistics". January to April, and September to December, 2011.

Lecturer. Universidad Técnica Nacional, Campus Atenas, Alajuela, Costa Rica. Courses: "Biostatistics"; January to April, 2013, and "Research project in Wildlife Management"; May to August, 2013.

Co-Lecturer. Universidad de Costa Rica. Campus Rodrigo Facio, San Pedro, San José, Costa Rica. Courses: "Animal Behavior", August – December, 2013; "General Biology", and "Seminar of Animal Foraging", March – July, 2014.

Lecturer. Universidad de Costa Rica. Campus Paraíso, Paraíso, Cartago, Costa Rica. Courses: "General Ecology", and "General Ecology Lab". August – December, 2013.

Lecturer. University Studies Abroad Consortium – University of Nevada at Reno. San Ramón, Alajuela, Costa Rica. Course: "Society & Environment". August – December, 2013.

Lecturer. Regional en Ciencias Veterinarias Tropicales. Medicina Veterinaria, Universidad Nacional de Costa Rica, Heredia, Costa Rica. Course: "Wildlife Ethology". January – April, 2014.

## Professional experience

Field assistant, course: Ecology & Climate Change; Education Abroad Program ELON University, NC, USA. Held in highland Costa Rica, spring 2009 & 2010.

Field Assistant, research: Swine influence in Costa Rican wetlands. Researcher: M. J. Baldi. Medical Veterinary School, Universidad Nacional de Costa Rica. March & December, 2009.

Field Assistant, research: The mechanics and evolution of courtship sounds produced by the wings and tail of hummingbirds. Researcher: C.J. Clark. Department of Ecology and Evolutionary Biology, Yale University, Connecticut, EEUU. Field work in highlands, Costa Rica. October, 2009.

Curator assistant: Laboratory of Bioacoustics, Zoology Museum, School of Biology, Universidad de Costa Rica. 2009-2011.

Referee for peer review manuscripts in *Ornitología Neotropical*, 2011; *Ecología Austral*, 2014, 2015 and 2016; *Boletín Sociedad Zoológica del Uruguay*, 2015; *Journal of Ethology*, 2015, 2016; and *Entomologia Experimentalis et Applicata* 2016.

Revision of a book chapter in "Cryptic female choice in arthropods: patterns, mechanisms and prospects". A.V. Peretti and A. Aisenberg (eds). Springer International Publishing, 2014.

Reviewer, graduate program admission committee, department of Environmental Science, Policy and Management, University of California – Berkeley. Fall 2015. I evaluated and ranked the application material for 1/3 of the applicants in the division of Organisms and Environment.

Graduate Student Researcher (GSR), department of Environmental Science, Policy and Management, University of California – Berkeley. Fall 2014, Spring 2015 and Spring 2017. Involved in several research-related tasks, especially data gathering in the field as well as in the lab, and data processing.

### Mentoring experience

B.S. Thesis advisor. Subject “Microhabitat structure preference next to shelters built in the palms *Asterogyne* sp. & *Calyptogyne* sp. (Arecaceae) by the bats *Artibeus watsoni* (Phyllostomidae)”. School of Biological Sciences, Universidad Latina de Costa Rica. Student: Ariel Rodríguez. 2011.

Resource person: invited professor, undergraduate course “Tropical Biology”, Organization for Tropical Studies (OTS). June 2010, March 2011 & June 2012. Invited professor, OTS graduate course “Ecología Tropical & Conservación”, January 2012, 2013, 2014, & 2016.

Research mentor. University of California – Berkeley. College of Natural Resources. Program: Sponsored Projects for Undergraduate Research. Spring 2015, Spring 2016, and Spring 2017. Two undergraduate mentees in each semester. Funding: \$1 000 and \$500 respectively.

Research mentor. Organization for Tropical Studies (OTS). Research Experience for Undergraduates (REU). Summer 2015. Two undergraduate mentees from the University of Puerto Rico.

### Affiliations

- Costar Rican Ornithological Association. Member. 2007-2009.
- Ornithologists Union of Costa Rica. Founder member. Partner, 2008-2011.
- Animal Behavior Society. Member, 2013-2017.
- American Arachnological Society. Member, 2014-2016.
- Society for Integrative and Comparative Biology. Member. 2015-2017.
- International Society for Behavioral Ecology. Member, 2014 and 2016.