COLÁISTE MHUIRE GAN SMÁL
OLLSCOIL LUIMNIGH
MARY IMMACULATE COLLEGE
UNIVERSITY OF LIMERICK

Department of Geography
Roinn na Tíreolaíochta

Postgraduate Scholarship in Geography

The Department of Geography at Mary Immaculate College, University of Limerick, is a small but dynamic department within Mary Immaculate College's Faculty of Arts. The department has a strong research profile and a track record of successfully attracting research funding both from public sources and private sources. Members of the department have held leadership roles in professional associations, including the Regional Studies Association, the Irish Quaternary Association and the Geographical Society of Ireland. All members are research active, and have successfully supervised postgraduate research at Masters and /or PhD levels. Faculty members and postgraduate students within the department form a strong and mutually supportive community of scholars, into which new postgraduate students are integrated. Further information about the department is available at: http://www.mic.ul.ie/academicdepts/geography/Pages/default.aspx

Subject to approval, the Department is now pleased to advertise a Scholarship to support postgraduate research leading to the degree of either a Master of Arts (by research and thesis) or a PhD, and is designed to support research in one of six target areas, which span both physical and human geography. The terms and conditions of the Scholarship and details of the target research areas are set out hereunder.

TERMS AND CONDITIONS

The scholarship consists of a stipend of €12,600 per annum, and a full waiver of tuition fees (up to the value of €4,403). The fee waiver will be linked to any increase in fees over the term of the Scholarship. The PhD award is for a maximum of four years; and the Masters award for a maximum of two years, commencing in September 2021. The continuation of the award is subject to annual review of the holder's progress under MIC's procedures for review of postgraduate research.

For a PhD, applicants must hold a Master's qualification in Geography or a relevant cognate discipline. In exceptional circumstances, applicants with a first class honours Bachelor's degree may be considered. For a Master's application, applicants must have at least a 2:1 qualification in a relevant Bachelor's degree.

Selection will be by a board consisting of members of the Department of Geography, Mary Immaculate College, and will be based on the written application and an interview.

RESEARCH AREAS

1. Coastal Communities and the Climate Crisis

Proposer: Dr. John Morrissey

Project Summary

Coastal zones are both highly vulnerable and of strategic long-term importance for 3 key reasons: 1) The concentration of population and assets 2) The exposure of these areas to climate-related risks 3) The decline in coastal habitats and undermining of key ecosystem services and coastal economies. Communities in coastal zones therefore face the prospect of threats to coastal economies, risks from rising sea levels, storm surges and extreme weather events and challenges of securing sufficient resource and investment support to 'weather the storm'. As communities enact strategies to transition to a low-carbon economy, there is a need for nuanced spatial analysis which considers the geographical unevenness of transition processes, which recognises the importance of the local geographical context and which explores challenges and opportunities at national, regional and community scales. This project will investigate how communities on Ireland's Atlantic corridor are dealing with sustainability, resilience and adaptation challenges. This project will conduct an interrogation of regional vulnerabilities to the impacts of climate change, including application of risk assessment and scenario modelling approaches, as well as an evaluation and mapping of the capabilities, potentials and barriers present at regional, settlement and community scales. The project will interrogate the challenges presented by both low-carbon transition and climate adaptation imperatives, taking due consideration of socio-spatial differences in vulnerabilities and capabilities. The project will link with collaborators from 'Project Blue' based in Long Island Sound and Southern Connecticut State University, CT, USA.

2. Retrofitting the City for Sustainable Urban Living

Proposer: Dr. John Morrissey

Project Summary

An efficient use of the urban fabric, including the retrofitting of existing buildings and sustainable re-use of brownfield sites, is essential to the delivery of sustainable cities. This is important to improve the energy efficiency of currently used buildings and to revive derelict and abandoned city centre locations. However, despite this, building energy efficiency activity is still a fraction of the wider construction industry. In addition, many Irish cities, including Limerick, are characterised by derelict and underutilised infrastructure in key urban core areas. While *ad hoc* action at the scale of individual buildings remains important, an overemphasis at this scale risks fragmentation and overreliance on individual owners and tenants. What is required at the city level is a more co-ordinated, planned and strategic approach so that cities can be re-engineered, retrofitted and renovated for a more sustainable future. Many barriers exist to the sustainable re-imagining of existing infrastructure including: perceptions of risk; information gaps; effects of lock-in; split incentives; and market capacity. In addition, the sector is still applying out-dated and inappropriate business models. This project will develop new knowledge on sustainable urban

environments through application of a mixed-methods study to the urban fabric in two Irish cities. The research will consist of: 1) detailed mapping of functionality, use and energy efficiency performance at the streetscape level; 2) extensive stakeholder engagement and business model review; and 3) scenario modelling to inform policy responses. Research will be inclusive and cognisant of the practical and operational needs of key stakeholders, ensuring policy-ready, deployable and targeted outcomes.

