

Surgical MedTech Cooperative

NEWSLETTER

April 2021

Edition 12

Welcome to the latest issue our quarterly newsletters. We are one of 11 national MICs funded by the National Institute for Health Research. Based in Leeds, we are a national network of clinicians, scientists, industry, patients and public working together to advance the care of patients with Colorectal, Vascular, Neurosurgery & HPB diseases. For more information on what we do, please contact surgicalmic@leeds.ac.uk

'Immersive Technologies in Healthcare Education & Training: Three Principles for Progress'

Dr Ryan Matthew (theme lead for Health within Centre for Immersive Technologies [CfIT]) and Dr Faisal Mushtaq (deputy director of CfIT) have been involved in the co-produced with Health Education England outlining a suggested set of principles for using immersive technologies in healthcare education and training, they have published a document outlining three principles for progress.



Boosting ultrafast lasers' medical benefits



In the battle to give people the longest, healthiest lives possible, cancer is one of our oldest foes, with some Egyptian mummies showing signs of bone cancer. The US government even declared war on cancer in 1971, and called for a 'moonshot' to end cancer as we know it in 2006. The resulting intensive medical effort has made many cancers treatable today. Yet modern populations are getting older on average, and older people's cells are exposed to more factors that can make them mutate and become cancerous.

Robots with T-ray technology to spot and remove cancer tumours in £8 million project

New technology that will marry probes that can detect cancer tumours through the skin with high-precision robotic surgery is to be developed for use in hospital settings for the first time in a project led by the University of Warwick.

The Terabotics project will use probes that use terahertz radiation, or T-rays, to scan for tumours under the skin while medical-grade surgical robots will be adapted to use these scans to guide them in removing tumours in skin and colorectal cancer patients more precisely.



Green Surgery Challenge

The Green Surgery Challenge 2021 is an opportunity for the UK's surgical community to recognise the value of sustainable healthcare for surgical conditions: to share and promote ways of practising that are less harmful to the environment and our planet and build social sustainability: to continue to transform surgery for the future.

The challenge launched on 3rd February 2021 at an online event, hosted by the Royal College of Surgeons England (RCSEng). Teams applied to enter the Green Surgery Challenge by submitting an idea for what area of the surgical pathway their team decided to focus on to make it "greener" and more sustainable...and why.

6 teams will be selected to receive mentoring from sustainable healthcare specialists (who are both clinicians and sustainability consultants) at the Centre for Sustainable Healthcare to hone a specific question, devise a project, implement the project and measure the outcomes over a 10-week period.



Virtual hackathon to tackle COVID-19 unmet needs

The COVID-19 pandemic has created an urgent need for healthcare innovation across the globe. In tandem, it has brought travel restrictions and social distancing measures which act as significant barriers to traditional methods of innovation. In this context, the MedTech Foundation programme explore the use of virtual hackathons to generate innovation during a global pandemic.



Rethinking MedTech Collaborations

The Virtual Northern MedTech Summit 2021 was an exciting initiative powered by National Institute for Health Research (NIHR) Surgical MedTech Co-operative, the Northern Health Science Alliance (NHSA) and Empact Ventures. It aimed to showcase and raise awareness of the North's position as a MedTech cluster for public and private sector organisations of all sizes while encouraging new collaborations to address the challenges in the healthcare sector today and tomorrow.

The event was open to any individual, professional, academic, researchers, clinicians, tech startup, scale-up, SME, corporate, funder or patient who were super connected by Empact Ventures to people, organisations and opportunities to address their challenges, needs and interests.



Surgical MIC Toolkit

Our ability to support your technology is largely dependent on your stage on the translational pathway. Our objectives are to shorten the translational pathway for those solutions where it is possible, and to provide a real time example of the steps and questions that are important for medical technology development and the factors that are important for the NHS.

This toolkit should help you understand how the Surgical MIC can work with you and the outputs you can expect at each stage of your translational journey.



Noninvasive vagus nerve stimulation to reduce ileus after major colorectal surgery: early development study

Vagus nerve stimulation has emerged as a plausible intervention to reduce ileus after surgery. An early development study was undertaken with the aim of exploring the feasibility of self-administered, noninvasive vagus nerve stimulation (nVNS) after major colorectal surgery.



Patient and Public Involvement

The role of the Patient and Public Involvement (PPI) is to provide oversight, input and advise on the development and coordination of Patient and Public Involvement (PPI) in the activities conducted by NIHR Surgical MedTech Cooperative and to act as a 'critical friend'.

The involvement of PPI or lay members:

- helps map the patient journey from the patient perspective.
- helps identify areas that will improve the patient experience and outcome.
- helps with assessing patient engagement ambition and strategy.

Upcoming Events

Wounds Research Industry Master Class

Call for expression of interest

NHS Long Term Plan Conference 2021

The Studio, Manchester 25th May 2021

Market Access for MedTech – June/July 2021

Every Tuesday from 13:00 – 15:00 for six weeks from the 1st June to 6th July 2021.

SEHTA 2021 International MedTech Expo & Conference

Hilton London Tower Bridge Hotel, 25th June 2021

MedTech Innovation Expo 2021

NEC Birmingham 29th - 30th June 2021

The Association of Coloproctology of Great Britain & Ireland (ACPGBI) 32nd Annual Meeting

Harrogate Conference Centre, Harrogate 5th – 7th July 2021

UGI Congress 2021

Belfast 13th – 15th October 2021

SAVE THE DATE
Surgical MIC National Meeting
Theme: Surgery 4.0
Date: 26th November 2021

Funding Collaborations

Health Technology Assessment Programme – Research Led

Closing Date 5th May 2021

Innovate UK Smart Grants January 2021

Closing Date 26th May 2021

Invention for innovation (i4i) product development awards – call 22

Closing Date 9th June 2021

Grow MedTech - Proof of Market

Closing Date 31st December 2022

Pancreatic Cancer Scotland – Pump Priming Research Grants

Closing date – no time limits

Talk to us if you would like academic or clinical input, patient and public involvement or some support with project coordination and management. Please allow sufficient time for this.

Core team

Clinical Director: Professor David Jayne

Deputy Director: Mr Aaron Quyn

Vascular Theme Led: Professor Julian Scott

Hepatobiliary Theme Lead: Professor Giles Toogood

Scientific Director/ Nanotechnology Theme Lead: Professor Steve Evans

Robotics Lead: Professor Pietro Valdastri

Engineering Lead: Dr Peter Culmer

Programme Manager: Vee Mapunde

Project Manager: Roxane Dumitrache

Project Manager: Sheila Boyes