

Research and Innovation Overview 2024

Department of Geography

The Department of Geography at Maynooth University continues to excel, with a team of 27 academic staff members, 27 postdoctoral researchers, and 4 administrative staff members. Fifteen academic staff are associated with university research institutes, including ICARUS, NCG, and MUSSI. The department is home to 33 taught and 36 research postgraduate students, with one PhD student, Dr Joseph Robinson, graduating in 2023. Over the past five years, the department has achieved outstanding research metrics, including 113 Scopus-indexed publications, 7546 total citations, and a field-weighted citation impact (FWCI) of 2.6.

Head of Department: Dr Stephen McCarron



Research Themes and Focus Areas

The department's research spans a diverse range of geographical topics, with key focus areas including:

- **Climate Change and Sustainability:** Research in this area focuses on climate change mitigation, adaptation strategies, and sustainability, aligning with the university's strategic priorities.
- **Migration and Social Justice:** Faculty members examine the intersections of migration, social justice, and care, contributing to critical discussions on mobility and inclusion.
- **Health and Environment:** This interdisciplinary research examines the relationship between environmental factors and health outcomes, particularly in urban settings.



Significant Research Outputs

In 2023, the department produced 66 peer-reviewed articles, 2 books, and 27 additional publications, including book chapters and reports:

Publications

- Professor Conor Murphy published 20 articles in 2023, contributing significantly to the department's strong research output. His work on climate change indicators appeared in *Indicators of Global Climate Change 2022*, a highly cited report.
- Professor Peter Thorne co-authored the IPCC Sixth Assessment Report (AR6), making significant contributions to climate science.
- Dr Gerard McCarthy served as the first author of the article titled, *Can we trust projections of AMOC weakening based on climate models?* published by the Royal Society.

Awards

- Professor Mary Gilmartin secured a prestigious €994,000 Advanced Laureate Award from the Irish Research Council (IRC) for her project MOBILISECARE: Migration and Care, which explores new perspectives on migration and caregiving.
- Dr Lisa Orme obtained a €571,000 Science Foundation Ireland (SFI) Frontiers for the Future grant for her research on Irish blanket bogs and their carbon accumulation rates.



Collaborations and Partnerships

The department actively collaborates with national and international institutions on a range of research projects:

- **IPCC:** The department has several key participants in the Intergovernmental Panel on Climate Change, the United Nations body responsible for assessing climate science. The sixth assessment cycle for the IPCC formally concluded in March 2023 with the publication of the Synthesis Report, with Maynooth University staff from Geography and ICARUS variously having roles as chapter scientists (Dr David Smyth), contributing authors (Professor Peter Thorne, Dr Lisa Orme and Dr Gerard McCarthy) and the Coordinating Lead Author for Working Group I and Section Facilitator on the Synthesis Report (Professor Peter Thorne).
- **Dublin 8 Health + Environment Dashboard:** Dr Kevin Credit and Professor Chris Brunson developed this community-focused, open-source data dashboard to inform local planning and investment decisions in Dublin 8, a project that integrates environmental data with public health metrics.



Research Impact and Societal Contributions

The department's research has had significant policy and societal impact, particularly in climate change and social justice:

- **Climate Change Policy:** Professor Peter Thorne serves in several leadership roles, including Chair of the Global Climate Observing System (GCOS) Atmospheric Observations Panel for Climate, contributing to global efforts to monitor and respond to climate change.
- **Social Justice and Migration:** Professor Mary Gilmartin's work with the Immigrant Council of Ireland on the Migrant Local Integration Index has shaped national policy on migrant integration in local communities.



Future Directions

The department will continue to focus on climate change, migration, and health-environment interactions, with plans to expand its engaged research on sustainability and social justice. Future projects include further collaborations with European and international partners, ensuring the department remains a leader in geographical research.

The Department of Geography at Maynooth University is committed to producing high-quality, impactful research that addresses critical global challenges. Through its interdisciplinary approach, strong research outputs, and successful collaborations, the department continues to make significant contributions to both academic knowledge and public policy.