



Maynooth University Ollscoil Má Nuad

Department of Biology Postdoctoral Researcher (Temporary Contract, 24 Months)

The Role

Maynooth University is committed to a strategy in which the primary University goals of excellent research and scholarship and outstanding education are interlinked and equally valued.

The FamilyGenomics research group led by Dr Lorna Lopez, in collaboration with behavioural neuroscientist Professor Andrew Coogan at Maynooth University invite applications for the position of Postdoctoral Researcher on our "Ambient-BD" research project, due to commence in November 2023.

This five-year project is led by the University of Edinburgh with co-investigators at Maynooth University, Ireland and the Technical University of Munich, Germany. It is funded by the Wellcome Trust (2023-2028).

The purpose of Ambient-BD is to investigate the role of variability in long-term circadian rhythms in the trajectory of disease in people with bipolar disorder. The initial development and validation studies will be carried out in Maynooth University and the clinical studies in people with bipolar disorder completed at the University of Edinburgh. There will be considerable collaboration between the two research sites throughout the project.

Bipolar disorder is defined by extreme variability in mood, activity, sleep and circadian timing recurring over weeks and months. The purpose of Ambient-BD is to optimize innovative ambient and passive methods for collection of circadian data and to test their feasibility and performance against gold standards. A lived experience advisory panel will help us to identify and prioritize clinical and functional outcome measures to co-produce low intensity methods for collecting these outcomes. In parallel, we will develop a data collection and data management system to support data collection and optimize data sharing with patients, clinicians and the research community. Our goal is to identify causal mechanisms by which sleep and circadian disruption leads to relapse in bipolar disorder. We will also deliver an innovative programme of knowledge exchange and dissemination in collaboration with Bipolar Scotland

We are seeking an enthusiastic and ambitious postdoctoral scientist to join our research team to manage studies to develop novel methods for assessment of circadian rhythms. The successful



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candidate will work with us on cutting-edge research projects that focus on understanding how changes in the variability of circadian rhythms relate to human health and disease.

The postdoctoral researcher will find ample opportunities to collaborate via our membership of circadian research collaborations in the UK, <https://www.circadianmentalhealth.org/>. They will be given support to develop their independent research career, including help with fellowship applications, building collaborations and research placements in other research groups.

This position is embedded in a collaboration across genetics, data science, chronobiology and psychiatry and the successful candidate will become a part of a large team of lived-experience advisors, patient advocates, PIs, postdocs, PhD students and research assistants working together to drive the field of chronopsychiatry forwards.

Principal Duties

Research, Administrative and other duties:

This will include:

- Working under the supervision of principal investigator Dr Lorna M. Lopez, in collaboration with a team of researchers in Maynooth University and national, European and international collaborators
- Leading research to develop and validate novel methods for assessment of circadian rhythms
- Managing studies to apply and analyse sleep using polysomnography in the home setting of research participants
- Validating and applying tests of neuroendocrine secretion in research participants
- Collecting and managing large datasets of sensor data
- Applying and developing algorithms for analysis of sleep and circadian rhythms
- Conducting statistical analysis
- Communicating research at scientific and non-specialist meetings
- Writing academic papers for publication
- Submitting new research proposals to Irish, EU and other funding agencies
- Undertaking relevant training and development
- Assisting in the supervision of team members
- Carrying out additional duties as may reasonably be required within the general scope and level of the post.
- Due to the nature of studies investigating sleep, this position will involve some time spent working outside of normal office hours.

The ideal candidate will have:

Essential:

- Applicants will have a PhD in a health or biological discipline that included a significant element of data analysis or a PhD in data science and an interest in biomedicine
- Knowledge and research experience of chronobiology or sleep science, or experience in a related discipline and an interest in developing a career in chronobiology
- Experience in statistical analysis of large datasets, and in the use of Python, R or equivalent
- Self-motivation to direct and manage the development and application of novel analytical methods for assessment of circadian rhythms and sleep



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- Excellent research, analytical and oral and written communication skills to contribute to, or in some cases lead, papers, grants, and technical reports
- Commitment to contribute to the success of a large academic collaboration
- Enthusiasm for cross-disciplinary research
- Experience of project management in an academic setting
- A driving licence is essential as the successful candidate will be required to set up sleep and circadian studies in the homes of research participants

Desirable:

- Postdoctoral experience in a relevant field.
- Experience working with large biomedical datasets.
- Research experience in human chronobiology.

