

# 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

DACHVERBAND DEUTSCHER AVIFAUNISTEN

- Project: MarBird

2021-current

### Postdoc researcher

FORSCHUNG UND TECHNOLOGIEZENTRUM WESTKÜSTE

- Project: TopMarine

2021

### Field technician

FONDO NOROESTE AC (CIVIL ASSOCIATION)

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

2015

### Field technician

CONANP (NATIONAL COMMISSION OF NATURAL PROTECTED AREAS)

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

2014

### Field technician

CONANP (NATIONAL COMMISSION OF NATURAL PROTECTED AREAS)

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

2014

### Advisor

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

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

2014

### Instructor

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

- Course: Introduction to studies on birds

2014

### Field technician

SONORAN JOINT VENTURE (BINATIONAL BIRD CONSERVATION)

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

2012

### Field technician

CONACYT (NATIONAL COUNCIL ON SCIENCE AND TECHNOLOGY)

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

2012

### Field technician

GRUPO DE ECOLOGÍA Y CONSERVACIÓN DE ISLAS A.C.

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

2012

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

## Tranings

### 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 biologgging de vertebrados marinos y sus interacciones con la actividad pesquera en el Peru

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 – Censing populations – Monitoring breeding success	Spanish (Mother tongue) – English (TOEFL iBT 99) – German (B1)