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EDUCATION

- 2016–2020 PhD in Biology, University of Bath, UK
Supervisors: Prof Tamás Székely, Dr Jordi Figuerola
- 2009–2014 Médico Veterinario (Professional Degree Equivalent to DVM in USA)
Highest Distinction Honours, University of Concepción, Chile
- 2009–2013 Bachelor's Degree in Veterinary Science, University of Concepción, Chile

APPOINTMENTS

- 2022-present ANID Postdoctoral fellow, Universidad Austral de Chile, Chile
- 2020–2022 Postdoctoral researcher, University of Debrecen, Hungary

HONORS, AWARDS and GRANTS

- 2022-2025 FONDECYT – ANID Postdoctoral Fellowship (Chile). Fitness costs of sex-specific investment in attraction in a small shorebird (€88,400).
- 2022-2024 Juan de la Cierva formación. Agencia Estatal de Investigación (Spain). Doñana Biological Station, Seville. Rejected.
- 2021-2022 INTERACT – International Network for Terrestrial Research and Monitoring in the Arctic. Access and support at two Arctic research stations (€2,000).
- 2019 Santander Mobility Award. Research visit to Lund University, Sweden (£450)
- 2018 Poster Prize for the best poster presentation. I Milner Centre Conference. Bath, UK (£200)
- 2016–2020 Scholarship for Doctoral Studies Abroad (Becas Chile para Estudios en el Extranjero). Comisión Nacional de Ciencia y Tecnología (CONICYT)
- 2014 Best Academic Performance of Graduates 2014. Colegio Médico Veterinario de Chile A.G.

TEACHING EXPERIENCE

- 2017–2020 Teaching assistant, University of Bath:
- Sexual Conflict
- Data Interpretation in R
- Ecology and Evolution
- Pathology practicals
- 2012–2014 Teaching assistant, School of Veterinary Medicine, University of Concepción
- Vida Silvestre
- Ecología
- Ornitología

RESEARCH TRAINING

- 11–12/2019 Ecology building, Lund University (Sweden)
Research visit to the Department of Aquatic Ecology to conduct avian immune assays.
Supervisor: Dr Arne Hegemann.
- 05–07/2019 Doñana Biological Station, Seville (Spain)
Department of Wetland Ecology. Fieldwork conducted in the rice fields of Doñana,

monitoring, trapping and sampling shorebird species. Laboratory work. Supervisor: Dr Jordi Figuerola.

- 11/2015–
08/2016 University of Concepción, Concepción (Chile)
Darwin's frog (*Rhinoderma darwini*) *ex situ* breeding facility. Also including Vanzolini's spiny-chest frog (*Alsodes vanzolini*). Part of a Veterinary crew in charge of e.g. environmental enrichment, nutrition and diseases treatment. Supervisor: Carlos Barrientos Donoso.
- 02/2015 University of Wisconsin-Madison, Madison (United States)
Two Internships: (1) Food Science: professor's assistant, laboratory assistant, temporary panelist of the sensorial science laboratory, attendance to weekly seminars of graduate students. (2) Forest and Wildlife Ecology: birding field trips, attendance to lectures, career orientation. Supervisor: Dr Arnoldo López-Hernandez
<http://foodsci.wisc.edu/>
- 04–07/2014 University of Concepción, Chillán (Chile)
Laboratory of Food Microbiology, collaboration in project: Characterization of Probiotics Isolated from Sow Milk. Culturing of *Lactobacillus* strains, hydrophobicity and antibiogram assays, assessment of cell culture. Supervisor: Dr Sandra Quilodrán.
- 01/2014 University of Concepción, Concepción (Chile)
Department of Physiology, Laboratory of Neurophysiology. Training on bioterium management and neuronal cell culture. Supervisor: Dr Luis Aguayo Hernández.
www.csbiol.udec.cl/fs_i_11.html
- 02/2013 Karukinka Natural Park (WCS), Tierra del Fuego (Chile)
Support group during research project on foraging habits of Beavers (*Castor canadensis*) on the island of Tierra del Fuego. Supervisor: Dr Derek Corcoran.
www.karukinkanatural.cl
- 08–10/2011 University of Concepción, Chillán (Chile)
Laboratory of Animal Physiology and Endocrinology
Project on polycystic ovary syndrome, using sheep as a biological model. Also: neuroanatomy dissections of neonates, assistance during surgeries, administration of hormones, assistance on molecular assays (RIA, PCR and Gel electrophoresis of proteins). Supervisor: Dr Mónica Recabarren.
www.veterinariaudec.cl/fisenlab

