

OUR CONSORTIUM



University of Brighton

- ◆ National University of Ireland, Galway (NUIG), Ireland
- ◆ Foundation for Research and Technology (FORTH), Greece
- ◆ Institute for Composite and Biomedical Materials-National Research Council (IMCB-CNR), Italy
- ◆ Universidad de Valladolid (UVa), Spain
- ◆ University of Brighton (UoB), United Kingdom
- ◆ University Hospital Basal Switzerland (UHBS), Switzerland
- ◆ Selyno Biomedical (SYB), Israel
- ◆ VivaSure Medical Ltd. (VivaSure), Ireland

PROJECT INFORMATION

AngioMatTrain is a four-year project, funded by the European Union Seventh Framework Programme (FP7/2007-2013) under the Marie Curie Initial Training Network and grant agreement No. 317304

The project commenced in May 2013



For further information, please contact the project coordinator

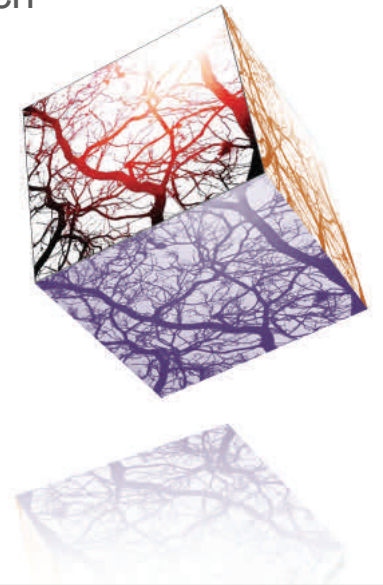
sarah.gundy@nuigalway.ie

Or visit <http://www.angiomatrain.eu>

AngioMatTrain

Development of Biomaterial-based Delivery Systems for Ischemic Conditions-

An Integrated Pan-European Approach



w: www.angiomatrain.eu



OVERVIEW OF THE PROGRAMME

AngioMatTrain focuses on the comprehensive, multidisciplinary understanding of ischemic diseases, from basics to translation, fully supported by eight full partners (5 universities, 1 hospital and 2 SMEs). The programme will educate and train 12 Early Stage Researchers and 3 Experienced Researchers in: tissue engineering, materials science, chemistry, functionalisation, cell biology, nanotechnology, bio-analytical techniques, *in vivo* models and prototype design. The researchers will undertake cross-disciplinary and intersectorial research projects, which when married together will deliver a novel, biomaterial-based, therapeutic device for the treatment of ischemic disease. 11 of the 12 ESRs will complete the AngioMatTrain PhD programme which is based on the promotion of knowledge through original research and is supported by additional discipline-specific and generic and transferable skills training. The research training programme is designed to ensure high-calibre graduates, best placed to secure employment in the private or public sector. Fellows will experience both private and public sector research and development environments through a considered secondment plan.

WHAT IS ISCHEMIA?

Ischemia occurs when blood supply to a tissue is limited, an example being ischemic heart disease, the most common cause of death in the western world, from which 16 million European adults currently suffer. Ischemia is not limited to heart disease and the research will have a wider scope across other medical conditions. Ischemia has a number of causes such as blockages, as in the case of cholesterol blockages in atherosclerosis or the clotting that may cause ischemic stroke, inflammation as in ischemic colitis, or conditions such as sickle cell anaemia. Acute limb ischemia occurs when blood supply is lost to a limb, with delayed treatment leading to morbidity, amputation and even death.

AngioMatTrain

TRAINING OF RESEARCHERS

A unique feature of the grant is that it funds four research summer schools for early researchers enrolled in this specially-designed training programme. The acquirement of transferable skills through both specific training and involvement in the programme will ensure fellows develop greater proficiency in a variety of topics including: research management, research ethics, health and safety, report and technical writing, team-based research, and entrepreneurship. The contents of the research summer schools highlight the local expertise of host partners, as well as featuring contributions from all network partners.

Research Summer Schools

Nature-inspired Nanomaterials; Characterisation and Applications for Ischemic Conditions (FORTH, Greece)-May 2014

Tissue Engineering and Regenerative Medicine I (UVA, Spain)-December 2014

Tissue Engineering and Regenerative Medicine II (NUIG, Ireland)-July 2015

Entrepreneurship, IPR, Exploitation and Commercialisation (SYB, Israel)-April 2016

PROGRAMME OBJECTIVES

- ◆ To synthesise and fabricate self-assembled nanoscale biomaterial systems
- ◆ To design delivery mechanisms for small and large biomolecules to specific sites for angiogenesis
- ◆ To have researchers acquire skills through both specific training and their involvement in specially designed summer schools
- ◆ To conduct preclinical studies on the delivery of functionalised angiogenic biomaterials