

# Surgical MedTech Cooperative NEWSLETTER

July 2022

Edition 16

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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](mailto:surgicalmic@leeds.ac.uk)

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## Honour for Interventional Radiologist

Dr Tze Wah senior consultant interventional radiologist with specialist interest in both imaging and interventional oncology has been awarded the Honorary Professor in Interventional Radiology at University of Leeds.

Interventional Oncology (IO) is the emerging clinical discipline and beginning to establish as the 4th pillar of cancer care alongside surgical, clinical and medical oncology. Since 2003, Dr Wah has led and developed the IO clinical and research programme at Leeds Teaching Hospitals Trust (LTHT) using various technologies e.g., radiofrequency (RFA), microwave ablation (MWA), cryoablation (CRYO) and irreversible electroporation (IRE) for a range of cancers such as liver, lung, renal, pancreas, adrenal, spleen etc.

Today, Leeds Cancer Centre is one of the leading national and international IO centres with reputable clinical outcomes. In 2021, Dr Wah led the translation of UK-First Ultrasound based technology using Histotripsy to treat liver cancer as part of the #Hope4Liver trial for CE marking. [Read more.....](#)



## Medipex NHS Innovation Awards & Showcase

Medipex have launched their NHS Innovation Awards and Showcase 2022, designed to identify and celebrate innovative activities of NHS staff and their collaborators

### Categories

- Using Artificial Intelligence (AI) to improve patient services and/or safety
- Improved treatments, therapies and rehabilitation
- Delivering benefits through diagnosis and screening
- Improved processes and systems



Entries must be led by an NHS organisation (or a CIC that delivers NHS services); collaborative projects with universities or industry are welcomed, but any prize they may decide to offer will only be awarded to the lead organisation

### The Awards Ceremony

The awards will be held virtually on **12th October 2022** when the finalists will be showcased and the winners announced

**The closing date for entries is 31st August 2022**

Download an entry form [Entry Form 2022](#)

Email your completed form to [csc@medipex.co.uk](mailto:csc@medipex.co.uk)

## Surg Tech Career Launchpad June 2022

The aim of this event was to bring together Clinical Researchers, Surgery Professionals, and technology stakeholders to share barriers and solutions within the industry that will shape and deliver research into surgical technology

This virtual event hosted by [NIHR \(National Institute for Health and Care Research\) Incubator for Advanced Surgical Technologies](#) took place on **Wednesday 8th June 2022**. The event featured Keynote speakers, roundtable discussions, PhD Clinic, speed video networking, an expo area, live chat and polls.

For more information about the Advanced Surgical Technology Incubator please contact:

Professor Martin Birchall

Email: [m.birchall@ucl.ac.uk](mailto:m.birchall@ucl.ac.uk)





## **POLARiS Study Award Funding**

Mr Aaron Quyn, Associate Clinical Professor of Surgery and Consultant Colorectal Surgeon at the University of Leeds and Leeds Teaching Hospitals NHS Trust awarded £1,977,428.44 in funding for his work in optimal management of low anterior resection syndrome.

Low anterior resection (LARS) is a collection of symptoms that people who have undergone a partial or total resection of the rectum might have. These symptoms include, for example faecal incontinence or leakage, frequency of urgency of stools, loose stools, incomplete bowel movement or tenesmus which can have considerable negative impact on quality of life and daily functioning.

## **WarnerPatch Relocates to Leeds**

WarnerPatch who are working with the Surgical MIC and Leeds Teaching Hospitals NHS Trust (LTHT) have relocated from London to Leeds. The Innovation Pop-Up based at LTHT which supports a cluster of health business startups was a major attraction.

WarnerPatch is an innovative new medical device powered with 5G connectivity and an interoperable web application for continuous real-time remote monitoring of symptoms with reminders to better inform clinical decision-making processes.

Using a new non-invasive sensing method, regional soft tissue health is derived as an indication of real-time and near-future disease evolution. <https://warnerpatch.com/>



## **Healthcare Technologies Student & Early Career Awards 2022**

Organised by the Institution of Mechanical Engineers' Biomedical Engineering Division (Bmed), the healthcare technologies student early career awards made its return as an in-person event on 8<sup>th</sup> June 2022.

