

# Surgical MedTech Cooperative NEWSLETTER

April 2022

Edition 15

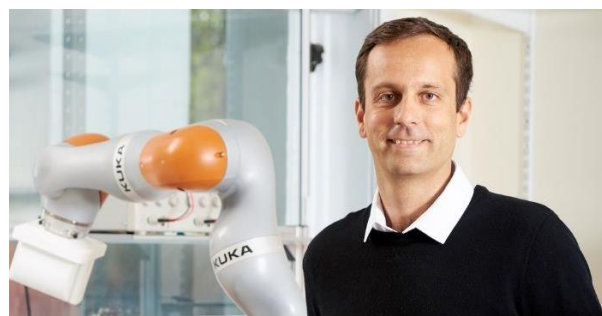
Welcome to the latest issue our quarterly newsletters. We are one of 11 national MICs funded by the National Institute for Health Research. Based in Leeds, we are a national network of clinicians, scientists, industry, patients and public working together to advance the care of patients with Colorectal,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

## Top Honour for Engineer Pioneering Medical Robots

Pietro Valdastri, Professor of Robotics and Autonomous Systems in the School of Electronic and Electrical Engineering and Director of the STORM Lab, has been made a Fellow of the Institute of Electrical and Electronic Engineers (IEEE).

Fellowships are given to a limited shortlist of members who have made significant contributions to engineering, science and technology.

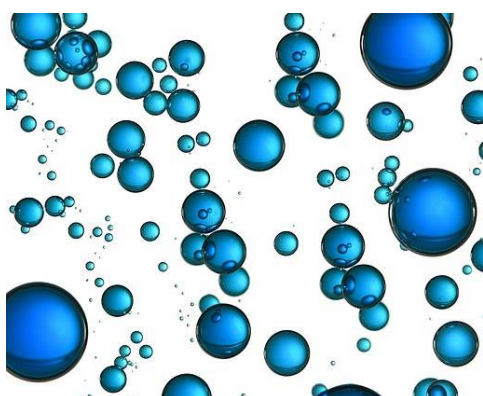
Professor Valdastri's research focuses on medical capsule robots – tiny devices that are inserted into the human body through natural orifices or small incisions to perform endoscopy and surgery in a minimally invasive way. [Read more.....](#)



## Tiny exploding bubbles can destroy tumours in as little as SEVEN minutes

One of the first patients in the UK treated with a new cancer treatment called histotripsy, which quickly destroys tumours using thousands of exploding gas bubbles!

An international research trial is now under way looking at histotripsy for liver cancer. Professor Tze Min Wah, senior consultant interventional radiologist at St James's Hospital believes this could transform cancer treatment. [Read more.....](#)



## Leading the Field with World-First Real-Time Brain Tumour Diagnosis

Mr Ryan Mathew Associate Professor and Neurosurgery Lead and his team uses is leading the field with world-first real-time brain tumour diagnosis evaluating the SamanTree Histolog® Scanner device for intra-operative use in brain cancer surgery.

The Histolog® Scanner is a digital microscopy scanner for ultra-fast confocal imaging of fresh excision. It reveals the morphology of the tissue at the subcellular level. In the treatment of cancer, the Histolog® Scanner can help clinicians to visualize the excision's margins [Read more.....](#)



## The Economic Impact of In Silico Technology

Prof Alejandro F Frangi has been working with an external consultant in designing an economic valuation of the in silico trials sector, with a focus on the UK, with elements that will be valuable more broadly, he will be releasing an early draft of the report shortly via InSilicoUK Slack.

He is working with colleagues in Avicenna Alliance, ABPI, ABHI and techUK but is keen to get additional input from industry, particularly from pharma and the broader supply chain.

You can help by completing and circulating this short survey. This will help to produce a final report that better reflects the future.

<https://insilicouk.typeform.com/insilicotrials>

You can view the recording from the online In Silico Launch event [here.....](#)



## European Tech for Good Report 2022

Hays partnered with start-up super connectors Impact Ventures to create the Super Connect for Good competition, an incredible contest that saw tech start-ups from across the UK, Ireland and Europe pitch to become the best-of-the-best in their categories of innovation, the surgical MIC contribute to the Medtech section. [Read more.....](#)



## [A robot small enough to explore the lungs](#)



Engineers and scientists have paved the way for a robot that can reach some of the smallest bronchial tubes in the lungs – to take tissue samples or deliver cancer therapy.

Known as a magnetic tentacle robot, it measures just 2 millimetres in diameter, about twice the size of the tip of a ballpoint pen.

Magnets on the outside of the patient will be used to guide the magnetic tentacle robot into place.

