



TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE 4418

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. Roberto Ambrosini _____

[Raquel Ponti de la Iglesia]

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	Ponti de la Iglesia
Name	Raquel
Date of birth	[03, 08, 1989]

PRESENT OCCUPATION

Appointment	Structure
Postdoc	Museo Nacional de Ciencias Naturales (CSIC)

EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree	Biology (3 years)	University of the Basque Country	2010
Specialization	Biology (2 years)	University Autonoma of Madrid	2012
PhD	Biodiversity	University of Barcelona	2018
Master	Evolutionary Biology	University Complutense of Madrid	2013
Degree of medical specialization			
Degree of European specialization			
Other			



REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date registration	of	Association	City

FOREIGN LANGUAGES

Languages	level of knowledge
Italian	Mother tongue
Spanish	Mother tongue
English	Advanced
Portuguese	Basic
Basque	Basic

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2019	Best oral contribution in III Jornadas del Museo Nacional de Ciencias Naturales.
2018	Gans Collections and Charitable Fund. Grant for conference Lizards of the Mediterranean Symposium: 2018: June 18-21., Tel Aviv, Israel. Fund received: 600 Euros
2015-2016	Short stage fellowship PhD fellowship from the Spanish Ministry of Education. Ayudas complementarias para beneficiarios de ayudas (FPU): Estancias Breves 2015. Ministry of Education (Spain). Fund received: 3000 Euros
2014-2015	Short stage fellowship PhD fellowship from the Spanish Ministry of Education. Ayudas complementarias para beneficiarios de ayudas (FPU): Estancias Breves 2014. Ministry of Education (Spain). Fund received: 3.512 Euros
2014-2018	PhD fellowship from the Spanish Ministry of Education. Beca de Formación de Profesorado Universitario (FPU2013), Ministry of Education (Spain). Fund received: 54.864 Euros
2011-2012	Collaboration fellowship. Universidad Autónoma de Madrid. Ministry of Education (Spain). Fund received: 2.700 Euros

TRAINING OR RESEARCH ACTIVITY

In my PhD Thesis I followed an integrative approach to study the evolution of bird migration as well as its historical drivers, combining both phylogenetic comparative methods, present and paleodistribution modelling and niche analyses. I focused on Sylvia warblers as a study group with migratory and non-migratory species, to reconstruct the origin of their migratory behaviour, and the role that mainly productivity historically played and plays in shaping their distribution and phenology. I also followed a macroecological approach, using all migratory birds from the Euro-African flyways, involving distribution modelling and an analysis of the fossil record, to investigate how migratory behaviour may have been affected during periods of past climate change. Hence, I am familiar with the methods and approaches that you request for the position.



During my PhD, I acquired experience in GIS and several approaches to study ecological niches and numerical ecology using R. I have experience modelling past and present species distributions with R.

I have strong background in statistics using R.

I am familiar with ensemble modelling and hypothesis testing, as well as with methods to explore environmental niche dimensions between species as well as within species.

I developed some skills in phylogenetic analyses and comparative methods, as the reconstruction of phylogenetic relationships and diversification times, as well as ancestral state reconstruction of characters. I also collaborated in works related with the diversification of shorebirds in the arctic zone during the Quaternary, using methodologies as ABC used to infer the phylogeography and timing of diversification events between lineages.

I also have field experience with lizards as well as performing behavioural experiments with them.

EXTRA ACADEMIC EDUCATION

Course title: Escritura de textos científicos/Writing scientific texts

Place: Museo Nacional de Ciencias Naturales, Madrid, España

Duration: 15h

Date: May 2019

Accreditation obtained: Diploma

Course title: Algorithms for DNA sequencing

Place: Coursera

Duration: 21h

Date: February 2019

Accreditation obtained: Diploma

Course title: Python for Genomic Data Science

Place: Coursera, online

Duration: 12h

Date: January 2019

Accreditation obtained: Diploma

Course title: Genomic Data Science with Galaxy

Place: Coursera, online

Duration: 11h

Date: January 2019

Accreditation obtained: Diploma

Course title: Introduction to genomic technologies

Place: Coursera, online



Duration: 8h

Date: December 2018

Accreditation obtained: Diploma

Course title: ACCESS 2010

Place: Gabinete Formación CSIC, Online

Duration: 40h

Date: 15 October -19 November 2018

Accreditation obtained: Diploma

Course title: PHOTOSHOP CS5

Place: Gabinete Formación CSIC, Online

Duration: 50h

Date: 10 September-22 October 2018

Accreditation obtained: Diploma

Course title: Inglés específico: meetings online (nivel intermedio y avanzado)

