

Current CDT Projects

2016/17

3D visualisation and flow imaging for retinal diagnostics

EngD student: Ian Coghill

Supervisors: Dr Mario Giardini, BME; Dr Richard Black, BME and Asimina Kazakidi, BME

Clinical/Industrial collaborator: Mr Iain AT Livingstone, Consultant Ophthalmologist for NHS Forth Valley and Prof. Dr. Ir. Heidi Ottevaere, Brussels Photonics Team (B-PHOT) of the Vrije Universiteit Brussel, member of the coordination team of ACTPHAST

Cystic Fibrosis Patient Monitor

EngD student: Sean Donnelly

Supervisors: Prof P Connolly/Dr A Ward, BME and Dr Gordon MacGregor

Clinical/Industrial collaborator: Dr Gordon MacGregor, Respiratory Consultant, Queen Elizabeth Hospital , Glasgow and Ohmedics Ltd

A soft wearable robotic exoskeleton for rehabilitation of the frozen shoulder

EngD student: Jonathan Failes

Supervisors: Dr Heba Lakany, BME and Prof B Conway, BME

Clinical/Industrial collaborator: Mr Tim Hems, Consultant Orthopaedic Surgeon

Lipids in Cancer – Advanced nanospectroscopic profiling and assessment of non-conventional drugs for cancer therapy

EngD student: Mark Governo

Supervisors: Prof Duncan Graham, Pure & Applied Chemistry and Dr Paul Murray, EEE

Clinical/Industrial collaborator: Professor Hing Leung, Beatson Laboratories

Paediatric wound infection sensor

EngD student: Aiden Hannah

Supervisors: Prof P Connolly/Dr A Ward, BME; Dr Neal Patel & Dr Helen McDevitt

Clinical/Industrial collaborator: Dr Neal Patel & Dr Helen McDevitt, Consultant Paediatricians, Royal Hospital for Children Glasgow; Mr Tim Bradnock, (Consultant Paediatric Surgeon), Neonatal Unit, Royal Hospital for Children Glasgow and Ohmedics Ltd

3D Bioprinting of Transplantable Vascular Grafts for Paediatric Heart Surgery

EngD student: Jack Logan

Supervisors: Prof Will Shu, BME and Prof T Gourlay, BME

Clinical/Industrial collaborator: Professor Mark Danton, Paediatric Cardiac Surgeon, Glasgow Children's Hospital

3D Bioprinting of resorbable scaffolds for bone tissue engineering in maxillofacial surgery

EngD student: Ross McWilliam

Supervisors: Prof Will Shu, BME and Dr Richard Black, BME

Clinical/Industrial collaborator: Mr David Koppel, consultant craniofacial surgeon at the Regional Maxillofacial Unit in the Queen Elizabeth University Hospital and Dr E Irvine, Bioglex Ltd

Realising the rapid liquid biopsy for cancer - a microelectrode sensor array with improved surface chemistry for detection and discrimination of circulating tumour DNA

EngD student: Bukola Omolaiye

Supervisors: Dr Damion Corrigan, BME and Dr Matthew Baker, Pure & Applied Chemistry

Clinical/Industrial collaborator: Dr Fiona Thomson – Director of Translational Pharmacology Laboratory & Senior Research Fellow. Institute of Cancer Science, University of Glasgow. Dr Nicholas Turner – Lecturer in Analytical Science, Faculty of Science, Technology, Engineering & Mathematics, Open University

An electrochemical device for rapid identification and antibiotic susceptibility profiling of key bacterial species involved in meningitis and sepsis

EngD student: Vincent Vezza

Supervisors: Dr Damion Corrigan, BME and Dr Paul Hoskisson, SIPBS

Clinical/Industrial collaborator: David Alcorn (Consultant Anaesthetist) at Royal Alexandria Hospital Paisley