



Ollscoil  
Teicneolaíochta  
an Atlantaigh  
Atlantic  
Technological  
University



## PhD Postgraduate Research Opportunity

<b>PhD Project Title:</b>	Assessing the use of Uncrewed Aerial Vehicles to monitor Ireland's Marine Protected Areas and provide best practice advice (P230074)
<b>Project Duration:</b>	4 years
<b>Organisation:</b>	Atlantic Technological University
<b>Location:</b>	ATU Galway City, and Marine Institute Oranmore, Co. Galway
<b>Stipend:</b>	€25,000 per annum
<b>Responsible to:</b>	Dr Ian O'Connor (ATU) and Professor David Reid (Marine Institute)

**Funding:** This **Cullen Scholarship** (Grant-Aid Agreement No. CS/23/001) will be administered by the Marine Institute and funded by the Institute under the Marine Research Programme with the support of the Irish Government

### Description:

This project is a multidisciplinary collaboration between the Marine and Freshwater Research Centre at ATU in Galway City and the Marine Institute. It combines the expertise of personnel with a track record of using UAVs, biologists and quantitative ecologists to investigate the potential for UAVs to provide data for monitoring and managing marine protected areas in support of Ireland's emerging marine spatial planning framework. Within the context of a structured doctoral degree programme at ATU the Cullen Fellow, under the guidance of the supervisory team will:

Document and analyse the challenges and requirements for the use of UAVs in the marine environment, with specific reference to MPAs in the Irish exclusive economic zone (EEZ).

Conduct field-based experiments to compare the use of monitoring systems (VMS/AIS) and UAV flyover methods to monitor fishing activities within selected case study sites.

Conduct field-based experiments to investigate the use of UAVs to evaluate the abundance and distribution of biological features of interest within case study sites, including the impact of any detected disturbance.

Investigate the potential for UAVs to quantify the nature and extent of other anthropogenic activities within case study sites, including data gaps for site specific monitoring.

Combine the outputs with results from reviews of international research to inform recommendations and technical guidelines for the use of UAVs in MPA monitoring and management in Ireland.

The expected outcomes of this project include improved understanding of the potential of UAVs to provide data to underpin the monitoring and management of MPAs, thus facilitating the implementation of the plan led approach and contributing to national and EU policy on delivering effective MPAs.

**Requirements/Qualifications:** The successful candidate will hold an Honours Degree with a minimum award classification of 2:1 or equivalent in a cognate discipline (Marine Biology, Oceanography, Fisheries Science, Aquatic Ecology, or a related discipline). A full clean EU driving licence is desirable. The candidate will be expected to work on their own initiative and be willing to acquire the broader skills necessary for the successful completion of a PhD project.

**Project Duration:** 48 months

**Conditions:**

- €25,000 Stipend per annum.
- Postgraduate fees for EU/EEA students will be covered by the project  
**Please Note:** Candidates from outside the EU/EEA are eligible to apply, but will be expected to provide evidence of sources of additional funds to cover excesses associated with Non-EU fees
- In addition, any necessary travel and material costs incurred during the project will be covered

If either English or Irish is not the applicant's first language, evidence of English language proficiency is required for registration. Please refer to web link [English Language Requirements | ATU - Atlantic Technological University](#) view the minimum English language proficiency standards for entry to ATU

**Project Start Date: Spring 2024**

**Application Closing Date: 12 noon Thursday 25<sup>th</sup> January 2024**

Applicants should submit their:

- Curriculum Vitae (to include details of 2 referees)
- A copy of transcript of results
- A Personal Statement to:

The Personal Statement should not exceed 1 page and must include details on:

- How your qualifications and experience have prepared you for this PhD research programme
- Why you would like to pursue this PhD research programme.

***Applications must be submitted to [ResearchOffice.galwaymayo@atu.ie](mailto:ResearchOffice.galwaymayo@atu.ie) e-mail address only. Please ensure all documents are emailed as a single Word or PDF file.***

For further information on the project, please contact: Dr Ian O'Connor ([ian.oconnor@atu.ie](mailto:ian.oconnor@atu.ie)) or Professor David Reid ([David.Reid@Marine.ie](mailto:David.Reid@Marine.ie))

**Data Protection Statement**

ATU takes very seriously its legal obligations as set out in the General Data Protection Regulation 2016/679 (GDPR) and the Irish Data Protection Act 2018 to safeguard and protect your personal information in our possession. The personal information which you disclose to us in this form will only be used to assess your suitability; administer and register you for this scholarship. We will not keep your personal information for any longer than is necessary for those stated purposes. **For more details, please refer to ATU's Student Privacy Statement: [Student-privacy-statement](#)**