The device has been developed by a team of engineers, scientists and clinicians based at the STORM Lab at Leeds, which is pioneering the use of robotic systems to assist in endoscopy and catheter procedures, where a fine tube is inserted into body. [Read more .....](#)

## [Novel Brain Tumour Modelling & Treatment Response One Step Closer to Patients](#)

Mr Ryan Mathew Associate Professor and Neurosurgery Lead and Dr Heiko Wurdak Head of Stem Cells and Brain Cancer Group are thrilled to announce they have been awarded a Cancer Tech Accelerator Phase II Grant, provided in partnership with Cancer Research UK, Roche UK and the Medical Research Council for their Assemblify enterprise.

The Cancer Tech Accelerator aims to foster entrepreneurship and support researchers to rapidly translate cutting-edge technology with a view to it reaching patients sooner. The academic organisation of each team will receive £70,000 to enable the researchers to progress and enhance their research over the next six months. They will also receive extensive guidance and support from the Capital Enterprise network, Roche UK, and Cancer Research UK's Entrepreneurial Programmes Initiative, which aims to promote a culture of entrepreneurship amongst academics in the UK. [Read more.....](#)



This document provides researchers and their organisations with a compliance checklist, a step-by-step guide and an FAQ to support compliance with the NIHR open access publication policy when publishing peer-reviewed research articles. This will be a living document and will be updated based on NIHR's experience of supporting researchers and their organisations. [Read more.....](#)

## **NIHR Be Part of Research Campaign 2022**

Every year the NIHR launch their Be Part of Research Campaign this year's theme is the 'Trailblazers Campaign' and will take place over 2 weeks starting on 16 May and ending on 29 May 2022.

The Trailblazers Campaign aims to create a sense of community among research volunteers - bringing people together to celebrate each other, feel proud and excited to share their message with the world! Trailblazers will come together to:

- 1) celebrate the contribution of the research volunteer community and
- 2) ask others to join them and sign up for a study.

Keep an eye out for Surgical MIC activities.

## [Tomorrows Leaders Programme 2022](#)

The NIHR Clinical Research Network is pleased to announce that the Tomorrow's Leaders Programme 2022 will run this summer between May and July.

The programme is designed to support early career researchers to develop and deliver surgical cancer studies. It is supported by trainee research collaboratives across all specialties involved in the multi-disciplinary care of cancer patients.

The programme will run as a series of webinars in May and June, with state-of-the-art lectures on surgical oncology, trial design and translational science along with an introduction to each of the trainee research collaboratives. These will be followed by a face-to-face workshop in London in July, where participants will have the chance to develop and discuss their own research ideas supported by an expert research faculty. [Read more.....](#)

## Artificial Intelligence (AI) technology

Public Intelligence is a revolutionary new concept which aims to bring awareness of our human intelligence, alongside addressing the global and ethical challenges we face today. They have developed a tool kit to help you embed ethics in your AI technology.

Are you working on an Artificial Intelligence (AI) technology? Would you like to know more about embedding ethics in your technology? Try the Quick Ethics Tool [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

### ASGBI Annual Congress 2022

ACC, Liverpool 3<sup>rd</sup> – 5<sup>th</sup> May 2022

### NIHR Advanced Surgical Technologies Incubator (ASTI) – 1<sup>st</sup> Annual Conference

SAVE THE DATE - 18<sup>th</sup> May 2022

### Voice of the Customer in MedTech Development

Online 19<sup>th</sup> May 2022

### Emergency General Surgery Delivery, Research and Innovation Symposium 2022

Aspire, Leeds 19<sup>th</sup> May 2022

### Med-Tech Innovation Expo 2022

NEC Birmingham 8<sup>th</sup> June 2022

### 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

### Vascular Societies' Annual Scientific Meeting 2022

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

Save the Date

Neurosurgery Technologies Event

26<sup>th</sup> November 2022 (TBC)

Save the Dates

IDEAL 2023 Conference

Leeds October 2023

## Funding Collaborations

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

[NIHR NICE rolling call \(EME Programme\)](#)

Closes 5<sup>th</sup> April 2022

[Programme Grants for Applied Research - Competition 38](#)

Closes 6<sup>th</sup> April 2022

[NIHR NICE Rolling Call \(HTA Programme\)](#)

Closes 4<sup>th</sup> May 2022

[HTA Researcher-led call Primary Research](#)

Closes 4<sup>th</sup> May 2022

[SBRI NHS Cancer Programme – Competition 2](#)

Closes 24<sup>th</sup> May 2022

[The Aortic Dissection Charitable Trust](#)

Closes 31<sup>st</sup> May 2022

[Pancreatic Cancer Scotland – Pump Priming Research Grants](#)

*Deadline – no time limits*

[i4i FAST \(Funding At The Speed Translation\) Award Pilot Scheme](#)

*Rolling call and there is no submission deadline.*

[Innovator Awards](#)

*Deadline - 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 Valdastrì

Engineering Lead: Dr Peter Culmer

Programme Manager: Vee Mapunde

Project Manager: Roxane Dumitrache

Project Manager: Sheila Boyes

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