PhD Studentship – Multifunctional Collagen Biomaterials

Description:
Applications are invited from suitably qualified candidates for a three-years, fully funded, full-time PhD position at the University of Ioannina, Greece. The project is in collaboration with the National University of Ireland Galway (NUI Galway), Galway, Ireland. The successful candidate will spend time in both Universities. The position is available from September 2019 onwards. The project aims to develop multifunctional collagen-based implantable devices for wound healing purposes. The produced scaffolds will be characterised using an array of biochemical, biophysical, biomechanical and biological methods. The release profile / pharmacokinetics of various therapeutic / bioactive molecules will be assessed. Extensive *in vitro* analysis will be conducted using human permanently differentiated and stem cell populations. Preclinical analysis of the produced scaffolds will also be conducted.

Qualifications / Expertise:
The candidate should have a 1st or 2:1 Bachelor's degree and a Master's in biomaterials, biomedical engineering, tissue engineering, cell biology, biology, drug discovery, biochemistry, or in a related area. The ideal candidate should have experience in as many of the following techniques: collagen extraction and characterisation; scaffold fabrication, functionalisation and characterisation; cell (permanently differentiated and stem cells) biology; molecular biology; protein and gene analysis; preclinical analysis; histology; and immunohistochemistry. The candidate should have excellent communication and organisational skills; be highly motivated and passionate about developing new products; and have strong written, oral and interpersonal skills. The candidate should be able to work independently and as a part of team.

Duties:
The successful candidate will be involved in: Collagen extraction and characterisation; Scaffold fabrication, functionalisation and characterisation; Cell acquisition from human tissues; *In vitro* biophysical, biomechanical, biochemical, biological characterisation of the produced scaffolds; Drug release / pharmacokinetics analysis; Preclinical evaluation of the produced multifunctional scaffolds; Conference and Meeting attendance and participation; Report and paper writing; Participation to training courses; Undergraduate teaching and/or laboratory demonstrations; Other duties relevant to the post.

Start Date:
September 2019 or soon after that.

To Apply:
Applicants should submit a cover letter outlining their suitability to the post, a detailed CV and the contact details of three referees. The application pack should be emailed to Dr Dimitrios Zeugolis (dimitrios.zeugolis@nuigalway.ie). Closing date for receipt of applications is 17.00 on Friday, 16th of August 2019.