Place: Gabinete Formación CSIC, Online

Duration: 30h

Date: 2-27 October 2017

Accreditation obtained: Diploma

Course title: Advanced course: Measuring and mapping evolutionary diversity for conservation planning

Place: CIBIO-InBIO, Vairão, Portugal

Duration: 24h

Date: 8-11 May 2017

Accreditation obtained: Diploma

Course title: Métodos de ordenación para analizar datos multivariados en ecología y biología de la conservación

Place: Museo Nacional de Ciencias Naturales, Madrid, España

Duration: 40h

Date: 3 - 8 October 2016

Accreditation obtained: Diploma

Course title: XI Taller GBIF de Modelización de Nichos Ecológicos

Place: Jardín Botánico, Madrid, España

Duration: 24h



Date: 24 - 27 February 2015

Accreditation obtained: Diploma

Course title: Introducción al modelado y simulación de autómatas celulares (Celldevs)

Place: Museo Nacional de Ciencias Naturales, Madrid, España

Duration: 15h

Date: 24 - 28 March 2014

Accreditation obtained: Diploma

Course title: Conceptos, métodos y praxis en técnicas de regresión. Aplicación a las ciencias naturales

Place: Museo Nacional de Ciencias Naturales, Madrid, España

Duration: 25h

Date: 24 February - 7 March 2014

Accreditation obtained: Diploma

Course title: SEB's 2013 Bioscience Futures Workshop Publishing Your Research I

Place: Charles Darwin House, London, England

Duration: 8h

Date: 5 November 2013

Accreditation obtained: Diploma

TEACHING ACTIVITY

Course/subject: Degree in Biology/Biogeography/Field practices

Department / center: Department of Animal Biology / University of Barcelona

Duration:16

Dates: From 6/April/2018 to 13/April/2018

Course/subject: Degree in Environmental Sciences / Fauna Management / Field practices

Department / center: Department of Animal Biology / University of Barcelona

Duration:16

Dates: From 27/October/2017 to 3/November/2017

Course/subject: Degree in Biology/Biogeography/Field practices

Department / center: Department of Animal Biology / University of Barcelona

Duration:14

Dates: From 7/April/2017 to 28/April/2017



<p>Course/subject: Degree in Environmental Sciences / Animal Biology / Field practices Department / center: Department of Animal Biology / University of Barcelona Duration:14 Dates: From 29/November/2016 to 02/December/2016</p>
<p>Course/subject: Degree in Environmental Sciences / Fauna Management / Field practices Department / center: Department of Animal Biology / University of Barcelona Duration:8 Dates: From 28/October/2016 to 28/October/2016</p>
<p>Course/subject: Master in Biodiversity / Biodiversity in the function and services of ecosystems / Field practices. Department / center: Department of Animal Biology / University of Barcelona Duration:6 Dates: From April/2016 to April/2016</p>
<p>Course/subject: Degree in Biology/Biogeography/Field practices Department / center: Department of Animal Biology / University of Barcelona Duration:14 Dates: From April/2016 to April/2016</p>
<p>Course/subject: Degree in Environmental Sciences / Animal Biology / Field practices Department / center: Department of Animal Biology / University of Barcelona Duration: 14 Dates: From November/2015 to November/2015</p>

PROJECT ACTIVITY

Year	Project
2017-2020	<p>“Genomic basis of the evolution of defense by alkaloids and aposematism in mantelids” Bases genómicas de la evolución de la defensa por alcaloides y aposematismo en mantelidos [CGL2017-83170-R]</p> <p>Center of application: Museo Nacional de Ciencias Naturales (CSIC) Funded: Ministerio de Ciencia, Innovación y Universidades. Spain Head researcher: David Vieites Rodríguez</p>