PUBLICATIONS

Online:

Pottier P, ... **Valdebenito JO**, ... Nakagawa S. 2022. A comprehensive database of amphibian heat tolerance. **Sci Data** 9: 600. Doi: <https://doi.org/10.1038/s41597-022-01704-9>

Valdebenito JO, Maher K, Gergely Zachár, ... Urrutia A. 2022. Males and females differ in brain immune gene expression in a small shorebird. **Immunogenetics**. <https://doi.org/10.1007/s00251-022-01253-w>

Amano T, ... **Valdebenito JO**, ... Sutherland WJ. 2021. Tapping into non-English-language science for the conservation of global biodiversity. **PLoS Biol.** 19(10): e3001296. Doi: <https://doi.org/10.1371/journal.pbio.3001296>

Valdebenito JO, Halimubieke N, Lendvai AZ, Figuerola J, Eichhorn G, Székely T. 2021. Seasonal variation in sex-specific immunity in wild birds. **Sci. Rep.** 11:1349. Doi: <https://doi.org/10.1038/s41598-020-80030-9>

Valdebenito JO, Liker A, Halimubieke N, Figuerola J, Székely T. 2020. Mortality cost of sex-specific parasitism in wild bird populations. **Sci. Rep.** 10:20983. Doi: <https://doi.org/10.1038/s41598-020-77410-6>

Halimubieke N, Kupán K, **Valdebenito JO**, ... Székely T. 2020. Successful breeding predicts divorce in plovers. **Sci. Rep.** 10:15576. <https://doi.org/10.1038/s41598-020-72521-6>

Valdebenito JO, Martínez-de la Puente J, Castro M, Pérez-Hurtado A, Tejera G, Székely T, Halimubieke N, Schroeder J, Figuerola J. 2020. Association of insularity with cloacal bacteria prevalence in a small shorebird. **PLoS One** 15(8):e0237369. Doi: <https://doi.org/10.1371/journal.pone.0237369>

Mena M, **Valdebenito JO**, Moreno L, Fuentes-Castillo D, Kinsella JM, Mironov S, Barrientos C, Cicchino A, González-Acuña, D. 2020. Parasites of the Shiny Cowbird, *Molothrus bonariensis*, and the Austral

Blackbird, *Curaeus curaeus*, (Passeriformes: Icteridae) in Chile. **Braz. J. Vet. Parasitol.** 29(2):e021819. Doi: <https://doi.org/10.1590/S1984-29612020022>

Rice R, **Valdebenito JO**, Ottensmann M, Engel N, Adrião A, Székely T. 2020. Breeding ecology of the Cream-coloured Courser in Cape Verde. **Ostrich** 91(1):65-73. Doi: <https://doi.org/10.2989/00306525.2019.1704900>

Halimubieke N, **Valdebenito JO**, Harding P, Cruz-López M, Alejandro Serrano-Meneses M, James R, Kupán K, Székely T. 2019. Mate fidelity in a polygamous shorebird, the snowy plover (*Charadrius nivosus*). **Ecol. Evol.** 00:1-12. Doi: <https://doi.org/10.1002/ece3.5591>

