

Miriam Lerma

DOCTORATE IN NATURAL SCIENCE

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Research interest

- I am a research associate at the Seevogelmonitoring team at the Dachverband Deutscher Avifaunisten DDA. My work entitles analyzing spatial patterns of marine animals. My research interest include ecology, conservation, physiology and ecotoxicology.

Education

Doctoral studies

CHRISTIAN-ALBRECHT-UNIVERSITÄT ZU KIEL

2015-2020

Kiel, Germany

Master in Science in Marine Biology

UNIVERSIDAD NACIONAL AUTONOMA DE MÉXICO

2011-2013

Mazatlan, Mexico

Bachelor in Science in Biology

UNIVERSIDAD DE GUADALAJARA

2005-2009

Guadalajara, Mexico

Work experience

Research associate

2021-current

DACHVERBAND DEUTSCHER AVIFAUNISTEN

- Project: MarBird

Postdoc researcher

2021

FORSCHUNG UND TECHNOLOGIEZENTRUM WESTKÜSTE (FTZ, KIEL UNIVERSITY)

- Project: TopMarine

Field technician

2015

FONDO NOROESTE AC (CIVIL ASSOCIATION)

- Project: Composition, abundance and habitat use of birds on shrimp farms on Bahia de Santa Maria, Sinaloa

Field technician

2014

CONANP (NATIONAL COMMISSION OF NATURAL PROTECTED AREAS)

- Project: Biological monitoring on Natural Protected Areas (PROMOBI 2014) (focused on Shorebirds)

Field technician

2014

CONANP (NATIONAL COMMISSION OF NATURAL PROTECTED AREAS)

- Project: Conservation of Species on Risk (PROCER 2014) (focused on American Oystercatcher)

Advisor

2014

UNAM-FONATUR (NATIONAL AUTONOMOUS UNIVERSITY OF MEXICO- NATIONAL TRUST FUND FOR TOURISM DEVELOPMENT)

- Subproject: Fauna monitoring on project CIP Pacific Coast on Escuinapa, Sinaloa

Instructor

2014

CONANP-IGC (NATIONAL COMMISSION OF NATURAL PROTECTED AREAS-GULF OF CALIFORNIA ISLANDS)

- Course: Introduction to studies on birds

Field technician

2012

SONORAN JOINT VENTURE (BINATIONAL BIRD CONSERVATION)

- Project: Monitoring seabirds in Santa Maria Bay, Sinaloa: Population size, nesting habitat, reproductive success and diet

Field technician

2012

CONACYT (NATIONAL COUNCIL ON SCIENCE AND TECHNOLOGY)

- Project: Seabirds as environmental indicators in coastal systems of economic importance

Field technician

2012

GRUPO DE ECOLOGÍA Y CONSERVACIÓN DE ISLAS A.C.

- Monitoring Eradication of Invasive Mammals: Farallón de San Ignacio and San Pedro Martir Islands

Field technician

2010

FONDO MEXICANO DE CONSERVACIÓN DE LA NATURALEZA

- Project: Ecological and Ecotoxicological monitoring of the Seabird community of Santa Maria Bay: establishing base lines for the use of bioindicators in decisions of environmental management, Sinaloa

Technical assistant

2009

RESOURCES FROM BASIC SCIENCE RESEARCH SEP-CONACYT AND PAPIIT

- Project: Morphologic, isotopic and genetic characterization of *Calidris mauri* in the Northwest of México

Education intern

2009

PRONATURA RIVER OF RAPTORS, CARDENAL, VERACRUZ

- Orientation to school groups, local people, and visitors

Technical assistant

2009

DUCKS UNLIMITED DE MÉXICO (BINATIONAL BIRD CONSERVATION)

- Project: Evaluation of the waterbird community in rehabilitated mangroves sites

Collaborator

2008

UNIVERSITY OF GUADALAJARA

- Course: Introduction to the study of birds

Peer-reviewed publications

Corticosterone levels, leukocyte profiles, and foraging and diving behaviours of Humboldt penguins during chick rearing in Northern Chile

2023

LERMA M, VILLAVICENCIO C, LUNA N, PORTFLITT-TORO M, SERRATOSA J, LUNA-JORQUERA G, GARTHE S, QUISPE R

Emu 123: 71-78

Seabird morphology determines operational wind speeds, tolerable maxima, and responses to extremes

2023

NOURANI E, SAFI K, DE GRASSAC S, ANDERSON DJ, COLE NC, FELL A, GREMILLET D, LEMPIDAKIS E, LERMA M, MCKEE JL, PICHEGRU L, PROVOST P, RATTENBORD NC, RYAN PG, SANTOS CD, SCHOOMBIE S, TATAHAY V, WEIMERSKIRCH H, WIKELSKI M, SHEPARD ELC

Current biology 33: 1179-1184

Nutritional state variations in a tropical seabird throughout its breeding season

2022

LERMA M, DEHNHARD N, CASTILLO-GUERRERO A, FERNANDEZ G

J Comp Phy B 192: 775-787

Breeding stage, not sex, affects foraging characteristics in masked boobies at Rapa Nui

2020

LERMA M, DEHNHARD N, LUNA-JORQUERA G, VOIGT CC, GARTHE S

Beh Ecol Soc 74: 149

Foraging ranges of Humboldt penguins *Spheniscus humboldti* from Tilgo Island: the critical need for protecting a unique marine habitat.

