



UNIVERSITÀ DEGLI STUDI DI MILANO

TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE 4712

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at **Dipartimento di Scienze e Politiche Ambientali**

Scientist- in - charge: Prof. Diego Rubolini

Marta Cruz Flores

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	Cruz Flores
Name	Marta
Date of birth	01/05/2020

PRESENT OCCUPATION

Appointment	Structure
External colaborator	University of Barcelona

EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree and specialization	Biology with specialization in Zoology. Five-year degree equivalent to BSc + MSc (detailed in the Diploma Supplement by the European Commission). Final average rating: 8.2/10.	Univ. Complutense of Madrid, Spain	2013
PhD in	Animal Biodiversity Thesis entitled "Life history of a long-lived, migratory species" Supervised by Jacob González-Solís and Raül Ramos. Animal Biodiversity program. <i>Cum laude / International mention</i>	Univ. of Barcelona, Spain	2020

1



UNIVERSITÀ DEGLI STUDI DI MILANO

Short Course	Statistics with R: linear models and extensions. 15 hours.	Imparted by Javier Seoane (Autonomous University of Madrid).	2019
Short Course	Modelling individual histories with state uncertainty. 36 hours.	Centre of Evolutionary and Functional Ecology (CEFE; CNRS), Montpellier, France.	2018
Short Course	Factorial designs and experiment analysis in natural sciences. 41 hours.	Imparted by Luis María Carrascal (National Museum of Natural Sciences).	2016
Short Course	Statistics applied to the biological sciences. 10 hours.	Imparted by Department of Animal Biology (University of Barcelona).	2016
Short Course	ESRI ArcGIS (ArcView) course. 20 hours.	Laboratori d'Informació Geogràfica I Teledetecció LIGIT; Autonomus University of Barcelona.	2015

REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date of registration	Association	Country
2007	Spanish Society of Ornithology (SEO/BirdLife) <ul style="list-style-type: none">Active volunteer in this organization since 2007Coordinator of the Seabird Working Group from November 2018 to presentBoard member from 15 November 2019 to present	Spain

FOREIGN LANGUAGES

Languages	level of knowledge
Spanish	Native
English	High (IELTS overall band score: 6,5. British Council, 2015)
French	High

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2015-2018	PhD Grant. At the Department of Evolutionary Biology Ecology and Environmental Sciences, University of Barcelona. Funded by University of Barcelona.



2013	Santander Universities SME Internship Programme. Funded by Santander Bank.
2012-13	Collaboration Grant. At the Department of Zoology and Physical Anthropology, University Complutense of Madrid. Funded by Ministerio de Educación, Cultura y Deporte, Spain.
2011	Junior Research Grant. At Spanish Council for Scientific Research. Funded by Ministerio de Ciencia e Innovación, Spain.
2020	Conference financial support (7 th Annual meeting of the Evolutionary Demography Society). Funded by the Centre for Biodiversity Dynamics, Norway. 600 NOK.
2018	Grant for participation in research training courses abroad. Funded by the University of Barcelona, Spain. 300€.
2017	Grant for training placement abroad. Funded by the University of Barcelona, Spain. 2,700 €.

TRAINING OR RESEARCH ACTIVITY

I have expertise in field data collection with seabirds: I coordinated and participated in four **research expeditions with seabirds** (6 months in total) in an uninhabited island of the Canarian archipelago. I monitored; banded; deployed GLS and GPS devices; sampled feathers, blood and ectoparasites; and measured morphometric data from Cory's shearwaters, Bulwer's petrels and storm petrels.

In addition, I have **analysed large spatial datasets** from light-level geolocators (GLS) and GPSs from different seabird species. Specifically, I have represented spatial data, calculated species distributions, analysed trip characteristics and tested different behavioural classification models. To carry this out, I have used **ArcGIS** and mainly **R software**, of which I have a vast knowledge. Part of the above-mentioned analyses have been already published in **peer-review journals** or in a monograph about the migration and spatial ecology of the Spanish population of Bulwer's petrel. This monograph has triggered >36 media contributions worldwide and Javier de la Puente, responsible for the Migration Program of SEO/BirdLife, noted about this work: "I want to thank you for all your work once again and congratulations on the Bulwer's petrel monograph".