Valdebenito JO, Grandón-Ojeda A, Pantoja-Maggi V, Novoa FJ, González-Acuña D. 2018. Report on beak abnormalities of some birds of Patagonia. **Wilson J. Ornithol.** 130(4):1014-1019. Doi: <https://doi.org/10.1676/17-00039.1>

Valdebenito JO, Moreno L, Barrientos C, Mironov S, Kinsella JM, Cicchino A, Mena M, Grandón-Ojeda A, González-Acuña D. 2018. Gastrointestinal and ectoparasites of Plumbeous rail, *Pardirallus sanguinolentus* (Aves: Rallidae) in Central Chile. **Braz. J. Vet. Parasitol.** 27(3):301-312. Doi: <https://doi.org/10.1590/S1984-296120180042>

Grandón-Ojeda A, **Valdebenito JO**, Moreno L, Kinsella JM, Mironov S, Cicchino A, Barrientos C, González-Acuña D. 2018. Gastrointestinal and external parasitism in the Magellanic Horned Owl *Bubo magellanicus* (Strigiformes: Strigidae) in Chile. **Braz. J. Vet. Parasitol.** 27(2):161-168. Doi: <http://dx.doi.org/10.1590/S1984-296120180013>

Quilodrán-Vega A, Villena J, **Valdebenito JO**, Salas MJ, Parra C, Ruiz A, Kitazawa H, García A. 2016. Isolation of lactic acid bacteria from swine milk and characterization of potential probiotic strains with antagonistic effects against swine-associated gastrointestinal pathogens. **Can. J. Microbiol.** 62:514-524. Doi: <https://doi.org/10.1139/cjm-2015-0811>

Valdebenito JO, Moreno L, Landaeta-Aqueveque C, Kinsella JM, Mironov S, Cicchino A, Troncoso I, González-Acuña D. 2015. Gastrointestinal and external parasites of *Enicognathus ferrugineus* and *Enicognathus leptorhynchus* (Aves, Psittacidae) in Chile. **Braz. J. Vet. Parasitol.** 24(4):422-431. Doi: <http://dx.doi.org/10.1590/S1984-29612015074>

In progress:

Székely T, ... **Valdebenito JO**, ... GC McDonald. Breeding systems in shorebirds: causes and implications of sex role diversity. **Submitted to IBIS.**

Valdebenito JO, Jones W, Székely T. Global analysis of sex-specific parasite prevalence suggests lower infection of the showy sex in wild birds. **Submitted to Functional Ecology.**

García-Miranda O, Székely T, **Valdebenito JO**. Reference levels of haematological parameters and their response to blood parasitism in wild birds. **Submitted to Journal of Wildlife Diseases.**

Halimubieke N, Fang B, **Valdebenito JO**, Xu X, Liu Y, Urrutia A, Sheppard SK, Székely T. Gastro-intestinal microbiota of two high altitude bird populations. *In preparation.*

Mourkas E, **Valdebenito JO**, Pascoe B, Sheppard SK. Ecological determinants of antimicrobial resistance genes in *Campylobacter* from wild birds. *In preparation.*

Valdebenito JO, Barwell L, Székely T. Parental care and the evolution of sexual dichromatism in wild populations of waterfowl. *In preparation.*

PRESENTATIONS AT SCIENTIFIC EVENTS

Valdebenito JO

What do we know about drivers of sex-specific mortality in shorebirds? Clues provided by immune gene expression in the Kentish plover.

International Wader Study Group Annual Conference. Szeged, Hungary. September 2022.

Pottier P, ... **Valdebenito JO**, ... Nakagawa S.

Climate vulnerability of the world's amphibians: Finding the missing pieces of an ecological puzzle.

Society for Experimental Biology (SEB) conference. Montpellier, France. July 2022.

Valdebenito JO, Maher K, Zachár G, Huang Q, Zhang Z, Young LJ, Székely T, Que P, Liu Y, Urrutia AO.

Sex differences in immune gene expression in the brain of a small shorebird.

