

Fully Funded PhD Studentship – Multifunctional Collagen Biomaterials

Description:

Applications are invited from suitably qualified candidates for a fully funded (fees and stipend), full-time PhD position between the University College Dublin, Dublin, Ireland and University of Ioannina, Arta, Greece. The position is available from June 2021 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; Travel to project partners' institutes; Other duties relevant to the post.

Start Date:

June 2021 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 Prof. Ioannis Skoufos (jskoufos@uoi.gr) and to Prof. Dimitrios Zeugolis (dimitrios.zevgolis@ucd.ie). Closing date for receipt of applications is 12:00 on Friday, 14th of May 2021.