Brain Injury Technologies Think tank (BITT tank)

Report

Tuesday 24th March, 9:30am – 4:00pm
Madingley Hall, Cambridge
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Executive summary

The Brain Injury Technologies Think (BITT) tank was piloted on the 24th of March 2015 in Cambridge. The BITT tank built upon the outcomes of the HTC unmet needs roadmapping workshop which identified key priorities in the patient pathway for ‘acute brain imaging’ and ‘telerehabilitation’. The purpose of the BITT tank is to address a key strategic objective of ‘NHS pull’ of novel technology solutions through engaging small-medium enterprises (SMEs). The BITT tank invited SMEs to showcase relevant technologies/solutions and the opportunity of an open Q&A session with clinicians, academics, patients and carers with the intention of expert input for product development relevant to the market. A key driver for the HTC remains the initiation of collaborations, mixing skills and expertise to deliver novel technology-based solutions for the brain injury patient pathway.

16 SMEs, 23 panelists and 63 attendees took part in the BITT tank, which identified a number of collaborations and partnerships (both with and without the HTC) that are being followed up.

Overall the feedback has indicated that there is merit in continuing to deliver focused BITT tanks for example ‘BITT tank: Telerehabilitation’ more detailed feedback has highlighted the opportunity to a) Brainstorm and b) match make.

The Brain Injury HTC will continue to track progress of collaborations and developments that were initiated at the BITT tank, through the live BITT tank activity log (see appendix 3).

Next Steps:
Define and deliver the BITT tank series, building on the outcomes from the pilot BITT tank by incorporating developments (via the activity log) and feedback on the approach.
Brain Injury Technologies Think (BITT) tank

Session 1: The Brain Injury Patient Pathway - Unmet needs and healthcare technologies

i) Patient Inspired Innovation:
Professor John Pickard

ii) Funding and Collaboration Opportunities:
Professor Mehdi Tavakoli, Knowledge Transfer Network

Session 2: Technology Showcase and Extended Q&A

In order to most effectively group delegates the technology showcase was divided into two groups:

• Group A will showcase a host of technological innovation improving the brain injury patient pathway from prevention to rehabilitation.

• Group B will focus upon molecular research, technologies and developments from stem cells to polymer design.
Company Profiles

Group A

1) Helpful innovation Ltd

*Presentation Notes:*

- Tim (founder) had an accident of mild TBI – started thinking about developing an intelligent system that can be built into any helmet capturing data with improved fit and energy dispersion.

- It does this through pressure sensors recording time of impact, level, location, size (speed-accelerometer) and angle of force. Capable of recording head position before, during and after impact (gyrometer) and processing, storing data (inbuilt processor) accessed via USB.

- Improved fit – 4 way fitment – material can adjust more easily to head movement, more reliable fitment for all head shapes and size. Head into helmet design.

- Improved energy dispersion – Non Woven Innovation Research Institute (partner) experts in manipulating existing materials to improve compressive limits of materials.

2) Eurolec-Instruments

*Presentation Notes:*

Eurolec is an instrumentation company with more than 40 years experience. Eurolec are experts in temperature and pressure instrumentation. They focus their research into induced hypothermia for improved prognosis of brain injury.

- The Eurolec device has been externally reviewed by Trinity College Dublin’s Department of Neuroscience in order to quantify the reduction in brain temperature induced by the ‘cool brain’ device. The academic report resulted in evaluation of the instrument and subsequent modification enabling the instrument to function 6°C lower than the initial evaluation. The full report is available at: [http://oajost.com/inpress/101095.pdf](http://oajost.com/inpress/101095.pdf).

- Non-invasive and portable instrument for inducing hypothermia using an internal rechargeable battery (12v paramedic vehicle & 110/220v mains). Instrument is capable of heating and cooling using liquid. European patent pending. Integrated ‘snap fit’ connectors permit choice of helmet size/attachments.

- The product is CE approved, operates within an ISO9001:2008 quality system and are in the process of being approved for the medical devices standard ISO13485.
3) Neuron Guard S.r.l.

*Presentation Notes:*

- Every 7 seconds a person suffers ABI; 5,000,000 patients per year, number 1 cause of disability and second cause of death over 50 years costing 330 billion globally.

- Hypothermia for neuroprotection in adults following cardiopulmonary resuscitation. Efficacious in Stroke, TBI and Epilepsy.

