

3 September 2018

## Winners of the first Seedcorn Funding Competition 2018

The NIHR Brain Injury MedTech Co-operative ([www.brainmic.nihr.ac.uk](http://www.brainmic.nihr.ac.uk)) is delighted to announce the winners of the Seedcorn Funding Competition 2018/2019 - Round 1. This competition has been established to support early development of novel technology-based solutions applicable to the brain injury pathway, from prevention of the initial acute event through to longer-term rehabilitation.

The Seedcorn awards of up to £10,000 aim to support proposals that are led by Academic Institutions, NHS Trusts, Third Sector Organisations and Small and Medium Sized Enterprise (SMEs). In addition, it fosters collaborative projects that have a near term clinical impact or the potential to secure further substantial funding after proof of principle has been established.

To find out more about the funding programmes and support available for MedTech innovators, you are welcome to come to the next NIHR MedTech SME event at the Bradfield Centre on Tuesday 16 October. Sign up here: <https://tinyurl.com/yc5zayo5>

@NIHRBrainMIC #BrainTech

### Mobile app for the delivery of cognitive behavioural therapy following concussion\*

**Mr Aimun Jamjoom, University Edinburgh**

Cognitive Behavioural Therapy (CBT) is a talking therapy that uses a range of techniques to help patients manage how they think and feel. CBT has been shown to improve patient outcomes after a concussion. The project is about developing a digital CBT intervention to support patient recovery following a concussion.

*\*The project was a winner of the Seedcorn Funding Competition 2017, funded through the former Healthcare Technology Co-operative*

### Wearable Neurotechnology for EEG based Awareness Detection, Communication and Technology Interaction in Prolonged Disorders of Consciousness

**Prof Damien Coyle, Ulster University**

In collaboration with NeuroCONCISE Ltd, this proposed project aims to build on ongoing trials involving patients who have a prolonged disorder of consciousness. The Seedcorn Funding will be used to provide complete NeuroCONCISE wearable products to a subset of 60 patients to evaluate extended use and assessment of product delivery, within a 3 layered programme.

### TOPS-Y: Adapting and piloting an online problem-solving intervention for young children with brain injury

**Dr Anna Adlam, University of Exeter**

In the UK a child injures their brain every 30 minutes. Most survive, however, brain injury can affect thinking and behaviour, which can impair the child's ability to cope and gain future independence. Despite these long-term difficulties, there is limited research investigating interventions. One promising intervention is the Teen Online Problem-Solving (TOPS) web-based intervention; however, children under the age of 12-years have difficulty engaging with, and benefiting from TOPS. In collaboration with Cincinnati Children's Hospital (USA), the proposed research aims to work with children (aged 9 -12 years) with brain injury and their families to adapt TOPS-for Young children (TOPS-Y).

### Investigating a portable patient-led virtual reality platform for assessment and rehabilitation of hemispatial neglect: a usability study

**Dr Stephanie Rossit, University of East Anglia**

Together with an industry collaborator (Evolv), a new virtual reality tool for the diagnosis and treatment of neglect using portable low-cost technology has been developed. The study aims to test how usable and acceptable this virtual reality tool is when administered in stroke survivor's homes.

### Evaluation of stroke patients' user acceptance and functional responsiveness to vibratory stimulation by active insoles in standing and walking

**Dr Leif Johansen, University of East Anglia**

The project proposes to conduct an evaluation of the usability, acceptance, user attitude and functional responsiveness to augmentation of plantar somatosensory feedback by the prototype of a smart vibratory stimulation insole in stroke patients. The project plans to assess the specific needs of individuals recovering from stroke as well as their family members and caregivers when the prototype insoles are used over a short period at home.

### Selective brain temperature management after Traumatic Brain Injury - a preliminary study to support the application to i4i funding

**Dr Andrea Lavinio, University of Cambridge**

The purpose of this project is to fund a preliminary, proof of concept study of a new, localised approach to brain cooling for patients with or at risk of suffering neurological injuries. The investigation is going to be carried out in the Addenbrooke's Hospital Neuro Intensive Care Unit, whose medical staff has provided the expert input during developing the approach and setting up the study. The project is 80% funded by the NIHR Brain Injury MedTech Co-operative and 20% by Neuron Guard, a company that has developed a cooling collar specifically designed to demonstrate the feasibility of this new approach. This study stems from the feedback of Research Design Service and NIHR to provide early stage demonstration of the feasibility of target brain cooling in patients with neural damage in preparation of a potential future application for funding a larger clinical investigation.