23rd Conference of the Hungarian Ethological Society (online). Budapest, Hungary. November 2021.

Valdebenito JO, Halimubieke N, Lendvai AZ, Figuerola J, Szekely T.
Immunosuppression and the cost of reproduction in male birds.
The seventh North American Ornithological Conference (NAOC VII) (online). San Juan, Puerto Rico. August 2020.

Valdebenito JO, Halimubieke N, Lendvai AZ, Figuerola J, Szekely T.
Immunosuppression and the cost of reproduction in male birds.
Research Day Annual Conference. University of Bath, UK. January 2020.

Valdebenito JO
Evaluating sex-specific immune function across shorebird populations.
Integrating Social Behaviour and Population Demography for Conservation of Wild Populations. Debrecen, Hungary. January 2020

Valdebenito JO, Halimubieke N, Lendvai AZ, Figuerola J, Szekely T.
Sex-specific cellular immunity in wild birds: a meta-analytic approach.
Congress of the European Society for Evolutionary Biology (ESEB). Turku, Finland. August 2019.

Valdebenito JO.
Sex-specific patterns in pathogen prevalence and immune response in birds.
Workshop: Male-female differences in mortality and cancer incidence birds and mammals. Odense, Denmark. June 2019.

Valdebenito JO.
Evaluating sex-specific immune responses across shorebird species
ÉLVONAL Shorebirds meeting. Debrecen, Hungary. March 2019.

Valdebenito JO, Halimubieke N, Liker A, Figuerola J, Székely T.
The avian immune system and its possible association with sex-specific mortality
New Directions in Evolutionary Research of Sex Roles. Debrecen, Hungary. January 2019.

Valdebenito JO, Liker A, Halimubieke N, Figuerola J, Székely T.
Mortality cost of sex-specific parasitism in birds.
Host-Parasite Interactions. TiBE. Porto, Portugal. December 2018.

Valdebenito JO, Liker A, Halimubieke N, Figuerola J, Székely T.
Mortality cost of parasitism in wild bird populations.
II Joint Congress on Evolutionary Biology. Montpellier, France. August 2018.

Valdebenito JO, Liker A, Halimubieke N, Figuerola J, Székely T.
Mortality cost of parasitism in wild bird populations.
Milner Centre for Evolution Opening Conference. Bath, UK. September 2018.

Valdebenito JO, Liker A, Halimubieke N, Figuerola J, Székely T.
Mortality cost of parasitism in with bird populations
Social Evolution. Hortobágy, Hungary. April 2018.

Valdebenito JO, Grandón-Ojeda A, Pantoja-Maggi V, Novoa FJ, González-Acuña D.
Report on beak abnormalities of some birds of the Southern Cone.
XII Congreso Chileno de Ornitología. Santa Cruz, Chile. November 2017.

Grandón-Ojeda A, **Valdebenito JO**, Moreno L, Kinsella JM, Mironov S, Cicchino A, Barrientos C, González-Acuña D.
Study of External and Gastrointestinal Parasitism in Magellanic Horned Owl *Bubo magellanicus* (Aves, Strigidae) in Central Chile.
XII Congreso Chileno de Ornitología. Santa Cruz, Chile. November 2017.

Valdebenito JO, Moreno L, Barrientos C, Mironov S, Kinsella JM, Cicchino A, Mena M, Grandón-Ojeda A, González-Acuña D.
Gastrointestinal and external parasites of *Pardirallus sanguinolentus* (Aves, Rallidae) in Chile.
VII Congreso Argentino de Parasitología. San Carlos de Bariloche, Argentina. 2015.

Valdebenito JO, Moreno L, Kinsella JM, Mironov S, Cicchino A, Troncoso I, González-Acuña D.
Parásitos gastrointestinales y externos en Cachaña *Enicognathus ferrugineus* y Choroy *E. leptorhynchus* (Aves, Psittacidae) de Chile.
IV Congreso Nacional Latinoamericano de Actualización y Divulgación Científica en Medicina Veterinaria. Valdivia, Chile. April 2015.