3. A Palaeoenvironmental Analysis of the Late Pleistocene Central Mediterranean Sea

Proposer: Dr. Angela Cloke-Hayes

Project Summary

Being a semi-enclosed basin, the Mediterranean Sea responds quickly to environmental and climatic changes. The amplification of these events in the deep-sea sediments provides the ideal setting for studying such events. This project will focus specifically on the Sicily Channel where a recent research expedition (PANTHER) extracted six deep sea sediment cores. The Sicilian Channel is the region that separates the western and eastern basins and due to the high sedimentation rates (between 18 and 50 cm/kyr), the cores provide an ideal opportunity to undertake a detailed micropalaeontological analysis of the location. Specifically, this project aims to: 1) provide a high-resolution record of the planktonic foraminiferal assemblages; 2) examine the palaeoecological variations in the faunal record, using a range of palaeoenvironmental proxies; and 3) provide a reconstruction of sea surface temperatures using artificial neural networks (ANN). This research will compliment previous work undertaken, whilst also adding valuable spatial coverage to the region.

4. Measuring the Environmental Effectiveness of the Grassroots TidyTowns Model

Proposer: Dr. Catherine Dalton

Project Summary

The TidyTowns model is referenced by multiple agencies (e.g. Environment Protection Agency, Local Authority Water & Communities Office, Local Development Companies) as a very effective local conduit for environmental initiatives. TidyTowns could additionally be described as the most prominent and widespread Irish 'environmental' group. In recent years voluntary activity has embraced transformation in line with national policies on waste prevention and biodiversity, enabling vast potential for change at local level. Surprisingly, there has been no evaluation of the model in the last 20 years and no peer-reviewed reports or publications exist. This project will review the TidyTowns model by: 1) establishing a baseline of current practices, challenges and supports; 2) identifying effective performance and potential for future capacity-building; and 3) scientifically evaluating the environmental effectiveness of works undertaken by voluntary groups. This baseline data will be used to measure further expansion of TidyTowns in terms of environmental enhancement, energy transition, sustainability and resilience, which are vital in the context of increasing climate, energy and water quality challenges.

5. Public Vaccination and the State in Nineteenth and Early Twentieth Century Ireland – A Geographical Analysis

Proposer: Dr. Hélène Bradley Davies

Project Summary

The nineteenth century marked a great advance in public health in Ireland. By the close of the century, sanitary reforms, developments in public health provision and the availability of vaccines improved living conditions and reduced the prevalence of infectious diseases thereby reducing mortality, particularly in urban areas. The state played a key role in these developments, initially through the Poor Law Commission and later through various statutory acts which improved general living conditions and access to healthcare. By the 1840s vaccines were viewed by the state as key instruments in the battle against poor health and the spread of infectious diseases. The roll-out of free public vaccinations was initially the responsibility of the Poor Law Commission; however, by the 1850s changes were afoot. In the following two decades, four acts relating to vaccination were introduced in Ireland which placed the state front and centre in the ongoing battle against infectious diseases and in the public registering and monitoring of vaccine take-up. The aim of this research is to: 1) investigate the role and intervention of the state in the provision of public vaccinations in Ireland; 2) examine the institutional and professional contexts necessary to implement vaccination policy; and 3) evaluate the successes of public vaccination at the local level. A number of key sources survive for Limerick City and County which will facilitate a detailed case study analysis. These include Medical Board Minutes for the Board of Guardians and the Register of Cases of Successful Vaccinations 1854-1912.

6. Human Security and Geographies of Migration in North Africa

Proposer: Dr. Julian Bloomer

Project Summary

Shifting geographies of irregular migration have characterised recent migration trends from north and west Africa to Europe, as transnational migrant routes and networks adapt to increased securitisation of borders, changing geopolitical landscapes, environmental degradation, climate change, uneven economic development and increased foreign intervention and spending in the north Africa region aimed, in part, at curbing transnational migration to Europe. Migration is a cross-cutting issue in the United Nations 2030 Agenda for Sustainable Development, with particular emphasis on the Agenda's core principle of "leaving no one behind". The research project will employ an empirical analysis of the migrant experience, and utilise a human security approach to understand irregular migration and foreign intervention in the region. An historical analysis of how transit routes developed in a chosen geographical setting, as well as an analysis of the impact of modern state and regional securitisation and interventions, as a result of the migrant 'crisis', will form a core focus of the research project. The research project will critique contemporary changes and their impacts, and develop an alternative rendering of security and interventionism in the region that understands the historical, security, and corporeal geographies at play. The project will develop policy-relevant proposals for the chosen geographical area of study and engage in public and academic dissemination activities in that regard.