

# Ana Payo-Payo

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## Education and Research Experiences

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- 2013 - 17** **Ph.D.** in Biodiversity, University of Barcelona, Spain.  
Effects of environmental variability and perturbations on the demography of marine top predators. Mediterranean Institute of Advanced Research-National Research Council (IMEDEA-CSIC), Spain. Supervisor: D Oro.
- 2011-13** **Postgraduate Training Fellowship JAE-TEC.** Database management and curacy of natural history collections. National Museum of Natural History- National Research Council (MNCN-CSIC), Madrid, Spain. Supervisor: ML Peñacoba & I Doadrio.
- 2010 - 11** **M.Sc.** in Biodiversity Management and Conservation. University of Barcelona, Spain.
- 2010** **Project Coordinator.** Coordinator of the sea turtle project in a remote location on the Caribbean coast of Costa Rica.
- 2004 - 10** **B.Sc.** in Oceanography and **B.Sc.** in Environmental Sciences, University of Cádiz.  
Graduated with honors and the Academic Excellence Award. Top of class.

## Scientific Publications

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Seven articles in well ranked, peer review international journals, five as first author. Four articles in prep for submission this year. 19 citations, h-index 3.

- **A Payo-Payo**, M Genovart, A Sanz-Aguilar, J Greño, M Garcia-Tarason, A Bertolero, J Piccardo, D Oro. (2017) Colonisation in social species: the importance of breeding experience for dispersal in overcoming information barriers. *Scientific Reports* 7: 42866
- **A Payo-Payo**, M Genovart, A Bertolero, R Pradel, D Oro (2016). Consecutive cohort effects driven by density-dependence and climate influence early-life survival in a long-lived bird. *Proceedings of the Royal Society of Biology B* 283: 20153042.
- **A Payo-Payo**, JM Lobo (2016). The unpredictable characteristics of the localities where new Iberian species will be discovered. *Diversity and Distributions* 22 (1), 73-82.
- **A Payo-Payo**, D Oro, JM Igual, L Jover, C Sanpera, G Tavecchia (2015). Population control of an overabundant species achieved through consecutive anthropogenic perturbations. *Ecological Applications* 25 (8), 2228-22391.

- EC Steigerwald, JM Igual, **A Payo-Payo**, G Tavecchia (2015). Effects of decreased anthropogenic food availability on an opportunistic gull: evidence for a size-mediated response in breeding females. *Ibis* 157 (3), 439-4484.
- J Sánchez-Almazán, P Álvarez-Campos, **A Payo-Payo**, F Yagüe-Sánchez, B Calvo-Revuelta (2015). Catálogo de tipos de la colección de poliquetos del museo nacional de ciencias naturales. CSIC Ed. ISBN: 978-84-00-09950-3.
- **A Payo-Payo**, B Ruiz, L Cardona, A Borrell (2013). Effect of tissue decomposition on stable isotope signatures of striped dolphins *Stenella coeruleoalba* and loggerhead sea turtles *Caretta caretta*. *Aquatic Biology* 18 (2), 141-1476.
- K Yates, **A Payo Payo**, D Schoeman (2013). International, regional and national commitments meet local implementation: A case study of marine conservation in Northern Ireland. *Marine policy* 38, 140-150.

#### In preparation

- **A Payo-Payo**, A Sanz-Aguilar, M Genovart, A Bertolero, J Piccardo, D Camps, J Ruiz, D Oro. Can non-lethal effects of perturbations drive population dynamics? Presence of invasive predators on seabird colonies as a case study. **In prep for: PRSB**
- **A Payo-Payo**, E Real, JM Igual, D Oro, G Tavecchia. Termination of PAFS drives ecological synchronization of marine top predators. **In prep.**
- **A Payo-Payo**, A Sanz-Aguilar, D Gaglio, RB Sherley, TR Cook, R Altwegg, PG Ryan. Survival estimates and 34 years old resight of Greater Crested Terns (*Thalasseus bergii bergii*) in southern Africa. **In prep.**
- **A Payo-Payo**, A Sanz-Aguilar, M Connan, D Danckwerts, P Whittington, R Altwegg, PG Ryan. Age-dependent survival estimates of Roseate Terns (*Sterna dougallii*) in southern Africa. **In prep**
- AB Gill, S Birchenough, A Jones, A Judd, S Jude, **A Payo-Payo** and B Wilson. Environmental implications of offshore energy. Chapter in Marine Spatial Planning. K Yates Editors. **In prep**

#### Conferences

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- **A Payo-Payo**, JM Igual, D Oro, G Tavecchia. (2016) Termination of PAFS drives ecological synchronization of marine top predators. **II International Albatross and Petrel Conference**. September 19-23, Barcelona, Spain.

