



National University of Ireland Galway

**COLLEGE OF ARTS, SOCIAL SCIENCES, AND CELTIC STUDIES
GALWAY DOCTORAL RESEARCH SCHOLARSHIP SCHEMES**

Beach-dune environments as a Nature-based Solution: Understanding controlling variables in human dominated landscapes.

(Joint funded by CASSCS, NUI Galway & Climate Action Regional Office ASN)

Beach-dune environments as a Nature-based Solution: Understanding controlling variables in human dominated landscapes.

(Joint funded by CASSCS, NUI Galway & Climate Action Regional Office ASBN)

Introduction

A Structured Doctoral (PhD) Scholarship is available for four years to further our understanding of how beach-dune systems may be utilised as a nature-based solution for coastal protection in the face of climate change impacts on the coast. The project is a collaboration between the discipline of Geography at NUI Galway and the newly formed government authority responsible for climate adaptation action - the Climate Action Regional Office Atlantic Seaboard North (CARO ASBN)

Context

There is a growing realisation that long-term, affordable solutions to climate change impacts in coastal ecosystems will be primarily nature-based solutions (NbS). In response to the threats of erosion, increased storm frequency and magnitude, and flooding, restoration and /or maintenance of beach-dune environments are becoming an increasingly viable solution. Natural beaches act as physical and flexible barriers to coastal storms, as well as being a living biodiverse ecosystem.

Current understanding of post-storm recovery on beach-dune systems is lacking. The existing models, having been developed at sites with little human presence, are not well-suited to situations where human use is a significant consideration. For example, post-storm assessment methods currently concentrate on quantifications of sediment return to the beach and dunes in the weeks and months after an event. While this is clearly important, it does not align well with management and public perceptions of recovery: sand may have returned post-storm, but if the site does not look like it did pre-storm it has not recovered. Clearly there is a disconnect between scientific driven assessments of recovery and expectations of the public.

The Research Project

This project will examine:

- 1) the extent of human pressures and responses to events controlling post-storm recovery pathways, and
 - 2) the contributions of physical, biological and human components in the critical zone seaward of the foredune.
- The project will assess post-storm recovery by incorporating humans as a geomorphic agent.

The project will develop a conceptual model of post-storm recovery using ecological, geomorphological and human perspectives. The sites will be located in rural sites that have been severely impacted by recent storms. Existing partnerships between NUI Galway, Geography and active community groups in these locations will be utilised to develop test sites. The model will be structured around testing intervention options to enhance dune recovery versus control areas that are left to natural recovery processes. A modified DIPSR (drivers, pressures, state, impact and response model) will support the work as a common language between management and science.

In the spirit of openness and engagement, regular monitoring updates will be made publicly available via a project website and other formats suitable for multiple stakeholders. Existing platforms used by the partners will facilitate this component.

The successful candidate will be housed at NUI Galway, within the discipline of Geography under the supervision of Dr Kevin Lynch (Geomorphologist) and Dr Terry Morley (Ecologist). The successful candidate will be expected to apply for additional external funding opportunities.

Essential Selection Criteria

- A master's degree (with a first-class or 2:1 grade) in a relevant discipline (e.g., environmental science, conservation, botany, earth or physical sciences, or similar degree).
- Demonstrated GIS experience and data management skills with the ability to perform spatial analysis.
- Ability and experience, identifying and mapping habitats
- Experience with field monitoring and data collection.
- Full, Irish or EU driver's license.

Desirable Selection Criteria

- Experience with GPS field surveying equipment.
- Experience in geomorphological research.
- Computer literacy in data management, data manipulation, and statistical analysis (knowledge of the R programming language preferred).
- Understanding of EU directives and policies and national legislation regarding natural areas.
- Understanding of concepts around the 'integrated management' of natural environments.

Closing date for applications: Tuesday, 30 Nov 2021, 5pm (GMT)

After shortlisting, interviews will take place virtually in December 2021. Studies will commence in January 2022.

TERMS AND CONDITIONS 2021/22

The College of Arts, Social Sciences, and Celtic Studies (CASSCS) at NUI Galway is pleased to offer this scholarship to support full-time PhD research within the PhD programmes of the CASSCS.

The scholarships will be awarded in line with the objectives and criteria as laid out above.

Applicants are advised to carefully read these Terms and Conditions in advance of submitting an application to ensure their eligibility under the Scheme. Applications that do not comply with the Terms and Conditions will be deemed ineligible.

1. Duration

The scholarship will be awarded for a maximum period of 4 years.

2. Value

The maximum value of an individual Scholarship award is €23,526 per annum, from which fees of €5,026 will be paid. The balance of €18,500 will be paid in a monthly stipend of €1541.67. The scholarship of the awardee whose fees are paid by an external funding body (e.g. a Local Authority) will be reduced by the relevant fee amount. A successful candidate from a non-EU country will be entitled to apply for an International Merit Scholarship to cover the non-EU portion of their fee. The successful awardee will have to pay the €140 student levy himself/herself.

3. Classification of Scholarship Payments

Scholarships are officially classified as a 'scholarship' and hence do not attract Tax or Social Insurance. The recipient is not an employee of the University.

