

Newsletter, Issue 5, March 2019

## **Patient Inspired Innovation**

Welcome to the issue 5 of the NIHR Brain Injury MedTech Co-operative newsletter.

In this edition, find out more about two initiatives you can be involved in, our Neurorehabilitation Theme Leader, the publication of the Brain Injury Unmet Needs Directory and many other news.

#### **About us**

The MIC is one of eleven national Medtech and In vitro diagnostic Co-operatives (MICs) funded by the National Institute for Health Research (NIHR).



The MIC works with patients, carers, academics, clinicians and industry to develop new medical devices, healthcare technologies and technology-dependent interventions to improve treatment and quality of life for patients with brain injuries.

#### Get Involved!

The MIC has developed a volunteer register for patients, carers and whoever has an interest in the advancement of healthcare technologies. For more information on the Register for Healthcare Involvement and Technology Evaluation (RHITE), please visit our website: http://www.brainmic.nihr.ac.uk/rhite

#### **Important:**

To unsubscribe from RHITE and this newsletter please send an email to: involve@brainmic.org

# Are you a caregiver of a child with Traumatic Brain Injury?

Supporting parents and caregivers of children and young people with brain injury to deliver neuro-rehabilitation.

Children and young people can sustain a brain injury for a range of different reasons and collectively these forms of brain injury are known as Acquired Brain Injuries. In hospital, children and young people with brain injury are likely to receive support from Physiotherapists, with input potentially continuing following their discharge from the acute setting. Having said that, the role of parents and caregivers in supporting their child's recovery and rehabilitation once home is significant. This view is supported by research which shows that children with a brain injury that receive treatment through family-supported rehabilitation have significantly better outcomes than those receiving treatment from a therapist alone. What remains unknown, however, is how Physiotherapists can better prepare and support parents and caregivers to deliver neuro-rehabilitation.



David Young is a Paediatric Physiotherapist working at Addenbrooke's who specialises in paediatric neuro-rehabilitation. David is passionate about doing research in this field in order to better understand the needs of parents and caregivers of children with a brain injury.

The focus of his research will be around developing an intervention which can be used by Physiotherapists to support parents and caregivers to learn and implement a range of new skills effectively. In turn,

it is hoped that this will improve the quality of rehabilitation delivered at home and positively impact the long term outcomes for the child or young person with brain injury.

Before undertaking such research, it is important for David to speak to parents and caregivers of children and young people with a brain injury. This will help him to understand whether such a structured Physiotherapy-led intervention would be a welcome addition to current practice, and to understand what such an intervention may look like.

If you are a parent or caregiver of a child with a brain injury and would like to speak to David as part of a small group, please contact the NIHR Brain Injury MedTech Co-operative office on 01223 336944 or email involve@brainmic.org.

We will set up a small group discussion to take place in Spring 2019 (date to be confirmed).

#### Series: The Brain Injury MIC presents its Theme Leads

### **Neurorehabilitation Theme: Professor Valerie Pomeroy**

As you may be aware, the work of the NIHR Brain Injury MIC is divided into eleven themes led by internationally renowned experts in their respective field. This month we are delighted to introduce to you our Neurorehabilitation Theme Lead: Professor Valerie Pomeroy,



Following qualification as a physiotherapist at the Cambridge School of Physiotherapy and holding a variety of clinical posts, Professor Pomeroy obtained a PhD from the School of Medicine, University of Southampton. Between 1996 and 2002 she was Senior Lecturer in Stroke Therapy Research at the University of Manchester and was also Director of The Stroke Association's Therapy Research Unit. Between 2002 and 2008 she was Professor of Rehabilitation for Older People at St George's, University of London. In 2008 Professor Pomeroy took up the Chair of Neurorehabilitation at the UEA.



The Acquired Brain Injury Rehabilitation Alliance (ABIRA) is a multidisciplinary group pf researchers and clinicans who are focused on undertaking research that is of direct relevance to the challenges people experince after brain injury. They have a particular focus on the investigation of th investigation of rehabilitation interventions that are suitable for people who receive the majority of their rehabilitation whilst living at home.



Emphasis is therefore placed on investigation of neuroscience-based therapies that can be self-administered with guidance from a therapist and that can be augmented through use of technological devices. One strand of current investigation is focused on how they can use sensitive physiological measures for timely identification of response to therapy and the prediction of likely response.





Another strand is focused on asset-based community approaches to rehabilitation following brain injury. Particular expertise is in MedTech development especially after securing team mentorship on the Design Council Leadership Programme in 2014. They have a track record of partnership with SMEs, e.g. joint industrial-university funded PhD studentship to develop a virtual reality product and industrial partners being co-applicants on competitive funding applications and funded projects. Also central is iterative working with people with a brain injury and with rehabilitation clinicians. Activity includes partnership: with clinicians to run a product test-bed and people with brain injury to generate and refine products. They also have a home setting resource for the community to explore the usefulness of assistive technology for everyday living.

**GET IN TOUCH!** 

Write to the ABIRA Team at:

abira@uea.ac.uk

#### Other opportunities...

## Are you interested in Health Research? Join an NIHR Committee!

The NIHR coordinating centres, Central Commissioning Facility (CCF) and NIHR Evaluation, Trials and Studies Coordinating Centre (NETSCC) are currently looking for patients, carers and members of the public with lived experience of health, services and social care to join one of the following national and regional committees.



Applicants should have a broad interest in health and social care issues beyond their own lived experience. Programme availbale:

- Invention for Innovation (i4i) programme
- Research for Patient Benefit (RfPB) programme
- Health Services and Delivery Research (HS&DR) programme

Deadline for applications: 1pm on Friday 26 April 2019

If you are interested in applying, please visit this page to get further info and download the application form: https://www.nihr.ac.uk/patients-and-public/opportunities/new-public-memberrecruitment-2019.htm

If you require paper copies of the documents, please contact: publicrecruitment@nihr.ac.uk

An exciting event...