The Surgical MIC sponsored the PhD poster category the winner was a candidate with a novel in-shoe tool for strain analysis mapping of the plantar surface for diabetic foot ulcer risk assessment. [Read more.....](#)



## EPSRC Funding Awarded

Circular Economy of Small Medical Devices (ReMed) project awarded funding from Engineering and Physical Sciences Research Council, (EPSRC) this is a joint project with Dr Phil Sheppard, Research Associate

Centre for Sustainable Manufacturing and Recycling Technologies, Wolfson School of Mechanical, Electrical and Manufacturing Engineering, Loughborough University and Leeds.

The aim is to take some significant steps to expand and improve the 'circularity' of small medical devices (MDs) - reducing the number being destroyed or buried and being able to route them/their materials instead for reuse, recycling or remanufacturing.

The project will last three years. Based on a well-defined understanding of the problem, it will start with a review of the space for innovation in product design (including materials) and reprocessing technologies as well as operational and management systems.



## ERAS World Conference 2022

The 8<sup>th</sup> Enhanced Recovery After Surgery (ERAS) World Congress was held in Madrid in June 2022, the first face-to-face congress since 2019. Dr Stephen Chapman, NIHR Doctoral Research Fellow at University of Leeds and General Surgical Registrar in Yorkshire, presented his work on electrical vagus nerve stimulation to reduce ileus after surgery.

The aim of this project, kindly supported by NIHR, was to explore the feasibility of a non-invasive, patient-administered device to improve gut function after surgery. Post-operative ileus, where the gut becomes sluggish after surgery, is a key unmet clinical challenge and is profoundly distressing the patients and costly to healthcare systems world-wide.

Stephen was awarded the Prize for 'Best Rapid-Fire Presentation'. He plans to continue this work to explore if and how it may lead to patient benefit in the NHS.

Stephen Chapman, Twitter: @SJ\_Chapman

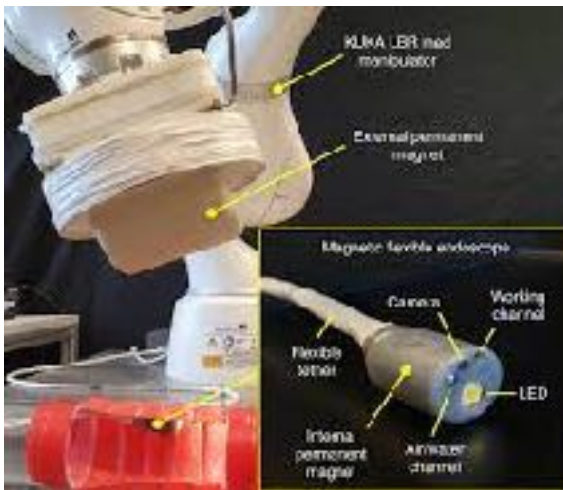
## Minister of State for Health Visits Leeds

The Leeds Centre for Neurosciences part of Leeds Teaching Hospitals NHS Trust led by Mr Ryan Mathew Associate Professor at the University of Leeds (UoL) and Honorary Consultant Neurosurgeon was delighted to welcome the Minister of State for Health to view some cutting edge immersive, mixedreality technology being used in neurosurgery to treat brain tumour patients.



## Robotic Autonomy for Magnetic Endoscope Biopsy

Magnetically actuated endoscopes are currently transitioning in to clinical use for procedures such as colonoscopy, presenting numerous benefits over their conventional counterparts. Intelligent and easy-to-use control strategies are an essential part of their clinical effectiveness due to the un-intuitive nature of magnetic field interaction. However, work on developing intelligent control for these devices has mainly been focused on general purpose endoscope navigation. In this work, we investigate the use of autonomous robotic control for magnetic colonoscope intervention via biopsy, another major component of clinical viability. [Read more.....](#)



## Environmental Sustainability & Surgery Survey

University of Leeds are interested in finding out what are the attitudes and barriers to implementing sustainable change in operating theatres.

The aim of this survey is to identify the attitudes of staff in the operating theatre department towards the environment and the adoption of waste-reducing practices.

This survey will take approximately **5 minutes to complete**. [Read more....](#)



## PPI Awards 2022

Congratulations to Mr Manoj Mistry who was announced the winner of the individual (Public Contributor) category for this year's Outstanding Contribution to Patient and Public Involvement and Engagement (PPIE) awards.