- Target temperature following cardiac arrest in the intervention period shows 32°C is more effective than 36°C. Factors that need to be considered include stability, rate and complications of temperature management.

- Hypothermia (body temp below 37°C) preserves the brain from acute damage – a 60 minute window.

- Refrigerating collar and control unit is portable, head targeting and adaptive. The early on-site treatment is pivotal in neuroprotection.

- Proof-of-concept illustrates that the collar cools the brain independently to the body.

- Applications in emergency medicine, military and surgery.

- Currently pursuing partnership for clinical trials.

4) Device Access UK and Cerebrotech Medical Technologies Inc

*Presentation Notes:*

- Non-invasive, continuous monitoring for early detection of cerebral bleeding and edema. Secondary brain injury is the brain damage caused by bleeding or edema after the initial injury from stroke or trauma.

- Walkthrough the patient pathway with the example of ‘Johnny’ who undergoes a traumatic brain injury that develops into SBI and the current approach to treatment – after SBI occurs. Earlier intervention involves prevention of SBI, less invasive treatment, better clinical outcome, shorter hospital stay and lower costs.

- The company is making a headband that measures fluid volume that can show changes in real-time. ICP alone is not a good indicator because it doesn't show the problem soon enough. They want a more effective use of imaging and a more effective use of neuro exams to save nurse time. Transfers to expert hospitals are usually too late and this will improve that.

- Review of current interventions for cerebral edema and bleeding spanning both surgical and non-surgical options.

- Cerebrotech’s ICF monitor is the only device that can detect fluid changes before they cause SBI. Noninvasive, continuous, easy to use, inexpensive
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and safe.

• Volumetric integral phase-shift spectroscopy –
  o Real-time measure of bio impedance
  o Function of fluid volume and radio wave frequency
  o Changes from baseline indicate bleeding or edema and can distinguish between them

• Preclinical data of animal models corroborate claims through cerebral dehydration (mannitol) and fluid injections across sheep and pigs.

• Simple test of jugular vein compression and valsalva maneuver in humans reveals that device sees changes in cerebral blood volume independent of CSF.

• They have done a pilot stroke study which can compare the progression of oedema between CT scans along with the headband data. They are using 3D CT scans to measure oedemas and can show a model of the fluid volume changes.

• The device is being miniaturized and they are looking for collaborative research opportunities.

5) CellCap Technologies Limited

Presentation Notes:

• They are a regenerative medicine company who make concentrations of stem cells. They are looking at diagnostic aspects to overcome regulatory concerns. The problem is aggregated proteins deposited in brain and they want to see if this is shown in blood so there could be a blood test for dementia. For this they are using existing detection technologies, which were originally made to detect prion diseases (used in food safety testing).

• They also have detection for monoclonal aggregates and a platform for aggregated proteins. They can search for oligomers, multimers and aggregates. Other uses for the platform may be stroke and they would like to work collaboratively.

6) Imec

Presentation Notes:

• They are a wearable health company, founded in 1984 in Belgium. Examples of their technology are: the sensor watch (made by Samsung but which uses an imec sensor platform); the cardiac patch (a miniaturized non-
irritant patch for long-term use) and the EEG headset.

- They make prototypes and help industry partners make products. They also make integration technology for circuits/sensors to make systems which get data science for applications for their own R&D or for customers. There are various wearable health platforms (see slides). They want to know how this can be used to improve patient outcomes.

7) BrainInHand Ltd

**Presentation Notes:**

- They make a software that synchronizes with a smartphone app. to manage behaviours at the end of the patient pathway. Their remit was how to provide support for people presenting challenging behaviours (e.g. in education, criminal behaviours etc.) It was originally meant for autistics.

- Their cloud-based software syncs with the app and is intended for people who need help with a significant problem. They have step-by-step solutions (and the planning for these) and reminders to use them, as well a function that allows the user to call for help.

- They have some partners already but want a larger group of patients to see what the impact would be. They also want funding.

8) Diamentech Limited

**Presentation Notes:**

- Most of their work so far has been on dementia/Alzheimer’s but it can be applied to brain injury. There is a need for a cost-effective tool for measuring TBI. It must be cheaper and more accessible and more accurate. It could be used for better research and give more personalized interventions.

- Their product is software based and uses A.I. to cluster people. (There is a test where users must say if an image flashed up contains an “animal”.) The pilot study can show high accuracy. It is very sensitive and there is no learning impact – you’re treating them, they’re not just getting better at it.

