Centro de Investigación Científica y de Educación Superior de Ensenada, Baja California

# Skills & Experience \_

Integrative Ecophysiology, Mollusk physiology, Next Generation Sequencing, qPCR, Metabolomics, Transcriptomics, Population Genetics, Conservation Genetics, R, Linux

### Education

#### Universidad Autonoma de Baja California Sur

BACHELOR OF SCIENCE IN MARINE BIOLOGY (HONOURS)

Date of thesis defense: 01/02/2007

Centro de Investigaciones Biológicas del Noroeste, S.C.

MASTER OF SCIENCE IN USE, MANAGEMENT AND CONSERVATION OF NATURAL RESOURCES

• Date of thesis defense: 28/08/2009

**University of Bremen** 

DOCTOR IN NATURAL SCIENCE (DR. RER. NAT)

· Date of thesis defense: 14/12/2018

La Paz, Baja California Sur, Mexico

La Paz, Baja California Sur, Mexico

Bremen, Germany

# **Publications list**

- 1. Tripp-Valdez, MA, S Lluch-Cota, P Delmonte-Luna, and C Salvadeo (2010). The importance of grey literature in Fisheries Ecology: an example based on the trophic role of small pelagic in the Gulf of California. Oceánides 25(mi), 59-71.
- 2. Tripp-Valdez, MA, F García de León, S Ortega-García, D Lluch-Cota, J López-Martínez, and P Cruz (2010). Population genetic structure of dolphinfish (Coryphaena hippurus) in the Gulf of California, using microsatellite loci. Fisheries Research 105(3), 172–177.
- 3. Tripp-Valdez, MA, FJ García-de-León, H Espinosa-Pérez, and G Ruiz-Campos (2012). Population structure of sablefish Anoplopoma fimbria using genetic variability and geometric morphometric analysis. Journal of Applied Ichthyology 28(4), 516–523.
- 4. Sicard-Gonzalez, M, MA Tripp-Valdez,, L Ocampo, A Maeda-Martínez, and SE Lluch-Cota (2012). Coastal sea surface temperature records along the Baja California Peninsula. Oceanides 27(2), 65–70.
- 5. Lluch-Cota, SE,MA Tripp-Valdez,, DB Lluch-Cota, D Lluch-Belda, J Verbesselt, H Herrera-Cervantes, and JJ Bautista-Romero (2013). Recent trends in sea surface temperature off Mexico. Atmosfera 26(4), 537–546.
- 6. Tripp-Valdez, MA, C Bock, M Lucassen, S Lluch-cota, M Sicard, G Lannig, and H Pörtner (2017). Metabolic response and thermal tolerance of green abalone juveniles (Haliotis fulgens: Gastropoda) under acute hypoxia and hypercapnia. Journal of Experimental Marine Biology and Ecology 497(August), 11–18.
- 7. Tripp-Quezada, A, A Tripp-Valdez, MA Tripp-Valdez,, and N Capetillo (2018). Composición y estructura de la comunidad de moluscos de fondos blandos de la isla Santa Cruz, golfo de California, México Composition and community structure of soft bottom mollusks on Santa Cruz Island, Gulf of California, Mexico. Hidrobiológica 28(1), 51–59.
- 8. Tripp-Valdez, MA, C Bock, G Lannig, N Koschnick, H Pörtner, and M Lucassen (2019). Assessment of muscular energy metabolism and heat shock response of the green abalone Haliotis fulgens (Gastropoda: Philipi) at extreme temperatures combined with acute hypoxia and hypercapnia. Comparative Biochemistry and Physiology Part B: Biochemistry and Molecular Biology 227, 1–11.
- 9. Tripp-Valdez, MA, L Harms, H Pörtner, M Sicard, and M Lucassen (2019). De novo transcriptome assembly and gene expression profile of thermally challenged green abalone (Haliotis fulgens: Gastropoda) under acute hypoxia and hypercapnia. Marine Genomics. 45, 48–56.