The awards recognise the inspirational and outstanding commitment to PPIE within the Faculty that has made a positive difference locally, nationally and globally. You were nominated for providing a unique insight and service user expertise to both the Faculty's research and teaching activities over the last few years. Including; refining research proposals, sharing your experience with our students and co-producing research projects and events..

The winners were announced live at our PPIE celebration event on the 12<sup>th</sup> July. You can watch the video message of the awards [here](#).



### Surgical MIC App

Our mic app is now available to download. The main purpose of this app is to facilitate surgical medical technology collaborations by linking individuals and companies with appropriate collaborators. We have also included a list of technologies that are required by surgeons in the NHS.

The collaborator component of the app will be updated on a regular basis, whilst the rest of the app will be updated on a monthly basis.

[Read more.....](#)



### 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. [Read more.....](#)

## Upcoming Events

Wounds Research Industry Master Class

Call for expression of interest

26th Annual Scientific meeting of the Association of the Upper Gastrointestinal Surgery (AUGIS)

P&J Live Conference Centre in Aberdeen on 21-23 September 2022

Medical Technology Ireland 2022

21-22 September 2022

Mastering Clinical and Technology Trials in MedTech

Virtual 13<sup>th</sup>, 15<sup>th</sup>, 20<sup>th</sup> & 22<sup>nd</sup> September 2022

The MedTech Conference

Massachusetts 24-26 October 2022

Vascular Societies' Annual Scientific Meeting 2022

Brighton 22-23<sup>rd</sup> November 2022

Neurosurgery Innovation & Technologies Symposium

Hilton Leeds City 26<sup>th</sup> November 2022

Save the Dates

IDEAL 2023 Conference

Leeds October 2023



**NIHR** | Surgical MedTech  
Co-operative

**Save the Date**

**SurgTech 2022**  
**Digital, Smart, Sustainable**

**Wednesday 23<sup>rd</sup> November 2022**  
**09:30 – 16:30**

**Royal Armouries Museum**  
**Armouries Drive, Leeds LS10 1LT**

The poster features a background image of surgeons in an operating room. It includes the NIHR Surgical MedTech Co-operative logo, the event title 'SurgTech 2022' with the tagline 'Digital, Smart, Sustainable', the date and time 'Wednesday 23<sup>rd</sup> November 2022 09:30 – 16:30', and the location 'Royal Armouries Museum, Armouries Drive, Leeds LS10 1LT'. There are decorative hexagonal icons in the top right and bottom left corners.

## **Funding Collaborations**

[NIHR Joint Industry call with i4i, EME and HTA – The development and evaluation of predictive algorithms using Artificial Intelligence \(AI\)](#)

[Surgical MedTech Co-operative Funding Competition 2021/22](#)

MRC Biomedical catalyst – developmental pathway funding scheme  
Closes 20 July 2022

[22/40 HTA Application Development Award: Towards evaluation of digital and technology-enabled healthcare](#)  
Closes 27 July 2022

[NIHR Research Partnerships – Liver Disease](#)  
Closes 14<sup>th</sup> September 2022

[Programme Development Grants – Developing Innovative, Inclusive and Diverse Public Partnerships](#)  
Closes 21 September 2022

[HORIZON-CL4-2022-DIGITAL-EMERGING-02 – digital and emerging technologies for competitiveness and fit for the green deal](#)  
Closes 16 November 2022

[Notice of Special Interest \(NOSI\): BRAIN Initiative: Translation of Groundbreaking Technologies from Early-stage Development through Early Clinical Study via Blueprint MedTech](#)  
Closes 21 June 2024

[NIHR i4i FAST \(Funding At the Speed of Translation\) Awards Pilot Scheme – Rolling deadline Innovator Awards](#)  
No time limits

[Pancreatic Cancer Scotland – Pump Priming Research Grants](#)  
No time limits

[Efficacy and mechanism evaluation programme – fast-track scheme](#)  
No deadline

[Healthcare Technologies: Call for Investigator-led Research Projects](#)  
No deadline

[British Heart Foundation New Horizons Grants](#)  
No deadline

[Ad-Venture Grant Funding for SMEs](#)

[Macmillan research grants scheme](#)

[Cardiovascular Catalyst Awards](#)

[Joint funding with the British Israel Research Academic Exchange](#)

[Cardiovascular Small Meetings & Events Funds](#)

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

<http://surgicalmic.nihr.ac.uk/>

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