

Marine Institute Job Description

Position	Postdoctoral Researcher – Tagging & Telemetry, MOSAIC
Grade & Contract	Postdoctoral Researcher on a Temporary Specified Purpose Contract up to 30th September 2029
Service Group	Fisheries Ecosystems Advisory Services (FEAS)
Location	Marine Institute, Furnace, Newport, Co Mayo, Ireland (The Marine Institute has a Blended Working Policy in Place)

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

The MOSAIC project (funded by PEACEPLUS and managed by the Special EU Programmes Body) represents a multidisciplinary consortium of leading academic and governmental scientists from across the Island of Ireland and Scotland and is supported by trusted international partners. MOSAIC will establish an ambitious interregional, multi-purpose marine observation network, linking oceanography to biodiversity, using innovative sensor technologies and tool kits. Data will be gathered on protected species and their habitats and will produce forward-looking indicators to underpin conservation efforts in an ever-changing ocean.

This is an exciting role that will contribute to closing critical knowledge gaps in marine species connectivity and habitat use, build an integrated conservation framework across jurisdictions and advance actionable strategies for restoring vulnerable marine populations in a rapidly changing climate.

The Postdoctoral Researcher will be an integral part of the Marine Institute MOSAIC team, performing a crucial role in data analysis and the delivery of high-impact reports and publications. This will include collaboration with MOSAIC partners and a coordinated approach to fine-scale analysis. The postdoc will work closely with the Team Lead based in Newport who is acting as principal investigator for the Marine Institute, and the STO responsible for tagging and telemetry field studies, also based in Newport. The postdoc will be expected to work to a high standard, meeting multiple deadlines and disseminating findings to the wider team. The postdoc will liaise with other Marine Institute MOSAIC team members and external partners to achieve the goals outlined by the Team Lead and MOSAIC project manager.

The Marine Institute recently completed reviews of its organisation and strategic achievement. The outcomes of these reviews are expected to affect the roles and duties of employees and to bring about other organisational changes. Any impacts or changes will be communicated.

What Will You Be Doing Every Day?

Principal Tasks:

Ecological and statistical modelling

- Apply advanced statistical analysis to explore species distribution, habitat use and behavioural patterns.
- Develop and refine habitat association models using environmental variables (such as temperature, depth and salinity profiles) and integrate movement models using telemetry data.
- Quantify model performance through cross-validation, sensitivity analysis and scenario testing to ensure robustness and reliability of habitat and movement predictions under varying environmental conditions.
- Use/test new and innovative R-packages for tracking analysis, such as 'mort', 'actel' and 'GLATOS'.
- Incorporate climate change projections into predictive models to assess potential future changes in species distribution, habitat suitability and migration dynamics under different climate scenarios.

Spatial analysis and critical habitat identification

- Perform spatial modelling and mapping to detect critical habitats, migration corridors and species "hotspots" for management intervention.
- Evaluate spatial overlap of species activity with anthropogenic pressures (fisheries, offshore renewables, etc) to suggest migration strategies.
- Integrate acoustic telemetry data from strategic array deployments to investigate residency, site fidelity and philopatry at a fine scale.
- Enhance PSAT-based movement models with midpoint locational data from acoustic arrays, particularly with dual-tagged species.

Reporting and policy communication

- Translate scientific outputs into clear, policy-relevant technical reports for marine policymakers (DAERA, DAFM and DCEE, etc).
- Collaborate on the drafting of reports that synthesise findings into guidance documents and best practice toolkits for species-specific and habitat management.
- Contribute to evidence-based assessments that support the designation and management of MPAs and elasmobranch conservation zones.

Collaboration and Communication

- Engage with stakeholders and key partners to collaborate on analysis and dissemination of findings.
- Author and co-author scientific publications, producing impactful science.

- Attend all relevant meetings and report regularly to MI MOSAIC team.
- Attend scientific conferences and project symposiums to present work.

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:

- PhD (or MSc with significant experience) in marine ecology, conservation biology, ecological modelling or a relevant scientific area.
- Track record of peer-reviewed publications and/or technical reports.
- Strong organisational skills to manage multiple deliverables and reporting deadlines.
- Proficiency in R and/or Python for data wrangling, analysis, modelling and visualisations.
- High level of experience in the use of Microsoft Word, Excel, and PowerPoint.
- Effective organisation and administration skills.
- The ability to work independently and as part of a team.
- Ability to communicate with different stakeholders diplomatically and effectively.

Ideally Nice to Have / Desirable:

- Proficiency in developing and applying spatial/movement models (e.g. state-space models, Hidden Markov Models, step-selection functions) to reconstruct and interpret animal movements.
- Ability to merge and analyse disparate datasets (e.g. PSAT, acoustic, environmental variables) into cohesive models.
- Strong GIS skills for geospatial analysis (QGIS, ArcGIS or spatial libraries in R/Python).
- Familiarity with international marine protection frameworks (e.g. OSPAR, ICES ISRAs, MPAs), national conservation strategies and regulatory contexts in Ireland and Northern Ireland.
- Knowledge of tagging and telemetry, and some practical application of these.
- Knowledge of protected elasmobranch species found along Irish coasts.
- Full Irish Driving licence.

