

OLLSCOIL NA GAILLIMHE UNIVERSITY OF GALWAY



Postdoctoral Researcher in Developing Brain Organoid Models for Brain

Cancer Research in the Field of Brain Mechanobiology.

<u>Centre for Research in Medical Devices (CÚRAM)</u> Ref. No. 011016

JOB ADVERTISEMENT

Applications are invited from suitably qualified candidates for a full-time, fixed term position as a Postdoctoral Researcher at the Centre for Research in Medical Devices (CÚRAM), University of Galway, Ireland to work on the Development of Brain Organoid Models for Brain Cancer Research in the Field of Brain Mechanobiology.

This position is funded by the European Research Council (ERC) under a starting grant award from October 2025 for 2.5 years, subject to successful completion of an initial six months probationary period. Possibility for extension is available, subject to successful project outcomes.

Organisation CÚRAM is a national, Research Ireland-funded research centre that brings together researchers from University of Galway, University College Dublin, Dublin City University, University of Limerick, University College Cork, Trinity College Dublin, and Royal College of Surgeons Ireland. The prime objective for CÚRAM is to radically improve health outcomes for patients by developing innovative implantable 'smart' medical devices to treat major medical needs.

This project will focus on developing and characterising complex brain cultures, including brain organoids, assembloids, and primary cultures of brain cancer cells, to understand how mechanobiological events, such as physical and mechanical activation, influence cell fate. These insights will be valuable for the "TrapKill" platform, which integrates cancer mechanobiology, microfabrication, and biomaterials engineering to create innovative therapies for brain tumours.

Salary: Postdoctoral Researcher salary scale **€45,846**, - **€58,481** per annum, (subject to the project's funding limitations), and pro rata for shorter and/or part-time contracts.

The default position for all new public sector appointments is the 1st point of the salary scale. This may be reviewed, and consideration afforded to appointment at a higher point on the payscale (subject to the project's funding limitations), where evidence of prior years' equivalent experience is accepted in determining placement on the scale above point 1, subject to the maximum of the scale. (Research Salary Scales - University of Galway)

Closing date for receipt of applications is 17:00 (Irish Time) on 7th May 2025. It will not be possible to consider applications received after the closing date.

*Please review full job description for further details and essential requirement



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JOB DESCRIPTION

Job Description:

The successful candidate will be responsible for developing and characterizing complex brain cultures, including brain organoids, assembloids, and primary cultures of brain cancer cells. The focus will be on understanding how mechanobiological events, such as physical and mechanical activation, influence cell fate. These insights will be valuable for the "TrapKill" platform, which integrates cancer mechanobiology, microfabrication, and biomaterials engineering to create innovative therapies for brain tumours. The candidate may also undertake in vivo studies.

Duties and Responsabilities:

- Perform extensive in vitro experimentation, including live cell imaging and molecular biology and biochemical assays;
- Supervise PhD and Master students
- Analyse data in an accurate and precise manner;
- Actively participate in international conference meetings;
- Participate in grant, patent filling and publish data in high impact factor journals;
- Closely work with teammates, collaborators, and clinicians within and outside the University of Galway;
- Any other duties assigned commensurate to this level of post.

ELIGIBILITY REQUIREMENTS

Essential Requirements:

- Candidate must have a PhD in Biomedical Engineering, Biology, or similar. (Candidates who have submitted their thesis and awaiting their viva prior to commencement date, will also be considered.
- Proven track record in a research and development environment.
- Previous experience with primary brain cultures and iPSCs neural differentiation.
- The successful candidate should also have expertise in as many of the following areas as possible: bioreactor cell culture, molecular biology and biochemical assays, live cell imaging, in vivo experience and biomaterials.
- Candidate should be highly motivated and passionate about developing new therapies for brain research.

Desirable Requirements:

- Experience working with brain organoids.
- Computational modelling



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CONTINUING PROFESSIONAL DEVELOPMENT

Continuing Professional Development/Training:

Researchers at University of Galway are encouraged to avail of a range of training and development opportunities designed to support their personal career development plans. University of Galway provides continuing professional development supports for all researchers seeking to build their own career pathways either within or beyond academia. Researchers are encouraged to engage with our Researcher Development Centre (RDC) upon commencing employment - see <u>HERE</u> for further information.

FURTHER INFORMATION/LINKS

- **TO APPLY:** <u>Search Current University of Galway vacancies</u>. Applications must be submitted online.
 - How to apply guide
- For informal enquiries, please contact:
- Catalina Vallejo Giraldo, catalina.vallejogiraldo@universityofgalway.ie or
- Manus Biggs manus.biggs@universityofgalway.ie
- University's Strategic Plan
- Working in Research at University of Galway
- Moving to Ireland (Euraxess)
- Applicant Information
- We reserve the right to re-advertise or extend the closing date for this post.
- University of Galway is an equal opportunities employer.
- All positions are recruited in line with Open, Transparent, Merit (OTM) and Competency based recruitment.

