

## Stokes Lectureships at GMIT in Biomedical Science

**Post Titles:**

- Implantable Device Design and Test;
- Simulation of Human Anatomical Systems, Physical and Virtual;
- Vascular Disease Intervention Methodologies.

**Funding Agency:** Science Foundation Ireland (Stokes Lectureship)

**Description:** The role will be as follows:-

- Lead research in the development of advanced simulation models of human anatomical systems, both diseased and healthy, using physical modeling and mathematical modeling approaches. These simulation models will be used to increase understanding of various disease states, and to inform the development of improved and novel treatment procedures.
- Perform teaching and lecturing duties in line with the requirements of the School of Engineering. It is anticipated that the lecturing duties will span both undergraduate and post-graduate courses.
- Supervision of post-graduate research students, at both M.Sc., and PhD levels.

**Research Environment:** The Stokes Lecturer will work within the Galway Medical Technologies (GMedTech) Centre, which was established in GMIT in 2006. The Centre supports the medical device design and development community through both the development of test systems which simulate the various systems in the human body, and the provision of specialised medical device design support. Both physical and virtual (typically FEA & CFD based) simulation systems are being developed by the Centre and these are being used to better understand interactions between the body and medical devices used to treat disease.

The Lecturer will collaborate closely with medical practitioners to identify strengths and weaknesses of existing treatment methods for various diseases, and to gather relevant topographical and physiological data on both healthy and diseased patients.

The members of the GMedTech team will support the Lecturer in his/her research activities. The researcher will be based the GMedTech building, which will be opening in May 2007. The initial focus of GMedTech is on the simulation of the arterial and venous systems, with plans in place to expand into the development of capabilities to investigate the urinary, digestive and musculoskeletal systems.

**Requirements/Background:** The successful candidate will hold a PhD, or equivalent, in a Mechanical or Biomedical Engineering discipline, and will have at least two years of independent research experience beyond the PhD. It is preferable that the person also has some relevant lecturing experience and experience of working closely with both medical practitioners and industry based R&D personnel.

**Project Start-Date:** September 2007

**Project Duration:** 5 Year Fixed Term

**Conditions:** SFI Award is valued at €90,000 per post, per annum

**Further Information on the Project:** Mr. John Kelly, Centre Director, GMedTech Centre

**Please submit a detailed Curriculum Vitae along with a covering letter clearly indicating the post title to:**

**Human Resources Department,  
Galway-Mayo Institute of Technology,  
Dublin Road, Galway.  
Email: [hr@gmit.ie](mailto:hr@gmit.ie)  
Telephone No.: (091) 742763/742767/742737  
Fax No.:(091) 770545**

*Latest date for receipt of application is: **12 noon on Friday 25<sup>th</sup> May, 2007***