

Current CDT Projects 2015/16

2015/16

The development of an adaptive and reactive interface system for lower limb prosthetic applications

EngD student: Jake Bagwell

Supervisors: Dr Arjan Buis and Dr Mario Giardini, BME

Clinical/Industrial collaborator: Ossur hf. Reykjavik, Iceland

A wearable, interactive, weight support device for upper limb rehabilitation

EngD student: Ross Collins

Supervisors: Dr Andrew Kerr, BME AND Dr Avril Thomas, Design, Manufacture & Engineering

Clinical/Industrial collaborator: Dr Mark Barber, Consultant Stroke Physician, NHS Lanarkshire; Dr Preeti Ragavan, Assistant Professor, Department of Rehabilitation Medicine (NYU). Mrs Debbie Strang, Senior Physiotherapist, NHS Lanarkshire and Kathleen Molloy, Stroke Survivor, PPI representative, Glasgow SAEBO, North Carolina, USA

Wearable LED-based phototherapy device

EngD student: Francesca Farrell

Supervisors: Dr Nicolas Laurand, IoP Physics; Prof P Connolly, BME and Dr Anne-Marie Haughey, Fraunhofer Centre for Applied Photonics

Clinical/Industrial collaborator:

Design and Fabrication of a Multi-Well ATR-FRIR Accessory for High-throughput Spectroscopic Diagnostics

EngD student: Duncan Finlayson

Supervisors: Dr Matthew Baker, Pure and Applied Chemistry and Prof Terry Gourlay, BME

Clinical/Industrial collaborator: Dr Mark Hegarty, Managing Director of Daysoft and CLINSPEC

A Steerable Drill and its multi-modality navigation system for Robotic Orthopaedic Surgery

EngD student: Julius Lipskas

Supervisors: Dr Wei Yao, BME and Prof Philip Rowe, BME

Clinical/Industrial collaborator: Dr Jon Clarke and Mr Kamal Deep, Golden Jubilee National Hospital

Developing combined serum-based biochemical markers for differential diagnosis of the dementias

EngD student: Zanib Panni

Supervisors: William McGeown, Psychological Sciences and Health and Matthew Baker, Pure & Applied Chemistry

Clinical/Industrial collaborator: Dr John Greene, Neurologist, Southern General Hospital

Fusing Infrared and Electrochemical Analysis for Accurate and Sensitive Clinical Measurements

EngD student: Christopher Rinaldi

Supervisors: Lynn Dennany and Dr Matthew Baker, Pure & Applied Chemistry

Clinical/Industrial collaborator: Dr Roman A Lukaszewski, Defence Science and Technology Laboratory, Salisbury; Prof Timothy Dawson, NHS Preston; Mr Michael Jenkinson, Walton Centre NHS Trust Liverpool

E-cigarette smoking cessation aid

EngD student: Abbey Sturrock

Supervisors: Prof P Connolly, BME and Dr Andrew Ward, BME

Clinical/Industrial collaborator: Mr Gordon MacGregor, Respiratory Consultant, Queen Elizabeth University Hospital

An auditory mid-brain optogenetic prosthesis

EngD student: Ruaridh Winstanley

Supervisors: Dr Keith Mathieson, Institute of Photonics and Shuzo Sakata, SIPBS

Clinical/Industrial collaborator: Dr Alexander Weir, Head of Software & Technical Device Engineering, Medical Device Unit, NHS Greater Glasgow & Clyde