What else do you need to know?

(Special personal attributes required for the role)

This is an exciting opportunity to work in a new, dynamic team supporting the innovation of technologies to monitor protected species.

You should be:

- Dynamic and reliable.
- Able to work in an organised manner and progress work independently.
- Able to meet multiple deadlines.
- Self-sufficient while being a good team player.
- Able to collaborate with scientists and members of a technical team.
- Willing to learn and apply new methods, approaches and knowledge.

Description of Service Group: Fisheries Ecosystem Advisory Services – The Wider Team

Currently, FEAS consists of over a 100 scientific, technical, postgraduate and administrative staff under the directorship of Dr Ciaran Kelly. The Service group operates a significant part of their services from the Marine Institute headquarters in Oranmore, Co. Galway with additional port-based facilities and a [research facility at Newport](#), Co. Mayo and Cashel, Co. Galway. The mission of FEAS is “to research, assess and advise on the sustainable use of marine fisheries resources”.

FEAS provide integrated advice and scientific support for the Irish government (principally the Department of Agriculture, Food and the Marine [DAFM](#)) on marine fisheries ecosystems-related issues. A key output of FEAS is the annual [Stock Book and the annual Shellfisheries Stock Book](#). These provide the latest assessments and scientific advice for the resources exploited by Irish vessels and are a key reference for the Government's sustainability assessment presented annually to the Oireachtas. FEAS experts also provide scientific services and support to other government departments, including the Department of Housing, Local Government and Heritage ([DHLGH](#)) to address the Marine Strategy Framework Directive ([MFS](#)) requirements through [OSPAR](#) and national reporting under an SLA ([service level agreement](#)). FEAS provide scientific services to the Department of Environment, Climate and Communications ([DECC](#)) related to offshore renewable energy development.

FEAS experts actively participate at many meetings of the International Council for the Exploration of the Seas ([ICES](#)). At ICES, our scientists are 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 coordination of data collection and the provision of independent scientific advice. FEAS scientists are also encouraged to publish much of their work in peer-reviewed scientific journals.

FEAS experts also participate at other international fora, including [STECF](#) (Scientific, Technical and Economic Committee for Fisheries), [ICCAT](#) (International Commission for the Conservation of Atlantic Tunas), [NEAFC](#) (North East Atlantic Fisheries Commission) and [NASCO](#) (North Atlantic Salmon Commission). FEAS provide scientific support for DAFM at various EU meetings (e.g. the EU Norway Agreements and the EU Council of Fisheries Ministers).

FEAS experts also carry out research and stock assessments on diadromous fish species (salmonids and eels) and are responsible for the salmon National Coded Wire Tagging and Tag Recovery programme and working closely with [IFI](#) (Inland Fisheries Ireland) on the Standing Scientific Committees for salmon and eel. In recent years, FEAS has developed a core expertise in oceanic tracking of large marine fish. The FEAS Aquaculture Section is responsible for the operation of the National Sea Lice Monitoring Programme and carries out a range of national and internationally funded research projects based at MI facilities.

Further details can be found on the Marine Institute website:

<https://www.marine.ie/site-area/areas-activity/fisheries-ecosystems/fisheries-ecosystems>

<https://www.marine.ie/site-area/areas-activity/aquaculture/aquaculture>

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

The successful candidate will be based at the Marine Institute in Newport and will report directly to the Team Lead for Tagging and Telemetry or their authorised official.

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 benefits that promote a healthy work-life balance and which we hope will help them to develop professionally. These include personal and career development, work/life balance policies, an employee assistance programme, “Bike to Work” Scheme, staff medicals and annual flu vaccination.

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: Section Manager, Team Lead Newport. Wider MOSAIC MI team, STO based in Newport responsible for tagging and telemetry field studies, data management and oceanography based in Oranmore.

Outside the Marine Institute: Partners to MOSAIC project led by Loughs Agency. European Tracking Network, NGOs and maritime users.

Salary:

Remuneration is in accordance with the Public Sector, Department of Public Expenditure / Department of Finance approved Salary Scale (as of June 2026) for a Post Doc Researcher, a scale that starts at €47,273-€53,925 per annum pro-rated with time worked. You will commence on the first point of the salary scale (€47,273) and 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 Doc 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:

This post will be filled on a temporary Specified Purpose basis up to 30th September 2029, subject to funding. The successful candidate will be on probation for the first six months.

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 (2023 to 2027) is available [Here](#)

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/MOSAIC/June26**

Closing date for Applications:

All applications for this post should be received by the Marine Institute in advance of **12 noon, Wednesday, 1st of July 2026**. Unfortunately, late applications cannot be accepted.

Eligible Candidates must be:

1. A citizen of the European Economic Area (EEA). The EEA consists of the Member States of the European Union, Iceland, Liechtenstein, and Norway; or
2. A citizen of the United Kingdom (UK); or
3. A citizen of Switzerland pursuant to the agreement between the EU and Switzerland on the free movement of persons; or
4. A non-EEA citizen who is a spouse or child of an EEA or UK or Swiss citizen and has a stamp 4 or a Stamp 5 visa.

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.

