Foras na Mara
Marine Institute

Funded by the European Union

Marine Institute Job Description

Position	**Post-Doctoral Researcher (PDR)** **EAFM – MarinePlan**
Grade & Contract	**Temporary specified purpose contract for a maximum duration of 3 years – MarinePlan Project Funded Via Horizon Europe**
Service Group	**Fisheries Ecosystems Advisory Services (FEAS)**
Location	**Marine Institute, Oranmore, Co. Galway, Ireland.** **Noting that the Marine Institute is piloting a Blended Working Policy, which you may be able to apply for in due course in line with the Policy.**

Who will you Work With and What Will The Role Involve?

The Post-Doctoral Researcher (PDR) will work closely with the Ecosystem Approach to Fisheries Management Principal Investigator and the Marine Spatial Planning Section Manager on delivering the research for the MarinePlan project. The individual will develop an approach to identify mutually acceptable locations for ORE and protected marine sites in the Celtic Sea, based on EB-MSP (Ecosystem-Based Marine Spatial Planning) criteria, that minimises the displacement effect for fisheries. The individual will help to determine the appropriate locations for the siting of Marine Protected Areas (MPAs) in the Celtic Sea based on the concepts of "ecologically or biologically significant marine areas" (EBSA). This is intended to identify where best to place MPAs to deliver the objectives of legislation, national and EU. The second element will be to map the fishing activity in the Celtic Sea and identify overlaps and potential conflicts, and with the intention of best achieving the ecosystem objectives while maintaining ecologically and economically sustainable fishing. Finally, this will be linked to proposals for Offshore Renewable Energy (ORE) sites in the Celtic Sea to identify interactions, and potential integration to maximise benefits. The researcher will use a wide range of existing data on the ecology, human activities, pressures and impacts.

What Will You Be Doing Every Day?

Principal Tasks:

The main tasks will be linked to the overall project work, and the Celtic Sea case study in particular. This will include:

- Stakeholder mapping and solicitation of their views and expectations for the planning of MPAs and integration with maintain sustainable fishing and the siting of ORE sites
- Applying an Ecosystem Based Marine Spatial Planning (EB-MSP) analytical approach and applying ecologically or biologically significant marine areas (EBSA) criteria to MPA and ORE site planning.

- Developing and applying (with the wider project team) the modelling approaches for EBSA to the selection of potential MPA sites.
- Developing the spatial mapping of fishing activities based on satellite and landings data, to include landings amount by species and value where possible, all based on Marine Institute or publically available data.
- Considering different spatial scenarios to meet ORE and marine conservation targets and how they will interact with the existing fishing activity
- Analyse, using GIS, the overlaps between fishing and potential MPAs, and the likely impact of such MPAs on the sustainability of fishing. If possible, this should include the likely displacement of fishing to other locations.
- Relate the main fishing areas, and potential MPAs to proposed ORE sites, and again identify overlaps and implications.
- Help work on the project where the MI is involved, and collaborate on other project work as appropriate.
- Present the work at local, national and international meetings, including project meetings.
- Publish regular articles in peer reviewed journals. Carry out any other duties assigned from time to time, appropriate to the position.
- Other outputs to ensure delivery of the project, appropriate to the grade and role as required from time to time.

What do You Need to Have Done to Apply for This role?
(Education, Professional or Technical Qualifications, Knowledge, Skills, Aptitudes, Experience and Training)

Essential / Important:

- A relevant PhD in a marine ecological analysis, or a related field.
- Demonstrated experience of working in the arena of fisheries and/or MPAs, and their analysis or similar.
- Demonstrated experience of working in an interdisciplinary science context that focuses on the marine environment and advice on its management.
- Demonstrated skills in data analysis linked to marine ecological/fisheries science, spatial data.
- Demonstrated excellent interpersonal skills and an ability to work with, organise and effectively communicate with people ranging from scientists and policy advisors to users of the sea (e.g. fishers) and the wider public.
- High level statistical analysis skills (ideally implemented in R).
- Proven Scientific Report and peer reviewed paper writing skills.
- Strong and effective organisation and administration skills.
- Good time management and the ability to prioritise and meet deadlines.
- The ability to work unsupervised and as part of a team.
- Good written and verbal communication skills in addition to effective numeracy skills.
- Full, clean driving license.