10. **Tripp-Valdez, MA**, F Cicala, CE Galindo-Sánchez, KD Chacón-Ponce, E López-Landavery, F Díaz, D Re-Araujo and F Lafarga-De la Cruz (2020). Growth Performance and Transcriptomic Response of Warm-Acclimated Hybrid Abalone Haliotis rufescens (♀) × H. corrugata (♂). Marine Biotechnology. https://doi.org/10.1007/s10126-020-10002-7

# **Professional Experience**

#### RESEARCH

#### Centro de Investigaciones Biológicas del Noroeste, S.C.

RESEARCH TECHNICIAN Mar-07 - Aug-07

• I evaluatred the genetic population structure of a pelagic fish with economic importance in Mexico

#### Centro de Investigaciones Biológicas del Noroeste, S.C.

RESEARCH TECHNICIAN May-10 - Aug-10

· I evaluated the genetic variability in shrimp farms using microsatellite markers to begin a selection program

#### Centro de Investigaciones Biológicas del Noroeste, S.C.

RESEARCH ASSISTANT Feb-11 - Dec-12

- I Created a database from a collection of sea surface temperature loggers along the coasts of Baja California Sur. This resulted in a publication in a scientific journal
- I analyzed temporal series of sea surface temperature from public databases (NOAA) from the coast of Mexico to detect trends in temperature change and regime shifts. This resuled in a publication in a scientific journal
- I Created a project for the Barcode of Life Data System

#### Centro de Investigación Científica y de Educación Superior de Ensenada, B.C.

POSTDOCTORAL POSITION Sep-20 - Aug-20

• I performed a transcriptomic analysis of two hybrid lines of abalone (Haliotis) species to identify the differneces in thermal tolerance and growth

#### **TEACHING**

#### Escuela Normal Superior del Estado de Baja California Sur (Mathematics department)

Probability Feb-20 - Aug-20

#### Universidad Autónoma de Baja California Sur (Graduate department)

MOLECULAR BIOLOGY Aug-20 - Dec-20

#### Centro de Investigación Científica y de Educación Superior de Ensenada, B.C.

Physiology and omics sciences; principles applied in aquaculture

Jan-20 - Apr-20

#### Centro de Investigación Científica y de Educación Superior de Ensenada, B.C.

BIOSTATISTICS IN R

Apr-20 - Jul-20

### Centro de Investigación Científica y de Educación Superior de Ensenada, B.C.

Massive Sequencing Data Analysis

Apr-20 - Jul-20

#### Centro de Investigación Científica y de Educación Superior de Ensenada, B.C.

Ocean Acidification and its impacts on Marine Biodiversity

Aug-20 - Dec-20

## **Grants & Awards**.

#### **CONACYT scholarship (N° 12947)**

TO STUDY TOWARDS A M.S. DEGREE IN MEXICO 2007 - 2009

#### **Deutscher Akademischer Austauchdienst (DAAD)**

RESEARCH GRANT FOR DOCTORAL STUDIES IN GERMANY 2013 - 2017

#### **Helmholtz Graduate School for Polar and Marine Research**

Travel grant to participate in the CEMEB Advance course: "Marine Evolution Under Climate Change" in Sweden. 2014

#### The Company of Biologist Travel Grant

Travel grant to participate in the "Society for Experimental Biology 2016 Annual Meeting" in the UK 2016

#### Estancias Posdoctorales Vinculadas al Fortalecimiento de la Calidad del Posgrado Nacional

POSTDOCTORAL POSITION 2019 - 2021

# Meetings & Conferences \_\_\_\_\_

Aug-20	XI Congreso Nacional de Ictiología - Poster	La Paz, B.C.S., Mexico
Nov-20	XII Foro Nacional Sobre El Atún - Talk	Ensenada, B.C., Mexico
May-20	61th Annual Tuna Conference - Talk	Lake Arrowhead, US
Oct-20	Il Congreso Nacional de Investigación en Cambio Climático - Talk	La Paz, B.C.S., Mexico
Jul-20	Society for Experimental Biology 2016 Annual Meeting - Poster	Brighton, UK
Oct-20	Western Society for Naturalists 100th Annual Meeting - Poster	Ensenada, B.C., Mexico
Nov-20	VII Taller Nacional de Ecofisiología de Organismos Acuáticos - Talk	Ensenada, B.C., Mexico

# Workshops\_\_\_\_\_

May-11	IV curso Internacional: Microarreglos en Biotecnología - (10 hours)	Universidad Autónoma de Nuevo León
Aug-12 Dec-14	Ocean Teacher Academy Training Course - (40 hours)  CeMEB Advance course: Marine Evolution under Climate Change - (40 hours)	UNESCO/IOC University of Gothenburg
Aug-14	Introduction to the Dynamic Energy Budget Theory - (15 hours)	Université de Bretagne Occidentale/CIBNOR
Jul-16 Nov-16	Next-Generation Sequencing Data Analysis: A practical Introduction - (24 hours) How to publish in peer-reviewed journals - (38 hours)	EcSeq Germany Tress & Tress GbR
Apr-17	An Introduction to the omics sciences - (10 hours)	Université de Bretagne Occidentale/CIBNOR
Sep-19	Noncoding miRNA Massive Sequencing Data Analysis - (10 hours)	CICESE