





Fully Funded MLitt Scholarship in Palaeolimnology CORE project / Geography

School of Geography, Archaeology and Irish Studies / College of Arts, Social Sciences and Celtic Studies, University of Galway

Applications are invited from suitably qualified candidates for a full-time, funded two-year MLitt scholarship starting on 1st of September 2025, affiliated to the College of Arts, Social Sciences and Celtic Studies / School of Geography, Archaeology and Irish Studies / Geography / Palaeoenvironmental Research Unit at the University of Galway.

University of Galway

Located in the vibrant cultural city of Galway in the west of Ireland, the University of Galway has a distinguished reputation for teaching and <u>research excellence</u>

For information on moving to Ireland, please see www.euraxess.ie

Detailed Project Description

Human-induced climate change is one of the greatest global threats of the 21st Century to environmental and socioeconomic sectors. There is a pressing need to address pertinent inconsistencies in the Irish palaeoclimatic record regarding abrupt climate events, which currently inform climate prediction models and subsequent mitigation and adaptation policies. The CORE project seeks to create the first robust, high-resolution regional temperature record since the end of the last ice age, focusing on abrupt climate events in western Ireland. Reconstruction of past climates is challenging due to timeline uncertainties, human impact on the landscape and methodological incompatibilities. This project aims to rectify critical issues in the Irish palaeoclimatic record by employing a uniform, innovative and multi-method approach to climate reconstruction using complementary palaeolimnological (study of past lakes systems) techniques which infer direct temperature estimates and supporting environmental information. The project will prioritise research excellence, generate high-quality contributions to European and global climate science and policy, and enhance the Irish palaeoclimatic research community - 'we reconstruct Earth's past in order to better understand our future'.

MLitt: A palaeoclimatic reconstruction of the Late-glacial period in Western Ireland.

To achieve these goals, the successful candidate will contribute to a high-resolution, regional palaeotemperature record of the Lateglacial and Holocene periods (18,000 years ago to present), using a proxy which infers independent quantitative estimates of temperature change. The candidate will create a chironomid-inferred palaeotemperature estimate for the Late-glacial period from a palaeolake in Co. Roscommon. The candidate will have access to







supporting biological and geochemical proxy data, including stable isotopic analysis, pollen and ITRAX elemental content. This position will be supervised by Dr Karen Taylor and cosupervised by Dr Aaron Potito, in collaboration with Dr Karen Molloy.

For more information on the CORE project, see the <u>project page</u> on our Palaeoenvironmental Research Unit's website and the CORE project's <u>Instagram page</u>.

For informal enquiries, please contact Dr Karen Taylor (karen.taylor@universityofgalway.ie), Principal Investigator of the CORE Project and Senior Post-Doctoral Researcher (Honorary Research Senior Lecturer) at the Palaeoenvironmental Research Unit, School of Geography, Archaeology and Irish Studies.

Living allowance (Stipend): €25,000 per annum, [tax-exempt scholarship award]

University fees: €5,750 per annum

Start date: 1st of September 2025

Academic Entry Requirements:

- An upper Second Class Honours, Grade 1 minimum (or equivalent international qualification) in a discipline such as Geography, Geoscience, or Natural Sciences.
- Undergraduate thesis in Palaeolimnology, Palaeoclimatology, or related fields.
- Proficiency in written and spoken English.
- Previous relevant laboratory experience using a dissection microscope and identification, which highlights excellent observational and fine motor skills.
- Experience in data acquisition, data entry, database management, quality control, processing and scientific report writing.

Desirable Criteria:

- Should have a suitable background in palaeoclimatic or palaeoenvironmental reconstruction, preferably involving chironomid subfossils.
- Must be highly motivated.
- Detail-oriented and thorough in work ethic.
- The ability to work independently as well as in a research group.
- Comfortable using statistical software programmes (R, Microsoft Excel, Canoco, C2, etc.)







To Apply for the Scholarship:

Please email the following documents as one PDF file to karen.taylor@universityofgalway.ie

- 1. **CV** (two pages max.). Please include academic qualification grades as a percentage (i.e. overall degree and final subject grades).
- 2. **Cover letter** (two pages max.). Here, the applicant describes their interest in the position and how their skills and competencies align with the entry requirements and desirable criteria.
- 3. Two referees.

Please include your <u>name</u> in the document title (PDF file name). Submissions after the deadline will not be accepted.

Contact Name: Dr Karen Taylor

Contact Email: karen.taylor@universityofgalway.ie

Application Deadline: 30th of June 2025 at 17:00 (Irish time 24-hour format)

Primary Supervisor name: Dr Karen Taylor