PATENTS



Patent

CONGRESSES AND SEMINARS

Date	Title	Place
13/11/2019- 17/11/2019	Lack of evidence of a Pleistocene migratory switch in current bird long-distance migrants between Eurasia and Africa.	Congress/Workshop: VII Congreso ibérico de Ornitología y XXIV Congreso Español de Ornitología Organizer: SEO-Birdlife, Cádiz (Spain)
25/02/2019	Lack of evidence of a Pleistocene migratory switch in current bird long-distance migrants between Eurasia and Africa.	Congress/Workshop: III Jornadas del Museo Nacional de Ciencias Naturales. Organizer: Museo Nacional de Ciencias Naturales, MNCN (Madrid, Spain)
01/10/18- 05/10/18	Waitin' on a sunny day: lizards pay steep thermal costs to hide from predators	Congress/Workshop: XII Congresso Nazionale SOCIETAS HERPETOLOGICA ITALICA SHI y Università della Calabria. : Rende, Cosenza (Italia)
03/09/18- 05/09/18	The effects of past and current climate changes in the migration, diversity and conservation of arctic shorebirds	Congress/Workshop: 3rd International Congress on Bird Migration and Global Change. Adapting to a changing Word. Organizer: Fundación Migres: Tarifa (España)
03/09/18- 05/09/18	Seasonal climatic niches diverge in migratory birds	Congress/Workshop: 3rd International Congress on Bird Migration and Global Change. Adapting to a changing Word. Organizer: Fundación Migres: Tarifa (Spain)
18/06/18- 21/06/18	Waitin' on a sunny day: lizards pay steep thermal costs to hide from predators	Congress/Workshop: 10th SYMPOSIUM ON THE LACERTIDS OF THE MEDITERRANEAN BASIN AND 2nd SYMPOSIUM ON MEDITERRANEAN LIZARDS Organizer: Steinhardt Museum for Natural History, Tel Aviv (Israel)
22/01/2018	Seasonal climatic niches diverge in migratory birds.	Congress/Workshop: III Jornadas de departamento de Biogeografía y Cambio Global. Organizer: Museo Nacional de Ciencias Naturales, MNCN (Madrid)
03/10/17- 05/10/17	Efectos del clima en la evolución y conservación de las limícolas árticas: una mirada hacia el pasado y el futuro.	Congress/Workshop: XXIII CONGRESO ESPAÑOL DE ORNITOLOGÍA Organizer: SEO - BirdLife, Badajoz (Spain)



28/08/17- 31/08/17	Productivity as the main driver of bird migratory behaviour at different evolutionary scales.	Congress/Workshop: 7° Congresso della Società Italiana di Biologia Evoluzionistica Organizer: SIBE, Università degli studi di Roma Tre, Università La Sapienza, Università di Roma Tor Vergata, Roma (Italia)
18/01/16- 21/01/16	Patrones de diversificación de limícolas árticas: ¿Existe una relación con la dinámica de glaciaciones durante el Pleistoceno?	Congress/Workshop: V CONGRESO DE LA SOCIEDAD ESPAÑOLA DE BIOLOGÍA EVOLUTIVA Organizer: SESBE, Murcia (Spain)
December 2015	Evolución de la migración y diversificación en aves del hemisferio Norte	Congress/Workshop: Invited conference Organizer: Universidad Complutense de Madrid, Madrid (Spain)
06/12/14- 09/12/14	The role of climatic, morphological and geographic factors in the evolution of migratory behaviour in Sylvia warblers	Congress/Workshop: XXII Congreso Español de Ornitología (SEO) Organizer: SEO/Birdlife, Madrid (España)
06/12/14- 09/12/14	Patrones y procesos de diversificación incipiente en limícolas árticas	Congress/Workshop: XXII Congreso Español de Ornitología (SEO) Organizer: SEO/Birdlife, Madrid (España)
06/12/14- 09/12/14	Comparative analysis of ancestral state reconstruction methods shows lack of congruence between methods	Congress/Workshop: XXII Congreso Español de Ornitología (SEO) Organizer: SEO/Birdlife, Madrid (España)
11/11/14- 15/11/14	Comparative analysis of ancestral state reconstruction methods shows lack of congruence between methods	Congress/Workshop: Modern Phylogenetic Comparative Methods and their Application in Evolutionary Biology Organizer: Ministerio de Educación, Cultura y Deporte, CSIC, Estación Biológica de Doñana y Universidad de Sevilla, Sevilla (Spain)
15- 16/12/2014	Comparative analysis of ancestral state reconstruction methods shows lack of congruence between methods	Congress/Workshop: II Jornadas de departamento de Biogeografía y Cambio Global. Organizer: Museo Nacional de Ciencias Naturales, MNCN (Madrid)
04/09/13- 07/09/13	Factores climáticos en la evolución de la migración en aves migratorias Euro-Africanas	Congress/Workshop: XX Bienal de la Real Sociedad Española de Historia Natural Organizer: Ministerio de Economía y Competitividad, Instituto Geológico y Minero de España, Madrid (Spain)
04/09/13- 07/09/13	Influencia del clima en la distribución y migración de las aves limícolas (Orden: Charadriiformes)	Congress/Workshop: XX Bienal de la Real Sociedad Española de Historia Natural Organizer: Ministerio de Economía y Competitividad, Instituto Geológico y Minero de España, Madrid (Spain)

PUBLICATIONS

Books



[title, place, publishing house, year ...]