9) Cavendish Implants Ltd

**Presentation Notes:**

- They are an eight year old company who design and manufacture customized implants and surgical guides for cranioplasty. The unmet need they focus on is post-cranioplasty infection
control. The rate of this is between 0-30%, from 0-7 days up to 3-6 months after surgery. They want to try and prevent infection.

- To work, the materials must be smooth and non-porous materials and must have a precise fit. They need to be able to see the effectiveness of the strategy. They want to treat implants with silver, applying micrograms (not nanograms) of silver to give an antibacterial treatment. The silver is to be released over a long period of time.

- They want people to do a study on, using the backlog of patients in Cambridge needing cranioplasty. They need 30 patients at least and it will cost £1000 per patient. They want to compare control patients with those who have the treated implant and they must be tested during the critical period when infection is likely to occur. Money can be saved because doctors will not have to treat the infection if it is prevented.

10) Cambridge InnoVision limited

Presentation Notes:

- They work in imaging, looking at various forms of MRI/CT/ultrasound scans. MRI scans have low exposure and a lot of noise so are not accurate and waste clinicians’ time. Not all scanners use the same software.

- Their algorithms avoid thresholding, manual segmentation and slice-wise operations (2D). They look at 3D data, surfaces shown as a geometric entity, mathematically-principled idea of ideal surface and segmentation done by algorithm. They can deal with low exposure images and no manual segmentation is needed. It is compatible with lots of different hardware and has different output options (e.g. slices, CG surface file, augmented reality). It is more accurate.

- Their software is patented but needs developing for the medical sector; they would like feedback on how useful people would find it and what they would like to get out of it.

Group B

11) Spheritech Ltd

Presentation Notes:

- They make scaffolds to medicines, with cell growth in three dimensions that mimic cell growth. They have a matrix developed from simple materials that can be easily absorbed by the body and are commercially available.

- They work with Poly-e-Lysine – a food preservative. It is cross-linked with fatty acids and the elasticity can be controlled in the form of a polymer.
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- Their product is “Proliferate™”, a polymer. It can be modified for different applications, (e.g. CNS repair, kidney repair, bone repair etc.) It lasts for four-six weeks of repairing. Porosity can be controlled. Elasticity can be controlled by the length of the fatty acid. The polymers can be spiked.

- They are working with Glasgow University and hope to move from neurospheres to astrocytes – this is to be tested in rats in the next three years. The technology was patented in 2011. The company want to know if there are applications for brain repair. They’re currently self-funded.

12) Axol BioScience

Presentation Notes:

- They make iPSC-derived neural progenitors. (All the information is on the NCBI website.) They work in protein expression – creating neural progenitor cells.

- They have investigated the neurite length, branch points and the network function. The network is working between ten-fifteen days after plating and is fully working forty-five DAP. The cells have electrical functionality.

- Axol hNPCs express neural markers. They provide technical support for coating.

13) Reneuron

Presentation Notes:

- They make stem cell therapy platforms: CTX platforms, exosome platforms and retinal platforms. They describe it as “little packages of proteins”.

- They are finishing their pre-clinical work and have a CTX platform for allogeneic hNSC therapy. As long as the cells are given the right stuff they will grow forever until you remove the retroviral c-mycERTAM.

- Each batch of cells should be the same regardless of, for example, the age of the patient. They are using a cell catapult to make a more efficient system. In order to get regulated they are demonstrating that they can make an identical product on a commercial scale. The initial twenty-eight days shelf-life has now been extended to three months (for the frozen human neural stem cell product). It can be shipped to hospital pharmacy as needed.

- The project is funded by Innovate UK. They are working with several partners, including a Welsh group.
14) Cambridge Innovations Technologies Consulting Limited (CITC Ltd)

Presentation Notes:

- The company has a mix of an engineering and medical background. They develop existing technologies and have been around since July 2014. They want to make smart implantable devices, e.g. smart biosensors.
- They want to develop a neuroprosthetic active implantable device, which has been tested in a mouse model. Medtronic make something similar but that is only for electrical stimulation. Their device will be wireless, have continuous monitoring of bio-physical parameters and transmit data securely. The product’s three aspects are: a wearable device, a smart dispenser and a wireless infrastructure. They want to work with Cambridge because of the wealth of brain injury knowledge there.
Event Evaluation

Survey Results:

1. Was the BITT tank useful to you and your organisation?
   • 100% said ‘yes’. Comments:
     - Networking and developing of contacts. Broader understanding of innovations, potential to help drive future investment and innovation.
     - Great to hear about potential upcoming products and ideas, quite inspiring, although the focus was very much on the acute stage of brain injury which is not our area. However, we made contact with another organisation to collaborate with, so a great day.
     - Great networking opportunity
     - It was interesting to see what people are doing in relation to brain injury
     - It allowed some interaction with key players.
     - Particularly interested to hear about rehab resources, so a couple of speakers in the afternoon.
     - I have a better understanding of the complexity of the different organizations involved & how they can relate with each other to achieve optimum effectiveness in reducing costs for the NHS & improving the outcome for patients.
     - Helpful feedback and contacts, as well as making us aware of future opportunities to aid our project
     - We met a number of people whom we discussed some of the current projects and future collaboration
     - Made new contacts with possible collaborators. Found out about funding opportunities.
     - Able to see the variety of biotech companies.
     - Provided useful contacts with opinion leading researchers

2. Was the BITT tank what you expected?
   • 62% Yes
   • 38% No:
3. **What were your desired outcomes for attending the BITT tank?**

- Make contacts with other organisations, learn about possible funding options
- Connecting with academic partners
- To see the current research and commercial activities in the area of brain injury, and to make new contacts.
- Deliver on tele-rehabilitation.
- General overview of what was happening particularly in relation to rehabilitation.
- To create an awareness of the versatile Cool Brain device; obtain more experienced medical input as to the ability of the medical community to measure brain temperature before & after cooling. Also to establish what is the optimum cooled brain temperature to improve a patient's prognosis.
Link with experience medical device company & obtain funding to bring device to the market.

• To make contacts with people who could really help form a route forwards for our project.

• We wanted to better understand the current technology landscape in neurosurgery

• Find new ways to introduce our technology into a new field.

• To potentially network/collaborate with a biotech company and/or other researchers.

• I wanted to outline a possible collaboration with the University of Cambridge

• Networking and collaborations generation

4. Was the format and structure of the BITT tank optimal for achieving these outcomes?

![Graph showing survey results]

- 69% Yes
- 31% No:
  - Yes and no, whilst the outcomes were achieved if there had been more rehab relevant representation then they would have been more greatly achieved.
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- I could not really engage with the main actors in this field
- Perhaps a preliminary questionnaire may have been able to ascertain if attendees / presenters were either interested in "match making" or were prepared to point companies in the appropriate direction.
- Some of the presentations were more like product promotion than brainstorming. Not enough time for discussion.

5. Tell us how to improved the BITT tank from your perspective

- I think that when holding a future BITT tank you could consider targeting more specific audiences. An example of this could be to hold a Rehab focused session and an acute focused session.
- More rehab phase focus if possible
- Also to invite academics to give short talks
- Focus on and restrict day to one or two themes.
- Would it be possible to put the talks in categories and encourage more presentations - as you will have picked up, I would really value anything related to rehabilitation, particularly later stages, with particular interests in apps.
- Perhaps I am more of an outsider than most of the other participants, but maybe the next step might be to facilitate some "match making" if people are prepared to clearly state their objectives.
- Perhaps allow slightly longer for discussion after presentations, especially for people who want to gather opinions and input.
- More brainstorming other than informally over coffee.
- There was plenty of biotech companies, but listening to the presentations, it seems that several of the companies wanted collaborations with clinicians/researchers rather than other companies to move forward their products. However, the number of clinicians/researchers seems to be the minority in comparison to the company representatives. But I could be wrong.
- I would create a moment for researchers to interact more with companies after their presentations
- More space for discussion and separate sessions for networking with start-ups/industries
6. Would you attend another BITT tank

Would you attend another BITT tank

Answered: 13  Skipped: 0

- 85% Yes
- 15% No:
  - Yes especially if it was Rehab focused. If there was such a session planned, I would be happy to help spread information about it as well.
Attendee feedback

Mountain Hare Consulting – interactions:

- Stephen Price Neuro-oncology – had a discussion around the grant we are working on collaboratively;
- Prof John Pickard – neuro surgery – it was useful to see him;
- Prof Valerie Pomeroy – Neuro Rehabilitation Sciences – we discussed her involvement into our project;
- David Andrews – Cambridge Ultrasonics Ltd – discussed potential collaboration in the future;
- Emily Boyce - Technology Associate Health Enterprise East – touched base on a project that we plan to start working on soon.

