

Ollscoil Teicneolaíochta an Atlantaigh Atlantic Technological University





Reference No.	ID 019147
Job Title	Post Doctoral Researcher: BRICONS Project (P250001)
Nature & Duration of Contract	3 Year Fixed Term
	Applicants should note a panel may be created from which future vacancies for this role may be filled.
Reporting To	Project Lead
Department / Function	Natural Resources and the Environment
Location	Galway City Campus
Essential Qualifications and	Minimum:
Skills	Minimum of PhD in marine ecology or related discipline, or equivalent research experience (including industrial R&D)*.
	<ul> <li>Good track record in organising and conducting marine habitat surveys and experiments.</li> </ul>
	<ul> <li>Diving qualification equivalent to CMAS*** or above.</li> </ul>
	• Full, clean driving licence valid for use in Europe.
	Good track record of publication in peer-reviewed scientific
	journals and writing experience.
	<ul> <li>Be able to work independently in remote, coastal environments.</li> <li>Evaluatt skills in evaluated unittee communication and</li> </ul>
	• Excellent skills in oral and written communication and organisation, with demonstrable ability to meet deadlines
	<ul> <li>Expertise in statistical analysis (R/Python/Matlab or similar).</li> </ul>
Desirable Qualifications and	* EU defines PhD equivalent 4 years fulltime research after primary degree
Skills	<ul> <li>Strong research profile in field aquatic biology, marine restoration ecology, and babitat survey techniques</li> </ul>
	<ul> <li>Scientific diving or commercial diving qualification.</li> </ul>
	Knowledge of bivalve aquaculture techniques, especially native
	oysters <i>Ostrea edulis</i> .
	<ul> <li>Experienced in European marine faunal and algal species identification</li> </ul>
	<ul> <li>Demonstrated project management experience.</li> </ul>
	Experience of research student supervision.
	Ability to engage and communicate with various stakeholders
	including academics, policy makers, industry and practitioners.
	<ul> <li>Experience presenting work at international project meetings</li> </ul>
	<ul> <li>Willingness to undertake additional training, when required</li> </ul>
	<ul> <li>Boat handling qualification/associated experience.</li> </ul>
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**Overview of the Role** 





**Funding:** Funding is provided via The BRICONS Project: Building Resilient Irish Coasts through Oyster Restoration: A Nature Based Solution for Enhancing Marine Biodiversity and Ecosystems (Grant-Aid Agreement No. PBA-BIOD-24-11), which is carried out with the support of the Marine Institute under the Marine Research Programme and funded by the Government of Ireland.

Healthy and diverse marine and coastal habitats are recognised as crucial in society's adaptation to and mitigation of climate change. Within policy, a range of marine and coastal habitats are recognised for their specific roles in carbon sequestration, coastal protection and in the maintenance and improvement of water quality – often termed "Nature-Based Solutions". Many coastal habitats are currently in a degraded state, or their areal extent has been reduced due to human activity.

Native oysters (*Ostrea edulis*) were once widespread across the Island of Ireland, particularly in the sea loughs. These provided a range of ecosystem services that have subsequently been lost. Since industrialisation, many of these water bodies have become highly modified, often through land reclamation and dredging for shipping access, as well as reducing water quality due to human population density and activities. Ports and Harbours play a crucial role in the economy, but also face unique challenges from sea level rise and coastal erosion under climate change. Restoring marine habitats within and adjacent to such areas may provide notable benefits in reducing the impact of climate change as well as promoting biodiversity and wider ecosystem resilience.

This postdoctoral position will entail develop habitat suitability models and help in the site selection process for native oyster restoration trials. The candidate will lead the coordination of field surveys in two bays in the Connemara region, Co. Galway in parallel with and supporting current oyster restoration project, Oisre Conamara, carrying out environmental monitoring and habitat characterisation surveys including extent, condition and biodiversity of native oyster beds using SCUBA diving, acoustic and imaging remote sensing techniques. Biodiversity monitoring will include video and photographic surveys, sediment and oyster clump sampling, and deployment of underwater baited cameras and other instrumentation to monitor fish assemblages. The successful candidate will develop, implement and coordinate an existing monitoring program in the Connemara sites and extend it to areas targeted for oyster restoration in Dublin Bay and Belfast Harbour liaising with all BRICONS partners. This monitoring methodology will serve as the blueprint to monitor the success and performance of oyster restoration approaches across all sites. The candidate will lead the procurement and deployment of artificial reefs, shell cutch and other restorative approaches used in oyster reef restoration, including reintroduction and translocation of native oysters, in communication with project partners and local aquaculture and fisheries stakeholders. As part of this transnational, all Ireland project, the successful candidate will work very closely with project team members and support postgraduate researchers across ATU and the Marine and Freshwater Research Centre, University







**Duties** 

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College Dublin, Trinity College Dublin and Queen's University Belfast, and will have the opportunity to work with experts in ecological restoration and aquaculture in Ireland and overseas in the Native Oyster Restoration Alliance Network.

As part of the project team, the successful candidate will undertake a range of research and associated tasks within the BRICONS project. The main duties and responsibilities include but are not limited to:

- Perform research and technical tasks including underwater surveys, deployment of instrumentation, species and habitat distribution modelling,
- Assist with the overall coordination of the BRICONS programme of research based at ATU, UCD, TCD and QUB including related outreach/dissemination activities.
- Undertake primary data collection and analysis using a range of research and oyster reef restoration methods.
- Coordinate fieldwork in restoration sites in Connemara aligned with work carried out in Dublin Bay and Belfast Harbour by postgraduate and postdoctoral researchers based at the partner institutions.
- Participate in regular meetings with the BRICONS team to communicate project results and progress.
- Participate in project dissemination and communication activities including presentation of research findings through writing journal articles, reports, website updates, newsletters, brochures etc.
- Presentation of research findings at relevant national and international conferences.
- Engaging with relevant stakeholders and overseeing outreach to different audiences.
- Undertake travel as required by the research project.
- Carry out additional administrative and reporting duties associated with the project.
- Preparation of funding proposals.
- Support the development of nature restoration research at ATU.
- Ensure that project work is performed in line with Health and Safety and other relevant university policies.
- Maintain confidentiality of all background IP, foreground IP, and research results emerging from the project.
- Other duties may be assigned from time to time.

The candidate must be prepared to travel extensively both nationally and internationally in the execution of project activities.

Salary: IUA PD1 point 1 (€45,847.00) to point 3 (€48,412.00) Plus 20% pension Contribution. \*Starting salary is dependent on funding availability & experience and will also be market driven and discipline related. 39 hours per week



**Hours of Work** 

Salary





Further information on the position may be obtained from Dr Jose M. Fariñas-Franco josemaria.farinas-franco@atu.ie

The BRICONS Project (Grant-Aid Agreement No. PBA-BIOD-24-11) is carried out with the support of the Marine Institute under the Marine Research Programme and funded by the Government of Ireland.