Faculty and Research Institutes

The Faculty of Science and Engineering comprises the Departments of Biology, Computer Science, Chemistry, Experimental Physics, Mathematical Physics, Mathematics and Statistics, Psychology and Electronic Engineering. The University has also developed a number of interdisciplinary Institutes to support excellent research and to build research capacity across disciplines, including the Institute of Immunology and the Kathleen Lonsdale Institute for Human Health Research.

Kathleen Lonsdale Institute for Human Health Research

The Kathleen Lonsdale Institute for Human Health Research at Maynooth University, takes a uniquely integrated approach to address some of the major health problems of today, including obesity and antimicrobial resistance, as well as researching many chronic inflammatory diseases like Crohn's and ulcerative colitis. The primary objective of the institute is to study key determinants of human health from childhood to adulthood, through to old age. Researchers at the institute explore how environmental, psychological, behavioural and biological factors affect health. The Institute consists of 43 research groups featuring over 100 researchers from disciplines such as Biology, Chemistry, Psychology, Computer Science as well researchers from other Maynooth University departments. While most of the groups focus on the biology of diseases and treatment, researchers also examine the various factors across the life course that determines health.

Department

The Department of Biology has a full-time academic staff of 27. It provides teaching in multiple degree programmes to almost 1,100 students, ranging from undergraduate to doctoral level. The Department of Biology offers well-established BSc Honours degree programmes in Biology, Biological and Biomedical Sciences, and Biotechnology and an award-winning taught MSc programme in Immunology and Global Health. It has a strong tradition in PhD education and currently directs a number of structured PhD programmes. The Department of Biology has a strong international reputation in research and has prioritised the following two research themes for strategic development and investment: 1. Immunology and Microbiology 2. Science underpinning sustainable exploitation of crop plants. Both themes are strongly supported by state-of-the-art approaches and research in Genomics, Proteomics and Chemical Biology.



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The University

Maynooth University is a very distinctive university, a collegial institution focused on science and engineering, humanities, and social sciences, and equally committed to research, teaching and community engagement. Located in Ireland's only university town, its distinctive features and character owe much to its unique history and heritage. It provides a high-quality educational experience to over 15,000 students on a campus with 18th century roots and 21st century dynamism.

The strategic trajectory and accomplishments of Maynooth University, in the 25 years since its establishment as an autonomous public university, are exceptional, and a source of great pride to the university community, staff, students and alumni. Maynooth University is now acknowledged to be one of the leading young universities in the world, and in 2022 ranked # 1 in Ireland in the latest Times Higher Education (THE) Best Young University Rankings. Maynooth University's growing global reputation is based on the originality, quality, importance and impact of its research and scholarship, commitment to teaching and learning, the quality of academic programmes, and its leadership in widening participation in higher education. The sources of success are the dedication of its staff and the energy and engagement of its students.

Maynooth University is a place of lively contrasts – a modern institution, dynamic, rapidly-growing, research-led and engaged, yet grounded in historic academic strengths and scholarly traditions. With over 15,000 students Maynooth offers a range of programmes at undergraduate, postgraduate and doctoral level in the humanities, science and engineering and social sciences, including business, law and education. The University also offers a range of international programmes and partnerships.

Maynooth's unique collegial culture fosters an interdisciplinary approach to research, which its world-class academics bring to bear in tackling some of the most fundamental challenges facing society today. The University's research institutes and centres consolidate and deliver this impact as vibrant communities of learning, discovery and creation. Research at Maynooth also is very much central to its teaching and the University prides itself on placing equal value on its research and teaching missions.

Principles and Values

Maynooth University is committed to the following values:

- Scholarly rigour;
- Academic freedom;
- Integrity and ethical behaviour;
- Collegiality, transparency and trust;
- Equality, inclusiveness and social justice;
- Operational excellence, organisational flexibility and responsiveness;
- Dignity, respect and care for the individual.

Strategy 2018 - 2022

The University's Strategic Plan 2018-22 builds from a position of confidence. Maynooth University is a University with ambition, vision and values, a clear identity and sense of purpose, a history of achievement, and a future of considerable promise. The Strategy builds on the University's accomplishments and concentrates institutional energy and resources on further development of research and postgraduate education.

For more information please visit <http://www.maynoothuniversity.ie/about-us/university-strategic-plan>



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Selection and Appointment

- Only shortlisted candidates will be invited to attend for interview.
- It is anticipated that interviews will be held in November 2023.
- The appointment is expected to be effective as soon as possible thereafter.

