Education

2013–2019 **PhD in Statistics**, *University of Valencia*, Spain.

First Class Honours

2010–2013 Masters in Biostatistics, University of Valencia, Spain.

2008–2010 **BEng Forest Engineering**, *University of Oviedo*, Spain.

PhD Thesis

Title Spatio temporal modeling of species distribution

Supervisors Professor Antonio López-Quílez & Professor Marta Blangiardo

Description This Thesis presented species distribution models through different approaches, showing an evolution from classical models applied during the last years, most of them based in regression models, to state-of-the-art methods currently used in several disciplines such as epidemiology

or public health (INLA).

Master Thesis

Title Modelling species distribution of the III National Forest Inventory (Spain)

Supervisor Professor Antonio López-Quílez

Description Development and comparison of statistical models, using different statistical (classical)

applications (MaxEnt, Cart, Mars and Gam).

Experience

May/2019— Postdoctoral Research Associate in Statistics, UNIVERSITY OF KENT, Canterbury.

Present Working within the Statistical Ecology (SE@K) group, on the project 'Modelling removal and reintroduction data for improved conservation'.

Objectives:

- Supplementing data types and optimal sampling design at removal sites.
- Model developments for Removal data.
- A "success" metric for re-introductions.
- Automation of model selection and assessment.
- Software development and dissemination.

Current projects:

- Removal and depletion modelling in ecology.
- Methodological developments for removal models.
- Spatio-Temporal distribution of Chromolaena odorata in Round Island (Mauritius).

- Sept/2013- PhD Student, UNIVERSITY OF VALENCIA, Spain.
 - Jan/2019 Thesis: Spatio temporal modeling of species distribution.
- Apr/2015- Visiting Researcher, IMPERIAL COLLEGE OF LONDON, UK.
- Dec/2016 Projects focused in my doctoral thesis: Using SPDE for species distribution in ecology; Spatial and Spatio-Temporal modelling of forest trees: Spatio-Temporal distribution of vegetation using environmental and pollution data. Teaching duties: Tutorials Advanced regression models (MSc Epidemiology.)
- **Sept/2012 Research Assistant**, University of Valencia, Spain.
 - Jul/2013 Thesis: Modelling species distribution of the III National Forest Inventory (Spain).
- Oct/2010- Research Assistant, POLYTECHNIC UNIVERSITY OF MADRID, Spain.
- Oct/2012 Assistant professor of Zoology and Forest Pathology (Diseases and Plagues). Developing GIS analysis and species distribution modelling. Forest health networks. Plagues and pests isolation.
- May/2008- Research Assistant, POLYTECHNIC UNIVERSITY OF MADRID, Spain.
- Apr/2010 Thesis: "Nocturnal lepidoptera inventory of Atlantic Islands National Park (Cíes, Ons, Sálvora y Cortegada) (Galicia, Spain)" Capture and identification of nocturnal Lepidoptera. Developing GIS analysis and species distribution modelling (SDM).

Publications

Articles

de Rivera, O. R., Blangiardo, M., López-Quílez, A., & Martín-Sanz, I. (2019). **Species distribution modelling through Bayesian hierarchical approach**. Theoretical Ecology, 12(1), 49-59.

Rodríguez de Rivera, Ó., López-Quílez, A., & Blangiardo, M. (2018). **Assessing the Spatial and Spatio-Temporal Distribution of Forest Species via Bayesian Hierarchical Modeling**. Forests, 9(9), 573.

Rivera, Ó. R. D., & López-Quílez, A. (2017). **Development and comparison of species distribution models for forest inventories**. ISPRS International Journal of Geo-Information, 6(6), 176.

Forthcoming

Rodríguez de Rivera, Ó., López-Quílez, A., Blangiardo, M., & Wasilewska, M. (2019). **A** spatio-temporal model to understand forest fires causality in Europe. International Journal of Wildland Fire.

Rodríguez de Rivera, Ó., & McCrea, R.. (2020). **Removal modelling in ecology**. Methods in Ecology and Evolution.

Rodríguez de Rivera, Ó.,McCrea, R. & López-Quílez, A. (2020). **Spatio-Temporal distribution of** *Chromolaena odorata* in Round Island (Mauritius). Special Issue: Spatio-Temporal Dynamics of Species. Applied Sciences (MDPI).

Rodríguez de Rivera, Ó., McCrea, R., & Matechou, E. (2020). **Methodological developments for removal models.**

Editor

Guess Editor, Special Issue: Spatio-Temporal Dynamics of Species, Applied Sciences (MDPI), (2020).