[title, place, publishing house, year ...]

[title, place, publishing house, year ...]

Articles in reviews

Peso-Fernández, M., **Ponti de la Iglesia, R.**, Ponz Segrelles, G., González Martínez, R., Arcones Segovia, A., & Vieites, D. R. (2016). The complete mitochondrial genome of the Endangered European brown frog *Rana pyrenaica* through RNAseq. *Mitochondrial DNA Part B*, 1(1), 394-396. <https://doi.org/10.1080/23802359.2016.1174087>

Ponti, R., Arcones, A., Ferrer, X., & Vieites, D. R. (2018). Productivity as the main factor correlating with migratory behaviour in the evolutionary history of warblers. *Journal of Zoology*, 306(3), 197-206. <https://doi.org/10.1111/jzo.12598>

Sannolo, M., **Ponti, R.** & Carretero, M. A. (2019) Waitin' on a sunny day: lizards pay steep thermal costs to hide from predators. *Journal of Thermal Biology*, 84, 146-153. <https://doi.org/10.1016/j.jtherbio.2019.07.001>

Ponti, R., Arcones, A., Vieites, D. & Ferrer, X (2019). Origen de la migració dels ocells. Patrons migratològics de Catalunya. *L'Atzavara*, 29, 45-55. ISSN electrònic: 2339-9791

Ponti, R., Arcones, A., Ferrer, X., & Vieites, D. R. (2019) Seasonal climatic niches diverge in migratory birds. *Ibis*. Early view. <https://doi.org/10.1111/ibi.12784>

Ponti, R., Arcones, A & Vieites, D. (2019) Challenges in estimating ancestral state reconstructions: the evolution of migration in *Sylvia* warblers as a study case. *Integrative Zoology*. ACCEPTED <https://doi.org/10.1111/1749-4877.12418>

Arcones, A, **Ponti, R.**, & Vieites, D. (2019) Mitochondrial substitution rates estimation for molecular clock analyses in modern birds based on full mitochondrial genomes. *BioRxiv*. Preprint <https://doi.org/10.1101/855833>

Ponti, R., Arcones, A., Ferrer, X., & Vieites, D. R. Lack of evidence of a Pleistocene migratory switch in current bird long-distance migrants between Eurasia and Africa. *Journal of Biogeography*. UNDER REVIEW

Arcones, A., **Ponti, R.**, Ferrer, X., & Vieites, D. R. Pleistocene glacial cycles as drivers of allopatric differentiation in Arctic shorebirds. *Journal of Biogeography*. UNDER REVIEW

Congress proceedings

[title, structure, place, year]

[title, structure, place, year]

[title, structure, place, year]



OTHER INFORMATION

INTERNATIONAL STAGES

1. Project title: Biometric and molecular study of the two subspecies of *Sylvia borin*

Centre: CMEC- Center for Macroecology, Evolution and Climate

Location: Copenhagen Country: Denmark

Start date: 05/19/2016 End date: 07/18/2016

Agency that has financed the stay (if applicable): EEBB2015 Short stay assistance from the Ministerio de Educación, Cultura y Deporte (2015) (Spain)

2. Project title: Use of molecular methodologies for phylogenetic study

Centre: InBIO-CIBIO

Location: Vairão-Oporto Country: Portugal

Start date: 04/01/2015 End date: 07/02/2015

Agency that has financed the stay (if applicable): EEBB2015 Short stay assistance from the Ministerio de Educación, Cultura y Deporte (2014) (Spain)

EXPERIENCE ORGANIZING I+D ACTIVITIES

1. Title: Co-organizer of III Jornadas de Departamento de Biogeografía y Cambio Global en el Museo Nacional de Ciencias Naturales (MNCN)

Activity: Scientific day of the Department Scope: Scientific-Divulgative

Date: 22 / January / 2018

2. Title: Co-organizer of II Jornadas de Departamento de Biogeografía y Cambio Global en el Museo Nacional de Ciencias Naturales (MNCN), Spain

Activity: Scientific day of the Department Scope: Scientific- Divulgative

Date: 15-16 / December / 2014

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: _____Madrid_____, _____29/11/2019_____

SIGNATURE