## The NIHR Brain Injury Technologies (BITT) Tank is back on 4 April 2019!

Augmented and Virtual Reality applications are increasingly proposed for the prevention and treatment of brain injuries. At a time when technology is rapidly evolving, this event will bring together leading clinical experts to define areas of unmet needs and potential applications of the technology. It will also provide an opportunity for technology developers and clinical teams to showcase their technology and on-going applications. The event will be supported by members of patient advisory groups as well as key personnel from grant funding and investment organisations who will provide critical advice on proposed products and applications. The BITT Tank will be split in to three sessions:

- **Session 1: Unmet Needs Identification** Sharing the evidence-base from clinical, patient and industry perspective;
- Session 2: Technology Showcase Individual slots for SMEs, start up and project teams to showcase relevant technologies in the field and for interactive Q&A with the expert audience;
- **Session 3: Panel Discussion** Horizon scanning with relevant partner organisations.

This event is delivered in partnership with **CW** CAMBRIDGE WIRELESS



and is free-of-charge.

When: 4 April 2019

Venue: Madingley Hall, Madingley, Cambridge, CB23 8AQ

Registration: https://www.cambridgewireless.co.uk/eventsbrainarvr/

#### Opportunity to take part in Research...

## Designing the study protocol for Cortirio: Portable brain imaging for point-ofcare diagnosis of traumatic brain injury

Cortirio has been funded by the NIHR i4i SME (Small Medium Enterprises) Connect to develop low-cost, portable brain imaging to be used at the bedside or the roadside following traumatic brain injury. The initial concept is a headband that will wrap around a patient's head and allow clinicians to detect, image and monitor bleeding within the head.

Inputs are required from patient representatives:

- Initial input on the concept (looking at images)
- Feedback (looking at a non-working mock-up of the device)
- Feedback (looking at the second iteration of the mockup)

If you want to be involved in the focus group or have further info please contact us at involve@brainmic.org Website: https://cortirio.com/



### An update on...

## Reaching Out North Essex: Building a local children and young persons health and wellbeing research partnership (a MIC Collaboration)



In just two weeks we developed together our "Reaching Out" bid with the help of East of England NIHR Public Involvement Collaborative.

By developing the bid together, we have strong platform for the partnership and shared ownership for the project.

Tendering, North Essex is one of the 20% most deprived districts in England. Jaywick Sands is the most deprived ward of all and 40% of children in Clacton live in poverty. There are significant health and social care inequalities and yet, as far as we know, the young voices of this area have not been heard in shaping research.

Our first action was to visit the Jaywick Neighbourhood team and invite them to collaborate. They accepted and introduced us to other local grass roots organisations working to change the inequalities.

"My involvement to date has been to learn more abaout the approaches and benefits of research methodology and how this can be incorporated into the Tendring Junior Warden Project, enabling the voices of young people to be heard in response to the project subject matter, but also wellbeing... I am eager to learn how we can improve on this through the work with partnership"

Teresa, Junior Wardens Project Lead

#### First 3 months in numbers

1 Oversight Group established and met

5 new community partners, new to research

2 Partnership Group meetings held in community 5 invitations and participation in partner events

2 Young Community fellowship awarded

7 meetings with partners groups

2 Meetings and Lunches with young partners

7 young people involved in partnership group &

4 creative projects co-designed

2 young children involved in planning =9!

#### **OUR VOICES MATTER**

The Reaching Out Project has had a transformational effect on two of our client participants - both refugees of a young age, 16 and 23. Being asked for opinions and having them heard by young people, researchers and other involved parties has made them feel appreciated and able to contribute. For those coming to a country where often tehir thoughts are never given an opportunity to be voiced this has been empowering and inclusive in an extremely positive way. being asked to contribute to a subject area so relevent to them and their families and contemporaries has also madse this extra meaning.

Maria, Refugee Action Colchester, Director

I am really enjoying being part of the Reaching Out Project! It's so refreshing to see that the voices of young people are being put first, and already we're seeing some fantastic ideas being discussed that I know would benefit so many people like myself. The project is an opportunity for us to express what we think our community needs, which really inspires me, and I feel it will inspire many others as well. We're making great progress, and I'm very excited to see what the New Year brings!

Jess, Freinds not Foes Age 17

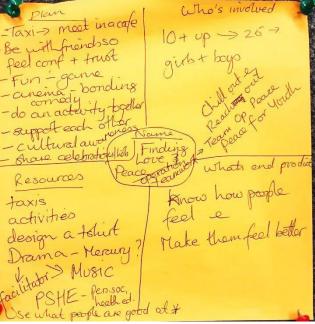
I'm enjoying being part of this project and looking forward tof urther contributions I can make. This is a wonderful opportunity for the voices of young people with mental health issues to be heard, something that is far too rare. I can't wait to make a real differences to research and as a result to the lives of young individuals who are struggling to cope.

Molly, Young Art Kommunity, Age 25

The United Kingdom saved my life and it gave me hope! It's my pleasure to say thank you practically by participating in these kond of projects

Omar, Refugee Action Colchester, Age 23





This project is funded by a grant from NIHR INVOLVE and Research Design Service for one year from September 2018 until August 2019. It is one of four Reaching Out projects funded across England.

For further information: https://www.invo.org.uk/current-work/reaching-out/

For further information

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NOTICE:

NEXT STEP!

On 12th June 2019 the East of England NIHR Public Involvement Collaborative will host a public engagement evening in Colchester. Details to follow...

NIHR Brain Injury MedTech Co-operative

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