

# Surgical MedTech Cooperative NEWSLETTER

July 2021

Edition 13

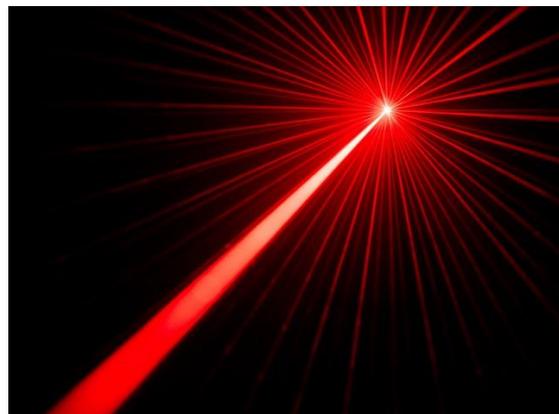
Welcome to the latest issue our quarterly newsletters. We are one of 11 national MICs funded by the National Institute for Health Research. Based in Leeds, we are a national network of clinicians, scientists, industry, patients and public working together to advance the care of patients with Colorectal,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

## National Robotarium to develop made-to-measure 3D laser beams

Researchers at the National Robotarium, hosted by Heriot-Watt University in Edinburgh, have secured £586,000 funding to develop 3D laser beams whose shape can be changed.

The innovation is set to transform the manufacturing and healthcare technology industries, making it easier and cheaper to produce products that require highly-precise manufacturing, such as medical equipment and mobile devices.

The funding from the Engineering and Physical Sciences Research Council (EPSRC), part of UK Research and Innovation, will support the research and development of the lasers for industry application, accelerating the commercialisation of the technology for the benefit of businesses and the wider UK economy. **Read more.....**



## Surgical MIC App – Now live

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.....**



## Supporting the development and evaluation of neurosurgical technologies

We are pleased to announce our new clinical theme - neurosurgery, led by Mr Ryan Mathew, Associate Professor at the University of Leeds and an Honorary Consultant Neurosurgeon at Leeds Teaching Hospitals.

The aims of the neurosurgery theme are to evaluate and define the role of innovative and disruptive technologies on common pathologies within neurosurgery where there is potential impact for improving patient outcomes.

Indications of interest are brain tumours and degenerative spinal conditions. Technologies that are considered to have potential will be supported to progress to mixed methodology clinical trial evaluations, encompassing pilot, feasibility, and implementation. There will also be a focus on utilising technology in the context of advancing neurosurgical training and competence to enhance the quality of service provision. **Read more.....**



## Green Surgery Challenge

Following a successful application, the Leeds team lead by Aaron Quyn and Adam Peckham were selected as one of six centres for mentoring as part of the Green Surgery Challenge.

The project aimed to reduce the carbon footprint of laparoscopic appendicectomy through streamlining the surgical process, reducing equipment consumption and exploring the RAIS device. Fantastic opportunities were developed in collaboration with an industry collaborator, Rutherford Solutions. Their project Revolution-Zero, to provide sustainable, socially responsible and environmentally friendly provision of face-masks and PPE for health and social care organisations formed a key component of the project.

After a 10-week quality improvement period, the team will showcase the project highlighting the results, impact and key learning points for the Green Surgery Challenge. **Read more.....**



## Surgical MedTech Co-operative Funding Competition 2021/22

The NIHR Surgical MedTech Cooperative in collaboration with Research England funded Grow MedTech programme is inviting industry, researchers and clinicians working in colorectal, HPB, vascular and neurosurgery to apply for pump-prime or clinical session funding. Funding is available to support the development of new concepts, demonstration of proof of principle, expedite translation of research to the clinic, and devise new research protocols for new medical devices, healthcare technologies or technology-dependent interventions for surgical technologies.

We are particularly interested in applications for the following:

- Development of immersive technology training modules for a neurosurgical procedure.
- Development of live-streaming capability for surgical education at undergraduate and postgraduate level.
- Development of a platform for immersive technology-based educational modules to complement cadaveric based neurosurgical courses.
- Technologies with the capability to predict brain tumour treatment response on an individual patient basis.
- Technologies that support health professionals allied to neurosurgery to conduct research into bespoke patient therapy regimens with the aim of pre-habilitation and tailored post-operative programmes, to enhance and maximise recovery after brain tumour and spinal surgery.
- Development of machine learning pipelines for the early detection of brain tumours.
- Enhanced imaging techniques to better characterise spinal degenerative pathology.
- Technologies to address unmet needs for cholecystectomy pancreatitis, transplantations, image ablation (AI imaging interpretation), multi imaging and patient follow up - low cost intervention, virtual prevention.
- Artificial Intelligence (AI) solutions for the review of pancreatic imaging, assessment of liver tumours and post-operative recovery.



**Read more.....**

## Surgical MedTech Cop-operative Steering Committee

We would like to offer a big thank you to Professor Sir Norman Williams Chair Independent Reconfiguration Panel, Chair National Consultant Information Programme (NCIP), Emeritus Professor of Surgery Barts & the London School of Medicine & Dentistry for his commitment, expertise, time and support as Chair of our Steering Committee. Sir Norman is stepping down due to an increase in his other commitments.

We would also like to welcome Mr Kevin Keily CEO of Medilink North of England and Group Chief executive for Medilink UK who has a valued member of the committee will be stepping up to chair the remaining meetings.

## 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

### Centre for HealthTech Innovation Launch

Virtual, 10<sup>th</sup> September 15:00 – 17:00

### Med-Tech Innovation Expo

NEC Birmingham 28<sup>th</sup> – 29<sup>th</sup> September 2021

### SEHTA MedTech Expo and Conference 2021

Tower Bridge Hotel, London 8<sup>th</sup> October 2021

### UGI Congress 2021

Belfast 13<sup>th</sup> – 15<sup>th</sup> October 2021

### NHS Long Term Plan 2022 Conference

The Studio, Manchester, 1<sup>st</sup> March 2022,

## **SAVE THE DATE**

**Surgical MIC National Meeting**

**Theme: Surgery 4.0**

**Date: 26<sup>th</sup> November 2021, 09:00 – 12:30**

**Virtual event Hosted at Bournemouth University**

**Registration via Eventbrite opening soon**

## Funding Collaborations

[NIHR i4i - Connect 5 & CYPMH - Competition: Call opens: 17th August 2021](#)

***Closing Date 14th September 2021***

[Biomedical catalyst 2021: early and late stage awards](#)

***Closing Date 26<sup>th</sup> August 2021***

[Innovate UK SMART grants May 2021](#)

***Closing Date 25<sup>th</sup> August 2021***

[ESRC Impact Acceleration Account \(IAA\)](#)

***Closing Date 6th September 2021***

[Knowledge Transfer Partnerships: 2021 to 2022, Round three](#)

***Closing Date 29th September 2021***

[Biomedical Catalyst Developmental Pathway Funding Scheme \(DPFS\) outline](#)

***Closing Date or Nov 21***

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

***Closing date – no time limits***

[Innovator Awards](#)

***Closing Date - No time limits***

[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 Valdastrì

Engineering Lead: Dr Peter Culmer

Programme Manager: Vee Mapunde

Project Manager: Roxane Dumitrache

Project Manager: Sheila Boyes

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