Quilodrán S, Villena J, **Valdebenito JO**, Salas MJ, Parra C, Ruiz A, Kitazawa H, García A.

Potential probiotic stains with antagonistic effect on *Escherichia coli* and *Salmonella* sp. isolated from swine milk.

Advances in Food Processing Challenges for the Future. Campinas, Brazil, November 2014.

INVITED SPEAKER

2022 Centre for Polar Ecology, University of South Bohemia, Czechia

2022 Milner Centre for Evolution, University of Bath, UK

2021 Department of Zoology, University of Debrecen, Hungary

PROJECT PARTICIPATION

- 2022–present Fitness costs of sex-specific investment in attraction in a small shorebird (ID 3220722)
Funding: FONDECYT, Chile
Role: principal investigator
- 2021–2022 Association of mating system variation with sex-specific immune function and gut microbiota in shorebirds
Funding: International Network for Terrestrial Research and Monitoring in the Arctic, EU
Role: principal investigator
- 2017–2022 Breeding system evolution in shorebirds. ÉLVONAL Shorebird Science
<https://elvonalsshorebirds.com/>
Funding: Hungarian Academy of Science
Role: scientific collaborator
- 2013–2014 Ticks (Ixodoidea) of Middle and South Chile: biogeography, biology and the possible role of pathogen vector. (ID 1130948)
Founding: FONDECYT, Chile
Role: fieldwork crew
- 2011 Impact of prenatal exposition to testosterone on fetal gonads of male and female sheep. A possible epigenetic mechanism of polycystic ovary syndrome. (ID 1090031)
Founding: FONDECYT, Chile
Role: laboratory crew

STUDENT SUPERVISIONS

Simón Maldonado, Master of Science student. Universidad Austral de Chile, Chile. 2022-present
Project: Ecological and physiological factor affecting parasite burden in the Two-banded plover

Rhian Davies, Undergrad student. University of Bath, UK. 2021
Project: Adult sex ratio and density affect female fertilisation in invertebrates

Louis Barwell, Undergrad student. University of Bath, UK. 2020
Project: Parental care and the evolution of sexual dichromatism in natural populations of waterbirds

Suzannah Egleston, Undergrad student. University of Bath, UK. 2020
Project: Variations in population demographic in Kentish plover (*Charadrius alexandrinus*) in Europe

Katherine Webb, Undergrad student. University of Bath, UK. 2019
Project: Adult sex ratio variation across spiders and its association with sex biases in mortality

Professional placements:

Juan Figueroa Alvarez, Universidad de las Américas Puebla, Mexico. 2018
Shorebird fieldwork biology, conducted in Baja California, Mexico

Alexandra Grandón Ojeda, Universidad de Concepción, Chile. 2016
Wildlife medicine, others

CONFERENCE ATTENDANCE

23rd Conference of the Hungarian Ethological Society (online).
Budapest, Hungary. November 2021.

IV ÉLVONAL Conference. Sex roles and breeding ecology (online).

Debrecen, Hungary. January 2021.

The seventh North American Ornithological Conference (NAOC VII) (online).
San Juan, Puerto Rico. August 2020.

Research Day Annual Conference.
University of Bath, UK. January 2020.

Workshop: Male-female differences in mortality and cancer incidence birds and mammals.
Odense, Denmark. June 2019.

ÉLVONAL Shorebirds meeting.
Debrecen, Hungary. March 2019.

New Directions in Evolutionary Research of Sex Roles.
Debrecen, Hungary. January 2019.

Host-Parasite Interactions. TiBE.
Porto, Portugal. December 2018.

Milner Centre for Evolution Opening Conference.
Bath, UK. September 2018.

Contemporary Topics in Ecology and Evolutionary Biology
Mexico City, Mexico. August 2018.