4. Eligibility

The minimum qualification for the award of a scholarship is a first class or higher second class honours master's degree or the equivalent from a recognised institution in a relevant discipline.

Applicants must have an established proficiency in English or in Irish. For applicants whose first language is not English or Irish, a language proficiency assessment may be required.

5. Conditions of Tenure

- a. Successful applicants to this scheme will be designated as a *Galway Doctoral Research Scholar* and will register in the Structured PhD programme of the CASSCS, National University of Ireland, Galway before the Scholarship can be drawn down. For further information on the programme, see [here](#).
- b. Registration will take place in September. If registration is not completed on the due date, then the scholarship offer may be withdrawn.
- c. Scholarships will be awarded for four years, according to the original date of the applicant's registration for the PhD degree, and based on satisfactory progress being confirmed each year by the student's GRC.
- d. The scholarship will automatically cease on the submission of the Scholar's PhD thesis, if this occurs within the four-year period.
- e. The scholarship is valid for the year in which it is awarded or renewed. Under general circumstances the scholarship may not be deferred or otherwise interrupted, without reasonable cause. Where particular situations arise that necessitate temporary leave of absence, they shall be verified and notified to the GRC, and approved by the Dean of the CASSCS.
- f. Should a Scholar be unable for any reason (including medical reasons) to pursue studies in accordance with the Terms and Conditions of the scholarship, the Scholar and/or his/her supervisor is required to inform the Dean of the CASSCS within two weeks of such a situation coming to the Scholar's attention. The Dean of the CASSCS, on appropriate advice, reserves the right to withdraw or suspend the Scholarship.
- g. A Scholar may wish to terminate the scholarship for personal, professional or other reasons. This should not be done without prior consultation with the GRC and Dean of the CASSCS, as it may involve reimbursement by the Scholar to the CASSCS if the Scholar is unable to justify the funding received up to the date of termination.
- h. All publications, presentations and publicity associated with or arising from the research undertaken by the Scholar while in receipt of the Galway Doctoral Research Scholarship must contain the following acknowledgement '**Funding received from the Galway Doctoral Research Scholarship Scheme of the College of Arts, Social Sciences, and Celtic Studies, National University of Ireland Galway, and the Climate Action Regional Office, Atlantic Seaboard North**'.
- i. At the earliest possible opportunity during the tenure of a scholarship, the Scholar will be required to prepare one, or if necessary two, application(s), under the guidance and advice of the supervisor, for external research funding under the Irish Research Council (IRC) Post-Graduate Scholarship Scheme, if eligible to do so.
- j. The holder may not be the holder simultaneously of any other scholarship or fellowship.
- k. Galway Doctoral Research Scholarships will be awarded only to full-time registered students who will engage full-time in research during the period of the scholarship. The recipients of the scholarships are expected to be normally present in the university for the duration of the programme. Should Scholars wish to take a prolonged absence from the university, s/he must apply for permission using Form GS 090, which is available on the [Graduate Studies website](#).

Galway Doctoral Research Scholarship Scheme

- l.** The Galway Doctoral Research Scholarship is held subject to these Terms and Conditions. If any of the above is breached by a scholarship holder, the CASSCS will suspend or terminate the Scholarship and/or will require the Scholar to reimburse the College for such payments that have already been made.
- m.** The successful applicant will be required to sign a form of consent under the Data Protection Act 1988 in relation to records on data concerning his/her registration status, academic record and scholarship payment details.
- n.** The award of a Galway Doctoral Research Scholarship is made subject to receipt of funding from various sources. In the event of such funding being reduced or being discontinued the CASSCS, the National University of Ireland Galway or their agents will not be under any liability to provide funding or to compensate a Scholar for any reduction or cessation of such funding.
- o.** In cases where ethical issues may arise from the research, applicants will be asked to provide a written statement to the effect that full consideration has been given to the ethical implications of the research proposal. In such cases, the successful application will require the approval of the Research Ethics Committee of the National University of Ireland Galway prior to confirmation of the Scholarship Award.
- p.** In accepting a Galway Doctoral Research Scholarship, successful applicants must also agree to accept the Terms and Conditions of the Scheme. Correspondence on this will not be entered into once an award has been accepted.
- q.** In the event that a scholarship recipient fails to comply fully with the Terms and Conditions of the Scheme, the CASSCS reserves the right to revoke the Scholarship award.
- r.** If a scholarship holder does not attend for a scheduled meeting with his/her GRC without reasonable cause, or if his/her GRC are unhappy with the progress being made on the research project, the GRC can recommend that stipend payments be suspended forthwith.

6. Application Process

Applicants are required to submit a Cover Letter and CV (including three named referees) to kevin.lynch@nuigalway.ie by **5pm, (GMT) Tuesday, 30 Nov 2021.**

7. Selection Process

The award will be made by the CASSCS on the recommendation of the Research Programme's Assessment Panel.

The selection process is strictly confidential, and representations may not be made on behalf of applicants.

Note: Late or incomplete applications or applications that do not fully adhere to the Terms and Conditions of this scheme will be deemed ineligible.

The College of Arts, Social Sciences, and Celtic Studies at NUI Galway reserves the right to alter the Conditions of Tenure of the Scholarship at any time.