- **A Payo-Payo**, M Genovart, A Sanz-Aguilar, J Greño, M Garcia-Tarason, A Bertolero, J Piccardo, D Oro (2016). Colonization in social species: the role of breeding experience in overcoming information barriers. **World Seabird Union Twitter Conference**. April 13-14.
- **A Payo-Payo**, M Genovart, A Bertolero, R Pradel, D Oro (2015). Early life conditions influence juvenile survival variability on two long-lived bird species. **XI Ecology and Behaviour Conference**. May 18-21 Toulouse, France.
- **A Payo-Payo**, M Genovart, JM Arcos, Álvarez, M McMinn, Wynn, Guildford, D Oro (2015). Demography of the critically endangered Balearic shearwater: impacts of fisheries and time to extinction. **2<sup>nd</sup> World Seabird Conference**, October 26-30, Cape Town, South Africa.
- **A Payo-Payo**, M Genovart, A Bertolero, R Pradel, D Oro (2015). Prey availability strikes first year survival: Cohort effect as a source of survival variability on a long-lived seabird species. **2<sup>nd</sup> World Seabird Conference**, October 26-30, Cape Town, South Africa.
- **A Payo-Payo**, D Oro, JM Igual, L Jover, C Sanpera, G Tavecchia (2014). Population control of an overabundant species achieved through consecutive anthropogenic perturbations. **XXI Spanish Congress of Ornithology**. SeoBirdlife. December 5-8, Madrid, Spain.

### Continuous professional development

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- Modelling species distribution with MARXAN (2011) Royal Botanic Garden Spain CSIC, Spain.
- Modelling of individual histories with state uncertainty (2014) CEFE, Montpellier, France.
- Matrix population models for population conservation and management (2014) CEFE, Montpellier, France.
- Introduction to capture-recapture-recovery analyses (2013). IMEDEA-CSIC-UIB. Esporles, Spain.
- Feb-May 2014. **Centre d'Ecologie Fonctionnelle et Evolutive**, Montpellier, France. Supervisor: **R Pradel**. Skills obtained: Multisite capture-recapture-recovery analyses training.
- Oct-Nov 2014. **Centre d'Ecologie Fonctionnelle et Evolutive**, Montpellier, France. Supervisor: **R Pradel**. Skills obtained: Multisite capture-recapture-recovery analyses training.
- Jull-Aug 2016. **Percy FitzPatrick Institute of African Ornithology**, Cape Town, South Africa. Supervisor: **PG Ryan and R Altwegg**. Skills obtained: Multievent capture-recapture-recovery analyses, population matrix modelling, state-space modelling.

## Reviewer for

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Proceedings of the Royal Society of Biology B (PRSB), IBIS, Plos One, Animal Biodiversity and Conservation, PeerJ, Aquatic Biology, Herpetologica and Coastal, Estuarine and Shelf Science.

## Funding

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- FPU research visit Award Fund (2016) — Studentship award including funding tuition, subsistence, travel and research project costs at a foreign institution for 2 months.
- FPU Award Fund (2013-17) — Complete PhD studentship award including funding tuition, subsistence and research project costs.
- Postgraduate Training Fellowship JAE-TEC (2011-2013)
- Iberdrola Energy and Environment Award Fund (2010) — Complete studentship award funding tuition, subsistence and research project costs.
- Bancaja Award Fund (2009) — Complete studentship award funding tuition, subsistence costs at Universidad Autonoma Baja California (México).
- Government Award Fund (2009) Complete 3 week studentship award funding tuition, subsistence costs at a English speaking country for English learning.
- Erasmus Award Fund (2007) — Complete studentship award funding tuition, subsistence costs at Kingston University (UK).
- Research assistant Award (2006-2009) Cádiz University (Spain)
- New World Expedition Award (2002)

## Teaching experience

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### ***Teaching assistant at the University of Barcelona (2015-2017)***

- B.Sc. Course of Foundations of Biology I
- B.Sc. Course of Foundations of Biology II
- B.Sc. Course of Marine Invertebrates

Over 60 contact hours, plus preparation.