II Joint Congress on Evolutionary Biology.
Montpellier, France. August 2018.

Social Evolution
Hortobágy, Hungary. April 2018.

XVI Congress of the European Society for Evolutionary Biology.
Groningen, the Netherlands. August 2017.

Sex-role evolution: integrating neural, behavioural and phylogenetic approaches.
Tihany, Hungary. April 2017.

VII Congreso Argentino de Parasitología.
San Carlos de Bariloche, Argentina. November 2015.

IV Congreso Nacional Latinoamericano de Actualización y Divulgación Científica en Medicina Veterinaria.
Valdivia, Chile. April 2015.

XI Congreso Chileno de Ornitología.
La Serena, Chile. October 2014.

EXPERIENCE IN THE FIELD

Mammals

Rodent and bats species
In collaboration with Dr Daniel González-Acuña.
Conguillio National Park, Chiloe National Park and Oncol Park, Chile. 2014.

North American Beaver (*Castor canadensis*).
In collaboration with Dr Derek Corcoran.
Tierra del Fuego, Chile. 2013

Passerines

Several species. Mist netting, blood sampling, parasite examination.
In collaboration with Dr Daniel González-Acuña.
Conguillio National Park, Chiloe National Park and Oncol Park, Chile. 2014.

Shorebirds

Several species. Capture with spring traps, ringing, blood and faecal sampling. RIF Biological Station, Raufarhöfn, Iceland. 2021 and 2022.

Several species. Capture with funnel traps, ringing, behavioural observations and blood sampling.

Turov Meadow, Belarus (Dr Natalia Karlinova); Cadiz Bay, Spain (Prof Alejandro Perez-Hurtado and Dr Macarena Castro); Rice fields of Doñana, Seville, Spain (Dr Jordi Figuerola and Dr Josué Martínez-de la Puente). 2019.

Snowy plover (*Charadrius nivosus*)

In collaboration with Dr Daniel Galindo. Monitoring of breeding biology: capture with funnel traps, ringing, behavioural observations and blood sampling.

San Quintín, Baja California, Mexico. 2018.

Kentish plover (*Charadrius alexandrinus*) and Cream-colored courser (*Cursorius cursor*)

In collaboration with Prof Tamás Székely. Monitoring of breeding biology: capture with funnel traps, ringing, behavioural observations and blood sampling.

Maio Island, Cape Verde. 2017.

Kentish plover (*Charadrius alexandrinus*)

In collaboration with Dr Afonso Rocha. Monitoring of breeding biology: capture with funnel traps, ringing, behavioural observations and blood sampling.

Salinas do Samouco, Portugal. 2017.

MEMBERSHIPS

Association of Field Ornithologists. Member. Massachusetts, USA, 2020–2021.

European Society for Evolutionary Biology (ESEB). Member. The Netherlands, 2017–2019.

Association for the study of Animal Behaviour (ASAB). Member. London, UK, 2017–2018.

Milner Centre for Evolution. Member. Bath, UK, 2016–present.

Organización para la Conservación de Aves Silvestres (OCAS). Cofounder and member. Chile, 2014-2016.

COURSES

2018 Macroevolution and phylogenetic comparative methods in R. Universidad Nacional Autónoma de México, Mexico.

2017 Generalized linear models (GLM) for Evolutionary Ecologists. France.
<https://glm2017vpa.sciencesconf.org/>

2016 Avian Medicine & Surgery Workshop: Wild and Exotic Birds
Universidad Andrés Bello, Santiago, Chile.

REFEREED

Revista Chilena de Ornitología

Water Study

General and Comparative Endocrinology

Nature Communications

Ecology Letters

PERSONAL SKILLS

Language (proficiency) :	Spanish (native) English (proficient) Italian (B1) Russian (as a hobby)
Driver's license :	Class B
Software :	R environment
Other :	Public speaking