Applications are invited from suitably qualified candidates for the following position:

**Full-time Doctoral Candidate Position in advanced non-invasive (multiphoton microscopy and fluorescent lifetime imaging microscopy) techniques towards detailed profilometry of tumor microenvironments**

**The Monaghan Lab:** Dr. Michael Monaghan leads a multidisciplinary research group in the School of Engineering in Trinity College Dublin and is a Principal Investigator within the Trinity Centre for Bioengineering (TCBE). The successful applicant will work within a multidisciplinary project team including PIs, postdoctoral research fellows and postgraduate researchers in the Trinity Centre for Bioengineering (TCBE; [http://www.tcd.ie/bioengineering/](http://www.tcd.ie/bioengineering/)), The Department of Surgery, Trinity College Dublin at St. James’ Hospital Dublin and the Trinity Translational Medicine Institute. This project is part of the Monaghan Lab’s vision of harnessing non-invasive imaging towards metabolic profiling of pathological niches towards improving diagnostics, treatments and further understanding of immunometabolics. The Monaghan Lab Webpage: [www.monaghanlab.com](http://www.monaghanlab.com)

**Project Description:** The aim of the research project is to develop, optimize and interpret a multifunctional imaging testbed for the metabolic profiling of pathological microenvironments. This project will involve detailed analysis of clinical tissues using advanced microscopy techniques.

**Qualifications:** Applicants will ideally have a background in molecular medicine, medical physics or a biomedical engineering/sciences (with some imaging experience). This is a truly interdisciplinary project, therefore candidates are not expected to have all the skills required and must have the drive to learn new concepts and techniques. Preference will be given to candidates who have experience in microscopy, tissue processing, in vitro cell culture, biochemical assays, in vitro/vivo immunohistochemistry and/or experience with multifunctional imaging probes. Candidates should have excellent communication and organisational skills; be highly motivated and passionate; and have strong written, oral, and interpersonal skills. The candidate should be able to work independently and as a part of team.

Applicants should be highly motivated with an ability to engage with disciplines outside of their fields.

**Skills and responsibilities:** Specific skills that would enhance a candidate’s application for the position include experience in some of the following areas: FLIM microscopy (essential to the project but training can be provided), cell culture (in particular organoid cultures), particle synthesis, metabolomics, cell isolation.

**Starting Date:** September 2018. This position is supported by Trinity College Dublin’s Provosts PhD Project Awards. Trinity College Dublin has launched 40 fully funded PhD positions across a wide variety of disciplines. The 40 Provost’s PhD Project Awards are open to EU and Non-EU candidates and include an annual stipend of €16,000 for four years. These doctoral awards are generously funded through alumni donations and Trinity’s Commercial Revenue Unit.

**To Apply:** Applicants should submit a cover letter outlining their suitability to the post, a detailed CV, and the contact details of three referees. **All of this should be contained in ONE .pdf file.** The application pack should be emailed to Dr Michael Monaghan at monaghmi@tcd.ie with the subject heading ‘Imaging TE-PhD’. **Deadline for applications is 30th June 2018.** Informal enquiries can be directed to monaghmi@tcd.ie. Trinity College Dublin, the University of Dublin is an equal opportunities employer.