Ideally Nice to Have / Desirable:

- At least two years of relevant post-doctoral work experience.
- Experience with working with one or more key issues such as: fisheries analysis, MPAs, spatial analysis or related fields.
- Good data handling and data manipulation skills (e.g. experience of relational databases and/or GIS systems.
- Understanding of the issues surrounding Ecosystem Based Fisheries Management and Ecosystem Based Management more widely.
- A good theoretical and practical knowledge of the Irish Marine Ecosystem, fisheries and the challenges they face in a changing world.
- Experience in teaching and transferring skills in a range of environments, including on-line and in person

What else do you need to know?
(Special personal attributes required for the role)

- This is an exciting opportunity to work in a major new international project which aims to develop Ecosystem Based Marine Spatial Management and MPAs to the operational level.
- There will be many opportunities to work with leading scientists in this field from 18 institutes in 12 European countries.
- It would suit an adaptable, enthusiastic, fast learner who is interested in widening their skills and experience.
- Within the project, there will be opportunities to make use of cutting edge methods of marine ecological analysis and to work in areas of high public and policy interest including fisheries management, design and choice of MPAs, selection of wind farm sites, and linking all these together to create an integrated approach to Marine Spatial Planning that allows the full range of ocean uses, as well as transforming that knowledge into policy advice.
- You should be:
    - Dynamic and reliable.
    - Able to work in an organised manner and progress work independently.
    - Self-sufficient while being a good team player.
    - Experienced in collaborating with scientists and members of a technical team.

Description of Service Group: Fisheries Advisory Ecosystems Services (FEAS) – The Wider Team

The position will be based within the FEAS Service Group, but will work with a cross-services team within FEAS and MEFSS.

Fisheries Advisory Ecosystems Services (FEAS)

The FEAS's mission is "to assess, research and advise on the sustainable exploitation of marine fisheries resources". Currently, FEAS consists of over 70 scientists, technical, post graduate and administrative staff under the directorship of Dr. Ciaran Kelly. The Service group operates a significant part of their services from the headquarters in Oranmore. Co Galway with additional port based facilities and a major research facility at Newport, Co Mayo. FEAS staff spend a considerable amount of time at sea on commercial fishing vessels and on research vessel surveys carried out on the RV

Celtic Explorer and RV Celtic Voyager. A key output of FEAS is the annual Stock Book and the annual Shellfisheries Stock Book. These provide the latest assessment and scientific advice for the resources exploited by Irish vessels and is a key reference for the Governments sustainability assessment presented annually to the Oireachtas. A key element of FEAS work is the provision of scientific support for the Irish government (principally the Department of Agriculture, Food and the Marine – DAFM) on marine fisheries ecosystems related issues. FEAS also publish much of its work in peer reviewed scientific journals.

The 9 goals of FEAS are:

1) To maximise the benefits of the new EU Data Collection Framework (DCF);
2) To build a strong working relationship with the fishing industry and the environmental NGO's;
3) To build an effective working relationship with key Government Departments (principally DAFM) and other partner agencies;
4) To use ICES, NASCO, ICCAT, OSPAR and the EU system to support the delivery of excellence in our fisheries and ecosystems science and advisory services;
5) To engage in a suite of research activity that supports the evolution of scientific advice and that is in line with MI/FEAS mission, HOOW, FH2020, Horizon 2020, the new RTDI strategy and the objectives of the CFP;
6) To progress and incorporate the ecosystem approach to Fisheries Management (EAFM) into all aspects of our work;
7) To increase public awareness of the importance of the Ocean;
8) To Ensure a common understanding of the " value chain" within the FEAS team and the MI;
9) To ensure FEAS is a rewarding place to work;

The Work of FEAS

FEAS work programmes are focused on;

(1) Data Collection and Data Management;
(2) Fisheries Resources Assessment and Advice;
(3) Modelling, Simulations and Management Plans;
(4) Fisheries - Ecosystems Interactions;
(5) Stakeholder Engagement;
(6) Research that supports ecosystem understanding;

FEAS staff actively participate at many meetings of the International Council for the Exploration of the Seas (ICES). ICES organises many Expert Groups, Study Groups and co-ordination Groups related to provision of scientific advice on marine ecosystems. The ICES Strategic Plan (2014 to 2018) is focused on advancing scientific understanding of marine ecosystems, providing information, knowledge and advice on the sustainable management of human activities affecting and affected by marine ecosystems. ICES is a key forum for scientific co-ordination of data collection and the provision of independent scientific advice.

