



**Applications are invited for the following a PhD studentship for the following project:**

**Electro-conductive biomaterials for nerve repair**

The position will be based within the [Tissue Engineering Research Group](#) at the [Royal College of Surgeons in Ireland](#) and will be part of the Materials for Health platform within the Advanced Materials and Bioengineering Research Centre (AMBER) centre.

Over 50,000 people across the UK and Ireland suffer from some form of spinal cord injury and live with permanent neurological dysfunction: ***This project is focused on the development of an electroconductive biomaterial with applications in for both peripheral nerve and spinal cord repair.*** Using natural polymer derived platform biomaterials previously developed in the AMBER labs for tissue regeneration, this project proposes to enhance their regenerative capacity through the incorporation of electroconductive functional materials. Such conductive biomaterials could thus provide direct electrical activation of isolated regions of damaged electroactive tissues while also providing a scaffolding to sustain cell proliferation and growth.

The ideal applicants will ideally have a 1<sup>st</sup> Class Honours Bachelor's degree in (bio)engineering or materials science. Experience in **3D printing**/additive manufacturing or working with electroconductive materials would be advantageous.

Specific skills that would enhance a candidate's application for the position might include experience in some of the following areas: scaffolds in tissue engineering, materials synthesis and functionalisation; 3D printing; cell culture; mechanical testing of materials; advanced microscopy; PCR; immunohistochemistry and other histological and imaging techniques.

The researcher will work closely with other members of a multidisciplinary project team including PIs, postdoctoral and postgraduate researchers within this TERG & AMBER research cluster. Excellent written and oral communication skills are essential.

**How to apply:**

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

**Prof. Fergal J. O'Brien, PhD (PhD Primary Supervisor)**

Dept. of Anatomy,  
Royal College of Surgeons in Ireland  
123 St. Stephen's Green,  
Dublin 2, Ireland

**Email:** [fjobrien@rcsi.ie](mailto:fjobrien@rcsi.ie)

<https://www.rcsi.com/people/profile/fjobrien>

<http://scholar.google.com/citations?user=CFBzniwAAAAJ>

Positions will remain opened until filled but preferred start date is [September 2 2019](#). Only short-listed applications will be acknowledged.

This position is funded by the SFI-research centre AMBER.

The AMBER research centre, as a community of researchers, welcomes its responsibility to provide equal opportunities for all. We are actively seeking diversity in our research teams and particularly encourage applications from underrepresented groups.