## **Online teaching**

Online tutor, design and online feedback of Massive Open Online Course (MOOC) LocosXciencia-ScholarTIC, available [here](#).

## **Skills**

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Languages:

Spanish (native) — English (fluent) — Catalan (fluent) — French (intermediate) — R (fluent) — LaTeX (fluent)

Analytical skills:

Handling of large datasets – Proficiency with multiple statistical methods: ANOVA, simple and multiple linear regressions, mixed-effects modelling, multistate capture-recapture modelling, multievent capture-recapture modelling, state-space models, population matrix models and stable isotopes analyses.

## **Software**

R, LaTeX, U-CARE, E-SURGE, M-SURGE, Marxan, MARK, RMARK, RGIS, SURFER, GRAPHER, OCEAN DATA.

## **Fieldwork experience**

Capture-mark-recapture technics, population density estimation, geolocators deployment, PIT tagging, biometric measurements, blood sampling, feather sampling, breeding monitoring. Previous experience with the following species: *Larus michahellis*, *Larus audouinii*, *Calonectris diomedea*, *Hydrobates pelagicus*, *Podarcis sp*, *Dermochelys coriacea*, *Eritmochelys imbricata*, *Chelonia mydas*, *Lepidochelys kempii*, *Lepidochelys olivacea* and *Caretta caretta*.

## **Event organization**

Planning and co-ordination of institutional PhD students weekly seminars, annual science communication and writing in science workshops.

## Science Communication

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I believe that addressing the challenge of engaging people in science has never been more urgent in order to avoid loss of scientific talent and to ensure future innovation capability, excellence and competitiveness. During the last two years I have devoted much of my time to better communicating my (and others) scientific research to the general community. To do so I have voluntarily worked in 3 different associations (Escola natura, JOIN-UIB and Big Van) and followed 2 complementary strategies: first, engaging people with science and second providing scientists with the tools to transfer scientific knowledge.

- Escola Natura (environmental education non-profit organization): I have organized several workshops, talks, field trips aiming to engage the public and particularly local population with their natural environment.
- JOIN-UIB (PhD students association): I have coordinated several Science communication workshops for young and senior researchers. Moreover, I have helped organizing two editions of the Science communication festival in my local town.
- Big Van (scientific outreach non-profit organization): We use innovative science education methods based on performing arts to foster peoples' motivations and engagement with science. During the last 2 years, we have reached more than 100.000 people performing scientific stand up solos in schools, high schools, libraries, universities, prisons, theatres and pubs. Personally, I have organized and performed in more than 100 scientific communication events, including science communication workshops, talks and stand up solo shows.

Moreover I was awarded with:

- **Runner up FAMELAB 2014** Spain. FECYT-BRITISH COUNCIL. **FAMELAB** is a science communications competition. Contestants have just **3 minutes** to convey a scientific concept of their choice. They are judged by leading researchers, media personalities and science policy makers on the content, clarity and charisma of their presentation.
- **Runner up I Science Slam** Mallorca. JOIN-UIB Universidad de Islas Baleares. **Science Slam** is a science communications competition. Contest dynamics are similar to FAMELAB's but contestants have **7 minutes** for their presentation.
- **Runner up Scientific stand-up solos contest AQUAE Trust.** Contestants have **3 minutes** to convey a scientific concept related to water.

## Other Courses & Certifications

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Full driving licence B+A (2004).

Leisure and tourism leadership certification (2004).

Aquatic and terrestrial lifeguarding and first aid certification (2016).

Cetaceous and sea turtles first aid certification (2016).

Advance PADI diving (2010).

Recreational skipper certification, 250 h (2010)

Introduction to Occupational Risks Prevention, 20 h, (2012).

Basics of Occupational Risks Prevention, 50 h (2012).

Introduction to Matlab, 20h (2012).

## References

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### Dr. Daniel Oro

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Spanish National Research Council (CSIC)  
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