FEAS also participate at other international fora including STECF (Scientific, Technical and Economic Committee for Fisheries), NEAFC (North East Atlantic Fisheries Commission) and NASCO (North Atlantic Salmon Commission). FEAS provide scientific support for the DCMNR at various EU meetings (e.g. the EU Norway Agreements and the EU Council of Fisheries Ministers). FEAS produce the annual Stock Book which provides the latest scientific advice on those stocks of interest to Ireland. In addition FEAS is responsible for the salmon National Coded Wire Tagging and Tag Recovery programme and work closely with IFI (Inland Fisheries Ireland) on the Standing Scientific Committees for salmon and eel.

http://www.marine.ie/Home/site-area/about-us/fisheries-ecosystems-advisory-services
http://www.facebook.com/#!/marineinstituteireland?fref=ts

Marine Environment & Food Safety Services (MEFSS)

Marine Environment & Food Safety Services provide government agencies, industry and other clients with marine licensing advice, and food safety, environmental and fish health scientific services; through the implementation of monitoring and research programmes and the provision of advice and regulation.

- We provide expert integrated advice to Government in support of sustainable development and management of the marine environment; and technical support on implementation of European and national food safety and environmental legislation;
- Working with the Food Safety Authority of Ireland and the Sea Fisheries Protection Authority, we monitor seafood safety, supporting the Irish seafood industry's reputation for high quality products and meeting national and international regulatory requirements. For example:
    - The national biotoxin monitoring programme prevents the placement of toxic shellfish on the market; and
    - Testing of commercial landings of fish and shellfish for the presence of environmental contaminants and farmed finfish for residues of veterinary medicines is carried out to ensure compliance with strict European food safety standards;
- We undertake monitoring of marine environmental health under the OSPAR convention and Marine Strategy Framework Directive and MEFSS works with the Environmental Protection Agency in delivering significant components of the Water Framework Directive monitoring programme;
- We test for fish and shellfish diseases and aim to maintain Ireland's superior fish and shellfish health status, supporting the aquaculture industry and inland fisheries sector;
- We undertake national and international collaborative research projects in support of our core monitoring and advisory services;

- Our fish health unit is the national authority responsible for implementation of EU and national aquatic animal health legislation. We oversee and monitor the movement of finfish and shellfish into, out of, and within Ireland.

The individual will work closely with the Marine Spatial Planning and Marine Strategy Framework Directive team in MEFSS. This team provides scientific and technical support to Department of Housing, Local Government and Heritage (DHLGH) for the implementation of Ireland's National Marine Planning Framework (NMPF), Marine Strategy Framework Directive (MSFD) and OSPAR.

Who Will You Report to / Who will Manage and Support You?:

The successful candidate will be based at MI Oranmore and will report to the Ecosystem Approach to Fisheries Management Principal Investigator.

What we offer

We value our staff, and we value their contribution to the work of the Marine Institute. In return for this, we provide a series of benefits that promote a healthy work-life balance which we hope will help them to develop professionally. These include the provision of laptops, supporting blended working, provision of modern work spaces, training programmes to support personal and career development, Work/Life Balance policies, Employee Assistance Programme, Buddy/Mentoring Programme, Bike to Work Scheme, Staff Medicals and Annual flu vaccination, access to sports and social activities

Training

A full range of training will be provided as required, on the job and through appropriate courses. Training needs will be identified through the MI Performance Management Development System (PMDS).

Contacts:

Within the Marine Institute
FEAS Ecosystem Approach to Fisheries Management Principal Investigator. Marine Spatial Planning Section Manager and Data Management team

Outside the Marine Institute
DAFM, DHLGH, Project Partners, The European Commission, the Media, BIM, SFPA, Fishing Industry (National and International), Environmental NGO's, ORE industry Third Level Higher Education sector.

