PhD Studentship

Suitable candidates are invited to apply for a PhD studentship at Dublin City University (DCU) as part of the collaborative INTERREG VA programme. The studentship (with stipend) will be four years in duration and part of the DCU School of Biotechnology structured PhD programme.

Project:
Endothelial release of membrane vesicles that harbour Notch and Hedgehog ligands as a POCT Predictor of Atherosclerosis.

Project Description: Extracellular vesicles include apoptotic bodies, exosomes, and microvesicles (also known as microparticles). The role of extracellular vesicles as regulators of transfer of biological information, acting locally and remotely, is now widely acknowledged. Circulating vesicles released from endothelial cells contain potential valuable biological information for biomarker discovery in primary and secondary prevention of coronary artery disease. These vesicles accumulate in human atherosclerotic plaques, where they affect major biological pathways, including inflammation, proliferation, calcification, and differentiation responses.

Requirements: Applicants must have a BSc (hons), Grade 1:1 or 2:1 (or MSc) in a biological discipline with experience in cell biology, protein biochemistry and tissue culture.

Main Supervisor: Professor Paul A. Cahill, Vascular Biology & Therapeutics Group, School of Biotechnology, Faculty of Science and Health, Dublin City University, Ireland.

About INTERREG VA: The programme was established in 2017 as a cross-border centre of research programme spanning Northern Ireland, the Border Counties of Ireland and Western Scotland. The primary focus is on cardiovascular medicine with a particular emphasis on medical grade wearables, data analytics, ambient assisted living, rehabilitation and associated remote monitoring systems.

Point-of-care testing (POCT) is necessary to provide a rapid diagnostic result for a prompt on-site diagnosis and treatment. Microfluidic lab-on-a-chip technologies have been considered as one of the promising solutions that can meet the requirement of the POCT since they can miniaturize and integrate most of the functional modules used in central laboratories into a small chip. Hence, POCT detection of plasma markers associated with subclinical atherosclerosis will have important application for clinical practice.

To apply – please email your CV and refs to: liz.oconnor@dcu.ie
Please use this code: ECMEP1PC - in email subject header

Application Closing Date: 31st July 2017