

## **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, 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

Applicants can apply for up to £10K to further develop ideas and solutions.

*Requirements:*

- All applications must have a clinical collaborator.
- Industry-led applications must include matched funding which can be financial or in-kind support.
- Successful applicants will work in conjunction with the NIHR Surgical MIC and its extensive network in order to successfully prototype and/or validate their idea(s) (i.e. show proof of concept/principle).

The number of projects funded and the allocation of funding will be dependent upon the number of high-quality applications received.

**Incubator Packages**

This is a seed funding call (up to £5K) for the early development of novel technology-based solutions applicable to colorectal, HPB, neuro and/or vascular surgery (including wound care). Applications are invited from academic institutions, NHS Trusts, third sector organisations and industry.

Incubator packages are designed to support the development of new medical technologies and they help teams to develop and progress their idea. Incubator packages are suitable for applicants that are looking to conduct the following activities (*not limited to these activities*):

- Feasibility research on a new device/technology
- Prototype design and development
- Filing of Intellectual Property, Patents etc...
- Focus groups and engagement activities (i.e. academic/clinical/industry)

### **Submission Deadlines**

Applications must be submitted by one of the following deadlines:

- 14 October 2021
- 25 November 2021

Applications are expected to be translational or have clearly planned translational aspects in the near or long term.

The number of incubator packages funded and the allocation of funding will be dependent upon the number of high-quality applications received. An important aspect in evaluating submitted projects is the potential to develop into a more substantial project that can apply for external funding.

**Projects must use allocated support by 31 March 2022.**

### **About Grow MedTech**

Grow MedTech is a programme, funded by the Research England Connecting Capability Fund, established to support medical technology innovation and development in the Leeds and Sheffield City Regions. Focusing on technology convergence and the de-risking of technologies, Grow MedTech will bring together leading technology and translational expertise in the Leeds and Sheffield city regions in a patient-focused and commercially-driven innovation system. It will enhance productivity and economic growth in the UK medical technology sector, while addressing the evolving health needs of the population.

Grow MedTech combines strengths from the Universities of Bradford, Huddersfield, Leeds Beckett, Leeds, York and Sheffield Hallam, with sector-specialist innovation managers, industry partners and expert healthcare professionals to offer a level of MedTech capability and capacity that no single entity could provide on its own. The programme aims to unlock the full potential of the region and make it a leading area for medical technology innovation and commercialisation in the UK

### **Support from Grow MedTech.**

The Grow MedTech team of Technology Innovation Managers can provide additional support and advice to project teams as part of the collaboration with the Surgical MedTech Cooperative. This support could be in the form of assistance with project management or development of technology road maps and routes to commercialisation, market and opportunity analysis, links to potential commercial and industrial partners and follow-on funding planning.

**Additional notes:**

Projects should aim to bring together researchers, clinicians, patients/public and industry. All components are not expected to be present for the duration of the project however, the applicant is advised to consider how they will be incorporated in the medium and longer term.

All applications should have a strong emphasis on patient benefit with plans for patient and public involvement. Industry involvement is recommended where possible, projects leveraging industry or third-party funding to translate research for clinical impact are also important to the NIHR Surgical MIC.

**Review Panel**

All proposals will be considered by the Clinical Director, Clinical Theme Leads, Academic Work Stream Leads, our Patient and Public Involvement Committee and the Grow MedTech management team. Additional panel members will be called upon from the following: health economists, clinical trials unit, industry key opinion leaders, and members of our network.

**Scope of Funding**

It is expected that funding will be used to support:

- independent small-scale projects – a small project that can develop independently from other projects. This would allow IP to be secured, pilot data obtained and/or de-risking of the project. The results would be used to apply for more substantial research funding.
- dependent small-scale projects – a small project that can utilise current or upcoming research projects as a basis of exploring new avenues that could later develop in to a larger, separate

project. This would allow IP to be secured, pilot data obtained and/or de-risking of the project. The results would be used to apply for more substantial research funding.

- Staff time – for small scale development projects for example implementing algorithms, processing historical data to support new projects, etc.

### **Suitable resources**

Pump priming funding can be used to support:

- Equipment (software and hardware)
- Consumables
- NHS Staff time

### **How to apply**

Application forms for the Strategic Call and Incubator Packages are available on our website - <https://surgicalmic.nihr.ac.uk/support-available/funding-competitions/>

### ***Some things to think about:***

- How does your project align with the NIHR Surgical MIC unmet needs and clinical themes?
- Include details on the maturity of any research/technology/intervention under development, the translational aspects, clinical impact, the patient benefit and the impact of healthcare provision.
- Dissemination of research to patients and the public, involvement in development of research.
- Has there been any industry support/interaction for this project, if not then future plans for engaging with industry or why no industry interaction is planned.
- Explain the deliverables in the short, medium and longer timeframes.
- If applying for funding for clinical session support please indicate the start and end dates for position.

- Successful applicants make a strong case for how the Surgical MIC funding will be used to leverage further funding to continue resulting work.
- Staff of any role, responsibility, department or grade are encouraged to apply.
- Only novel ideas will be supported through our funding.
- Applicants must be prepared to comply with their respective organisation's Intellectual Property policy and the NIHR Intellectual Property requirements.

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