Salary:

Remuneration is in accordance with the Public Sector, Department of Finance approved Salary Scale for a Post-Doctoral Researcher (as per University appointments), a scale that starts at €39,523-€45,609 per annum pro-rated with time worked. You will become a member of the Single Public

Service Pension Scheme unless you are currently or have worked in the Public Sector in the past 6 months or are a member of another Public Sector Scheme.

Annual Leave:

Annual leave entitlement for a Post-Doctoral Researcher is 24 working days per annum pro-rated to reflect time worked. Annual leave entitlements are exclusive of Public Holidays. All leave must be approved in advance in line with Marine Institute leave policies, by your manager or their authorised representative.

Duration of Contract:

The maximum duration of this temporary specified purpose contract of employment will be up to three years. The successful candidate will be on probation for the first six months of this contract.

Who is the Marine Institute?

The Marine Institute is a non-commercial semi-state body, which was formally established by statute (Marine Institute Act, 1991) in October 1992.

Under the Act, the Marine Institute was given the responsibility:

"to undertake, to co-ordinate, to promote and to assist in marine research and development and to provide such services related to marine research and development, that in the opinion of the Institute will promote economic development and create employment and protect the marine environment".

The Marine Institute is the national agency responsible for marine research, technology, development and innovation (RTDI). The Marine Institute seeks to assess and realise the economic potential of Ireland's 220-million-acre marine resource; promote the sustainable development of marine industry through strategic funding programmes and scientific services; and safeguard the marine environment through research and environmental monitoring. The Institute works in conjunction with the Department of Agriculture, Food and Marine (DAFM) and a network of other Government Departments, semi-state agencies, national and international marine partners.

Our vision - ***The Marine Institute, as a global leader in ocean knowledge, empowering Ireland and its people to safeguard and harness ocean wealth.***

Our Mission - ***The Marine Institute, provides government, public agencies and the maritime industry with a range of scientific, advisory and economic development services that inform policy-making, regulation and the sustainable management and growth of Ireland's marine resources. The Institute undertakes, coordinates and promotes marine research and development, which is essential to achieving a sustainable ocean economy, protecting ecosystems and inspiring a shared understanding of the ocean.***

In order to achieve this vision, the MI have six service areas; (1) Ocean, Climate and

Information Services, (2) Marine Environment & Food Safety Services, (3) Fisheries Ecosystems Advisory Services, (4) Irish Maritime Development Office, (5) *Policy, Innovation and Research Services* and (6) Corporate Services.

The Marine Institute 5 Year Strategic Plan (2018 to 2022) is available here

Harnessing our Ocean Wealth (HOOW) is an Integrated Maritime Plan (IMP) for Ireland. HOOW sets out a roadmap for the Irish Government's vision, high level goals and integrated actions across policy, governance and business to enable our marine potential t[1]o be realised. Goal 2 of HOOW focuses on healthy marine ecosystems and specifically; to protect and conserve our rich marine biodiversity and ecosystems; manage our living and non-living resources in harmony with the ecosystem; implement and comply with environmental legislation (see http://www.ouroceanwealth.ie/

How to Apply:

A C.V. and letter of application, summarising experience and skill set applicable to the position should be emailed to recruitment@marine.ie or posted to Human Resources at the Marine Institute, Rinville, Oranmore, Galway. All correspondence for this post should quote reference **FEAS/PDR/Marineplan/Nov2022**

Closing date for Applications:

All applications for this post should be received by the Marine Institute in advance of **12 noon 25th of November 2022.** Unfortunately, late applications cannot be accepted.

Use of Data - all personal data and the information submitted for this application will be used solely for the purpose of this campaign, after which it will be deleted in line with our General Data Protection Regulation Policy and data retention schedule. All information will be treated with the strictest confidence and accessed only by those involved directly in the campaign.

The Marine Institute is an organisation that champions Diversity, Inclusion & Equality for all. We encourage and welcome applications from anyone interested in this role.
Please do advise if there are any special accommodations required for the recruitment process. We are here to help you access opportunities with us.