Furthermore, I have **attended different courses** about statistics (performed through R software) and about the use of ArcGIS (see short courses in the EDUCATION AND TRAINING section). Additionally, I carried out a 3-months training with the Biostatistics and Population Biology team at the Centre of Evolutionary and Functional Ecology (CEFE; CNRS; Montpellier, France) to model capture-mark-recapture data, where I demonstrated my ability to move across countries, as well as to integrate into new teams.

PROJECT ACTIVITY

Year	Project
2017-2018	Researcher of the project "Evaluación de la RAMPE para la conservación de las aves marinas en el levante español". Programa Pleamar. Main researcher: Raül Ramos. Applicant entity:



	University of Barcelona. Duration: 1 year. Funding entity: Ministerio de Agricultura y Pesca, Alimentación y Medio Ambiente. Amount: 152,834€.
2016-2019	Researcher of the project “Las aves marinas como un elemento para la gestión dinámica de espacios protegidos y pesquerías”. Reference: CGL2016-78530-R. Main researcher: Jacob González-Solís. Applicant entity: University of Barcelona. Duration: 3 years. Funding entity: Ministerio de Economía y Competitividad. Amount: 169,400€.
2014-2015	Researcher of the project “Centinelas del mar: seguimiento remoto de las aves marinas aplicado a la gestión adaptativa en la Red de Parques Nacionales”. Reference: 1248/2014. Main researcher: Jacob González-Solís. Applicant entity: University of Barcelona. Duration: 2 years. Funding entity: Ministerio de Agricultura, Alimentación y Medio Ambiente. Amount: 71,875€.
2013-2017	Researcher of the project “Interacciones estacionales y efectos acumulados en aves marinas migratorias”. Reference: CGL2013-42585-P. Main researcher: Jacob González-Solís. Applicant entity: University of Barcelona. Duration: 3 years. Funding entity: Ministerio de Economía y Competitividad. Amount: 135,000€.

PATENTS

Patent
-

CONGRESSES AND SEMINARS

Date	Title	Place
October 2020	Cruz-Flores, M. , R. Pradel, J. Bried, T. Militão, L. Zango, J. González-Solís & R. Ramos. Does climate change also affect survival of tropical species? Predictions from populations of Bulwer's petrel across the Atlantic Ocean.	7 th Annual meeting of the Evolutionary Demography Society. Online.
May 2020	Invited to give the seminar “ <i>The Chinijo archipelago through the study of seabirds.</i> ”	Online. Organized by WWF Spain.
November 2019	Cruz-Flores, M. , R. Pradel, J. Bried, T. Militão, L. Zango, J. González-Solís & R. Ramos. <i>El efecto de la temperatura del mar sobre la supervivencia de un ave marina oceánica a lo largo de su distribución atlántica.</i>	VII Congreso Ibérico y XXIV Español de Ornitología. Cádiz, Spain.
October 2017.	Cruz-Flores M. , R. Ramos, M. Sardà, C. Soria & J. González-Solís. <i>Estrategias de alimentación del petrel de Bulwer durante la cría mediante el seguimiento remoto y el análisis de isótopos estables.</i>	XXIII Congreso Español de Ornitología. El futuro de las aves comunes. Badajoz, Spain.
September 2016	Cruz-Flores M. , T. Militão, R. Ramos & J. González-Solís. <i>Isotopic tools to infer non-breeding areas in tropical seabirds: the case of Bulwer's petrel (<i>Bulweria bulwerii</i>).</i>	6 th International Albatross and Petrel Conference. Barcelona, Spain.



April 2016.	Cruz-Flores M. , T. Militão, R. Ramos & J. González-Solís. <i>Herramientas isotópicas para evaluar las estrategias migratorias en predadores apicales oceánicos: el caso del petrel de Bulwer (<i>Bulweria bulwerii</i>)</i> .	IX Congresso de Ornitología da SPEA, VI Congresso Ibérico de Ornitologia. Vila Real, Portugal.
Coauthor of 8 oral communications at the national and international level		

PUBLICATIONS

Books

Cruz-Flores M., R. Ramos, M. Sardá-Serra, S. López-Souto, T. Militão & J. González-Solís. 2019. Migration and spatial ecology of the Spanish population of Bulwer's petrel (Migración y ecología espacial de la población española de petrel de Bulwer). Monografía nº 4 of Migra program. SEO/BirdLife. Madrid. <https://doi.org/10.31170/0070>.