2020

QUISPE R, LERMA M, LUNA N, PORTFLITT-TORO M, SERRATOSA J, LUNA-JORQUERA G

Mar Ornithol 48: 205

Foraging ecology of a marine top predator in the Eastern Tropical Pacific over 3 years with different ENSO phases

2020

LERMA M, CASTILLO-GUERRERO JA, HERNANDEZ-VAZQUEZ S, GARTHE S

Mar Biol 167: 88

Zinc concentrations in Blue-footed booby (*Sula nebouxii*) eggs, nestlings, and adults

2020

LERMA M, CASTILLO-GUERRERO J.A., GARCIA-HERNANDEZ J, FERNANDEZ G

J Sea Research 165: 101952

Foraging ecology of masked boobies (*Sula dactylatra*) in the world's largest 'oceanic desert'

2020

LERMA M, SERRATOSA J, LUNA-JORQUERA G, GARTHE S

Mar Biol 167: 87

Non-Breeding Distribution, Abundance, and Roosting Habitat Use of the American Oystercatcher (*Haematopus palliatus frazari*) in Sinaloa, Mexico

2017

LERMA M, CASTILLO-GUERRERO JA, PALACIOS E

Waterbirds 40: 95-103

Lead, cadmium and mercury in the blood of the blue-footed booby (*Sula nebouxii*) from the coast of Sinaloa, Gulf of California, Mexico

2017

LERMA M, CASTILLO-GUERRERO JA, RUELAS-INZUNZA J, FERNANDEZ G

Mar Poll Bull 110: 293-298

Environmentally-mediated flexible foraging strategies in Brown Boobies in the Gulf of California

2016

CASTILLO-GUERRERO JA, LERMA M, MELLINK E, SUAZO-GUILLÉN E, PEÑALOZA-PADILLA EA

Ardea 104: 33-57

Conferences

2023	Pacific Seabird Group 50th Annual Meeting	San Diego, US
2022	Deutschen Ornithologen-Gesellschaft	Wilhelmshaven, DE
2021	7th Annual Bio-Logging Science Symposium	Hawaii, Virtual
2018	Pacific Seabird Group 45th Meeting	La Paz, MX
2017	VI Reunión Internacional de Investigadores del Archipiélago Revillagigedo	Colima, MX
2017	41th Waterbirds 2017	Reykjavik, IS
2015	Waterbirds 2015: Challenges and Responses	Bar Harbor, US
2013	Pacific Seabird Group 40th Annual Meeting.	Portland, US
2011	Congress for the study and conservation of the birds in Mexico	Mazatlán, MX

Trainings

Risk and Impact Assessment Course

EUROWA

2022/Sep/27-28

From Zero to (s)Hero: Five-part introduction to R

R-LADIES FREIBURG

2021/Jan-May

Young Entrepreneurs in Science

FALLING WALLS. KIEL, GERMANY

2021/Jun/1-3

Programación en R para estudios de biologging de vertebrados marinos y sus interacciones con la actividad pesquera en el Perú

UNIVERSIDAD CIENTÍFICA DEL SUR. ONLINE, PERU

2020/Nov-2021/Feb

AniMove

MAX PLANCK INSTITUTE. RADOLFZELL, GERMANY

2018/Sept/10-21

Basics in University Teaching

INTEGRATED SCHOOL OF OCEAN SCIENCES. KIEL, GERMANY

2018/Jul/16-17

International Summer School on Stable Isotopes in Animal Ecology

CENTRE FOR STABLE ISOTOPE ECOLOGY. BERLIN-BRANDENBURG, GERMANY

2016/Sep/12-16

GIS for Marine Sciences

INTEGRATED SCHOOL OF OCEAN SCIENCES. KIEL, GERMANY

2016/Jun/20

Analysis of univariate data sets - first steps in R

INTEGRATED SCHOOL OF OCEAN SCIENCES. KIEL, GERMANY

2016/Feb/8

Relevant skills

Computer	Laboratory	Fieldwork	Languages
R – SQL – Statistica – SPSS – SigmaPlot – QGIS – Git – Markdown	Heavy metal analyses – Stable isotopes – Plasma metabolites analyses	Catching and handling wild animals – Sample collection: extraction blood & feathers – Censusing populations – Monitoring breeding success	Spanish (Mother tongue) – English (TOEFL iBT 99) – German (B1)