**PhD Scholarship in Heart Organ Bioprinting**

Biomedical Engineering and CÚRAM

University of Galway, Ireland.

Applications are invited from suitably qualified candidates for a full-time, fully-funded PhD scholarship in AI-powered organ bioprinting. The scholarship will be under the supervision of **Dr Andrew Daly,** Associate Professor in Biomedical Engineering.

The researcher will join Dr Daly's lab, which combines expertise in 3D bioprinting, tissue engineering, and biomaterials. The group leverages this interdisciplinary research expertise for heart tissue bioprinting applications. Previous examples of our work can be found [here](https://advanced.onlinelibrary.wiley.com/doi/full/10.1002/adfm.202424553) and [here](https://advanced.onlinelibrary.wiley.com/doi/full/10.1002/adfm.202414559). For further information, see [biofabrication.ie](https://www.biofabrication.ie/). Our lab is located in the vibrant biomaterials research cluster at CÚRAM, the Research Ireland Centre for Medical Devices at the University of Galway, which possesses state-of-the-art biomaterials and tissue engineering research facilities. The position is available from October 2025.

**University of Galway:** Located in the vibrant cultural city of Galway in the west of Ireland, with over 18,000 students and more than 2,400 staff, the University of Galway has a distinguished reputation for teaching and [research excellence](https://www.universityofgalway.ie/our-research/). In particular, the University of Galway is a leading international research hub for Medtech and Biomedical Engineering Research, and Galway's Medtech cluster is globally recognised as one of the top 5 in the world.

**Project Description:** Bioprinting technology holds tremendous potential for developing artificial tissues and organs that mimic the complexity of their native counterparts. Despite considerable advances in the field, the limited reproducibility and adaptability of bioprinting are significant challenges. This frontier research project will focus on establishing a new intelligent, AI-driven bioprinting platform with volumetric process vision and closed-loop control. This technology will be leveraged to fabricate multicellular human heart tissue constructs derived from induced pluripotent stem cells. As part of the PhD program, you will receive advanced training in biofabrication, microscopy, computer vision, and hydrogel engineering techniques.

**Stipend:** Fully funded four-year scholarship - €25,000 per annum (tax-exempt scholarship award). You will also receive a high-end laptop for your research. Travel expenses are included to attend leading international conferences.

**University fees**: University fees are fully covered by the scholarship.

**Start date**: Expected start date of Winter 2025 or Spring 2026

**Academic Entry Requirements:** Applicants must hold a Bachelor's Degree in Biomedical Engineering, Mechanical Engineering, Mechatronics, Physics, Computer Science or a related field. Prospective candidates should be enthusiastic, motivated, and willing to learn new skills.

**To Apply for the Scholarship:** Interested candidates should send their CVs (including the names of two referees) and a one-page motivation letter explaining why they would like to join the project to Dr Andrew Daly at [andrew.daly@universityofgalway.ie](mailto:andrew.daly@universityofgalway.ie). Please use the subject line "PhD application". For an informal discussion on the positions, do not hesitate to reach out via email.

**Application Deadline:** 31/10/2025

For information on moving to Ireland, please see [www.euraxess.ie](http://www.euraxess.ie)