

## **NUIG 011-17 Postdoctoral Researcher in Marine and Coastal Conservation and Management, School of Geography and Archaeology, NUI Galway.**

Applications are invited from suitably qualified candidates for a full-time, fixed term, three-year position as a postdoctoral researcher with the Discipline of Geography at the National University of Ireland, Galway.

This position is funded by Department of Agriculture, Food and the Marine (DAFM) and is in association with the Marine Institute and the Socio-economic Research Unit at NUI Galway. The term of contract is for a period of three years or to project end date of 1<sup>st</sup> March 2020.

**Job Description: The successful candidate will work on a project to develop a quantitative, spatially explicit ecological risk assessment framework for development in Irish coastal waters. The framework is intended to demonstrate the use of systematic spatial planning conservation methodology as a decision support system for consent authorities.**

The successful candidate will work on a research award at NUI Galway, Discipline of Geography in close collaboration with the Marine Institute and the Socio-economic Marine Research Unit (SEMURU) at NUI Galway.

### **Duties:**

1. Develop a quantitative and spatially explicit environmental risk assessment framework (ERAF) for evaluation of the implementation of Environmental Directives in Irish coastal waters.
2. Evaluate the design and efficacy of conservation areas established by existing Directives and policies using systematic conservation decision planning tools (CPTs).
3. Use this new tool to effectively deliver advice to consent authorities using case studies.

### **Essential Qualifications/Skills:**

- PhD in a relevant discipline (geography, conservation planning, statistics and modelling of environmental data or other)
- Demonstrated background in ecological risk assessments, marine/coastal conservation, reserve design / planning and analysis, coastal and marine risk assessment frameworks or marine spatial planning.

## Desired Qualifications / Skills

- Knowledge/Experience with **conservation decision support tools** (DSTs; e.g. Marxan) or metamodels are particularly encouraged to apply.
- High degree of computer literacy in database management, data manipulation, and statistical analysis.
- Proven ability to work independently and proactively as a project leader
- Technical proficiency in using the R open source programming language (R-Project)
- Familiarity with analysis of spatial data including GIS (Geographic Information Systems) software (eg Quantum GIS, ArcMap, MapInfo).
- Understanding of EU directives and policies and national legislation regarding natural areas.
- Computer Programming skills or ability to use open source software and web applications (eg GiTHuB, R Shiny)
- Technical proficiency in SQL (Sequel Query Language)
- Knowledge of population dynamics and metapopulation theory and application.

**Starting salary:** €37,750 per annum, annual increments apply.

**Start date:** March 2017.

**Continuing Professional Development/Training:** Researchers at NUI Galway are encouraged to avail of a range of training and development opportunities designed to support their personal career development plans.

Further information on research and working at NUI Galway is available on [Research at NUI Galway](#)

For information on moving to Ireland please see [www.euraxess.ie](http://www.euraxess.ie)

Further information about the Discipline of Geography is available at <http://www.nuigalway.ie/geography/>

**To Apply:** Applications to include a covering letter, CV, and the contact details of three referees should be sent, via e-mail (in word or PDF only) to Terry Morley at: [terry.morley@nuigalway.ie](mailto:terry.morley@nuigalway.ie) Please put reference number **NUIG-011-17** in subject line of e-mail application.