Peer-reviewed articles

Ramos R., V. Morera-Pujol, **M. Cruz-Flores**, S. López-Souto & J. González-Solís. 2019. Geolocator tagged fledgling provides first evidence on juvenile Atlantic movements of Cory's shearwater *Calonectris borealis*. **Bird Study**. <https://doi.org/10.1080/00063657.2019.163834>.

Cruz-Flores M., T. Militão, R. Ramos & J. González-Solís. 2018. Using marine isoscapes to infer movements of oceanic migrants: The case of Bulwer's petrel, *Bulweria bulwerii*, in the Atlantic Ocean. **PLoS ONE**. 13(6): e0198667. <https://doi.org/10.1371/journal.pone.0198667>.

Articles under review

Morera-Pujol V., C. Péron, P. Catry, [et al, including **M. Cruz-Flores**]. Detecting recurrent sources of variability in animal tracking studies. Resubmitted to Methods in Ecology and Evolution on 7 August 2020. Marta's contribution: data collection, writing review and edit.

Halpin L. R., J. D. Ross, R. Ramos, [et al, including **M. Cruz-Flores**]. Spatial accuracy of light-level geolocation of seabirds is lower than previously thought and highly variable. Resubmitted to Methods in Ecology and Evolution on 15 August 2020. Marta's contribution: data collection, writing review and edit.

Beal, M., M. Dias, S. Oppel, [et al, including **M. Cruz-Flores**]. Global political responsibility for the conservation of albatrosses and large petrels. Submitted to Science Advances on 21 June 2020. Marta's contribution: data collection, writing review and edit.

Davies, T., A. P. B. Carneiro, M. Dias, [et al, including **M. Cruz-Flores**]. A new seabird diversity hotspot in the North Atlantic. Submitted to Conservation Letters on 5 August 2020. Marta's contribution: data collection, writing review and edit.

Congress proceedings



OTHER INFORMATION

Round-tables and workshops:

- Invited as seabird expert to a **round-table** about the role of seabirds in the oceans as indicators of climate change, at the United Nations Climate Change Conference (COP25). Organized by SEO/BirdLife. Madrid (Spain), 6 December 2019.
- Invited as seabird expert to a **workshop** to review and evaluate the efficiency of the Marine Natura 2000 network in Spain, under the project LIFE IP INTEMARES. Coordinated by The Ministry for the Ecological Transition (MITECO; through Biodiversity Foundation), Spanish Institute of Oceanography, Spanish Fishing Confederation, SEO/BirdLife and WWF Spain. Madrid (Spain), 7 November 2019.

Co-direction/supervision of students:

- 2015/2016. MSc thesis in Biodiversity. Student: Ricard Marcos. Co-supervised with Prof. Raül Ramos.
- 2016/2017. Degree thesis in Biology. Student: Mariona Sardà. Co-supervised with Prof. Jacob González-Solís.
- 2017/2018. Degree thesis in Biology. Student: Daniel Bragg. Co-supervised with Prof. Jacob González-Solís.

Teaching as a professor at field trips and practices (92 hours):

- Degree in Biology: subjects of Zoology and Biogeography.
- Degree in Environmental Sciences: Fauna Management and Biodiversity Conservation.
- Master in Biodiversity: Biodiversity at the Macroscale

Service as reviewer:

- "Ardeola: International Journal of Ornithology" (1 article).

Organization of scientific meetings:

- Member of the **scientific committee** of the "2n Congrés d'Ornitologia de les Terres de Parla Catalana". Menorca, Spain. 2020.
- Member of the **organizing committee** of the "6th International Albatross and Petrel Conference". Barcelona, Spain. 2016.

Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Place and date: Montpellier, 05/10/2020

SIGNATURE