Equality and Diversity

Maynooth University values the enrichment that comes from a diverse community and seeks to promote equality, prevent discrimination and protect the human rights of each individual. To learn more about our commitment to Equality and Diversity, please read the Maynooth University [Equality and Diversity Policy](#) / [Polasaí Comhionannais agus Éagsúlachta](#). Additionally, as an [Athena SWAN Bronze Award](#) Institute, we are committed to advancing gender equality across the University.

We aim to reflect the diversity of the community we serve and welcome applications from all individuals, in particular from people underrepresented in our workforce.

Terms and Conditions

Tenure	This a full-time, temporary post, of 24 months duration. Contract cannot exceed 30.9.28. Depending on date of commencement, contract duration may vary.
Location	The place of work is the campus of Maynooth University, Maynooth, Co. Kildare.
Salary	Postdoctoral Researcher (2023): €42,783 - €43,371 p.a. (2 points with increment) Appointments will be made in accordance with public sector pay provisions.
Hours of work	A 37-hour working week is in operation in respect of full-time positions (pro-rated for part-time positions). This can be reviewed or adjusted from time to time through national agreements.
Annual Leave	Annual leave and public holidays are provided for in the University policy: https://www.maynoothuniversity.ie/human-resources/policies/annual-leave-policy Annual leave will be allocated on a pro-rata basis for part-time and temporary positions.
University policies and schemes	Employees of the University will be subject to the terms of the University policies and schemes, available on the University website at:



Athena
Swan
Ireland



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	https://www.maynoothuniversity.ie/university-policies https://www.maynoothuniversity.ie/human-resources/policies
Pension	<p>This is a pensionable post. Employees of the University will enter into a public sector pension scheme, details of the schemes are available at: https://www.maynoothuniversity.ie/human-resources/pension-information</p>
Eligibility	<p>Applications from non-EEA citizens are welcomed, applicants should note that eligibility is determined by the Department of Enterprise, Trade and Employment. Further information regarding eligibility is available at: https://enterprise.gov.ie/en/what-we-do/workplace-and-skills/employment-permits/employment-permit-eligibility/</p> <p>Non-EEA applicants are responsible for ensuring they can secure a visa to travel to Ireland. Any offer of employment is conditional on applicants securing the appropriate employment permissions.</p> <p>Former Irish Public Service employees - Certain Restrictions on Eligibility</p> <p>Eligibility of applicants formerly employed by an Irish Public Sector body, and who availed of an Irish Public Service Redundancy or Incentivised Retirement Scheme under the Schemes below, may be affected:</p> <ul style="list-style-type: none"> • Collective Agreement: Redundancy Payments to Public Servants • Incentivised Scheme for Early Retirement (ISER) • Department of Health and Children Circular (7/2010) • Department of Environment, Community & Local Government (Circular Letter LG(P) 06/2013) <p>Applicants should ensure that they are eligible to be re-engaged in the Irish Public Service under the terms of such Schemes. Applicants should address queries with their former Irish Public Sector employer.</p>
Garda vetting	Garda vetting or clearance may be required by the University.
Medical	The University may require a medical examination as a condition of employment.

Data Protection Law

Maynooth University will process any personal data provided by you in connection with an application for this role in accordance with the General Data Protection Regulation and the Data Protection Acts 2018.

If your application is successful and you accept an offer of employment at Maynooth University, then your personal data will continue to be processed in accordance with Maynooth University's Staff Data Privacy Notice.

Both the privacy notices and further information relating to data protection, including Maynooth University's other data protection policies and processes, can be viewed at <https://www.maynoothuniversity.ie/data-protection>



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Application Procedure

Closing Date:

23:30hrs (local Irish time) on 23:30hrs (local Irish time) on **Sunday, 05th November 2023.**

Please note all applications must be made via our **Online Recruitment Portal** at the following link:

<https://www.maynoothuniversity.ie/human-resources/vacancies>

Please apply with your CV and a Cover letter that includes a brief summary of the following:

- your research interests;
- a proposal for how your previous experience will fit with the aims of “*Ambient and passive collection of sleep and circadian rhythm data in bipolar disorder to understand symptom trajectories and clinical outcomes (AMBIENT-BD)*”

Applications must be submitted by the closing date and time specified above. Any applications which are still in progress at the closing time on the specified closing date will be cancelled automatically by the system.

Late applications will not be accepted.

Maynooth University is an equal opportunities employer

The position is subject to the Statutes of the University



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