Applications are invited for the following position: **PhD Studentship**

Project: Functionalisation of 3D collagen-based scaffolds for nucleic acid delivery through the incorporation of novel nanoparticles

Supervisor: *Prof. Fergal O'Brien, Tissue Engineering Research Group, RCSI*

http://pi.rcsi.ie/pi/fjobrien/pi.asp

Co-supervisor: *Prof. Caitriona O'Driscoll, School of Pharmacy, UCC*

http://research.ucc.ie/profiles/C019/caitrionaodriscoll

The use of nanoparticles as vesicular systems for drug delivery is an important area of research for the development of improved therapies. The aim of this project is to develop functionalised collagen-based scaffolds for the delivery of nucleic acids using novel nanoparticle formulations which have recently been developed by researchers based in the SFI-funded CÚRAM and AMBER research centres. These gene-activated scaffolds will be used as platforms for tissue regeneration and as physiologically-relevant 3D systems for disease modelling and for drug development and delivery.

The researcher will be primarily based in the Tissue Engineering Research Group and AMBER Centre at RCSI and will work closely with other members of a multidisciplinary project team including PIs, postdoctoral and postgraduate researchers within this research cluster. In addition, the student will work closely with Prof. Caitriona O'Driscoll's team in the CÚRAM centre at UCC where the student will spend significant time. The ideal applicant will have a 1st Class Honours Bachelor's degree or MSc degree (with minimum 2.1 honours from primary degree) in pharmacy/biomedical engineering or related disciplines. Specific skills which would enhance a candidate's application might include experience in some of the following areas: scaffolds in tissue engineering, cell culture, drug delivery, nano-particle syntheses and fabrication, advanced microscopy, histological techniques, micro-CT and molecular biology experience. Excellent written and oral communication skills are desired.

CVs with the names and addresses of three referees should be submitted to:

Prof. Fergal O'Brien, Dept. of Anatomy, Royal College of Surgeons in Ireland
Email: fjobrien@rcsi.ie

Only short-listed applications will be acknowledged.

This position is funded by the SFI CÚRAM Centre.