Cambridge Ultrasonics – interactions & guidance:

- Stephen Price at Cambridge Clinical Neurosciences about the possible application of delivering ultrasound deep into the brain using thin optical fibres for neurosurgery and possibly treatment or assessment purposes. He would like to meet to discuss the potential. He has a colleague he wants to involve who is out of the country at present. So the meeting will probably have to wait for a few weeks.
- I looked through the Invention for Innovation i4i part of the NIHR web-site at funding opportunities. However, I think the work needed to be done first would probably fall into the category of basic research and I see it is excluded from the scope of i4i. Any guidance you can offer in this area would be helpful.

Anba Soopramanien – Director of rehabilitation, Salisbury – interest & interaction:

- My interest is tele-rehabilitation and I have made contact with Professor Alan Crockard and Professor Valerie Pomeroy about joining them in their EU grant bid.
- I am interested in the work carried out by Bernard Grundlehner from imec.
- I am keen to develop telerehabilitation in spinal cord injury as well.

Kate Homan – Patient Experience manager – Feedback:

- I didn’t get the sense that those presenters who were seeking clinical input into their products/devices/etc got what they were seeking! I hope they did in informal discussions at tea breaks and lunch but my impression was that although the panel asked questions they didn’t provide enough feedback about how they would see the devices in use clinically. Maybe I misunderstood the discussions!
Sivas Chennu – Senior Research Associate – Feedback:

- I had detailed interactions with Bernhard Grundlehner IMEC, on a couple of themes:
  - IMEC are planning to work with Cambridge to build a prototype, small-factor (8-channel) wireless EEG headset for testing in the acute neurocritical care setting following brain injury. Dr. Ari Ercole in Anesthesia is leading this.
  - I also explored the possibility of deployment of such technology in the chronic setting, at patient sites and care homes. They are certainly interested in exploring this, and could be the next thing following the learning experience of using this setup in the neurocritical setting.
  - I am still exploring all the different funding opportunities to generate initial funding for such translational projects. If the HTC could help highlight the right sort of funding for these specific circumstances that would be most welcome, and perhaps make IMEC more likely to invest resources into pushing this forward.

David Walker, Phillips Healthcare:

- Well-organized event, logistics were very good and a fantastic venue. The timings for presentation and Q&A were very good. Format was good and could only be improved with more time.
- Following BITT met with both Diamentech and BraininHand and is currently pursuing internal agreements within Phillips. Once initially agreed funding will be sought from E.U (20/20) or TSB to facilitate contractual agreement.
- Has recently submitted a paper entitled technology for dementia - emphasis on carers and patients.
- Pursue funding opportunities and internal go-ahead. Look at the validation process and regulatory implications of developing a clinical app - pursuit of NHS recommendations.
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<th>PPI perspective</th>
<th>Event Feedback</th>
<th>Progress at follow up</th>
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<tr>
<td>Helpful Innovation</td>
<td>Helmet Technology</td>
<td>This is a good practical, technical addition for wearable helmets. An excellent opportunity to engage with emergency responders and A&amp;E to ensure the right data is recorded. Also potential to link with existing technologies that use GPS systems. Is there potential to link with the MYH helmet?</td>
<td>BITT was a Productive day and an efficient means of gathering contacts. Following on from the BITT tank, interest in HI and external contact was facilitated that wouldn’t have occurred organically. A smaller setting wouldn’t have reached broadly enough, the larger setting and scope of the day generated diverse interests as well as expertise in a variety of niche fields. A smaller setting wouldn’t have reached broadly enough, the larger setting and scope of the day generated diverse interests as well as expertise in a variety of niche fields. Valuable conversations with a number of attendees including Peter Jarritt, Mike Bradley, David Mennon and Stephen Kirker. I have already followed up with forwards. The team is working on compiling a BITT tank report we will send this through as soon as possible.</td>
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<tr>
<td>Eurolec</td>
<td>Therapeutic Hypothermia</td>
<td>A Blood cooling benefit seems to be clear but is the proposed kit practical and safe (for first line responders)? An opportunity for linking with a similar device that cools the brain using the blood flow through the carotid and vertebral arteries. <strong>N.B.</strong> The Eurolec device has been externally reviewed by the Trinity College Dublin’s Department of Neuroscience:</td>
<td>Overall enjoyed the event. However, would have preferred a more facilitated networking opportunity focused around advice and direction, not criticism. Otherwise, well organized and fantastic venue. Would like to be kept apprised of any future events or opportunities. There were no specific/tangible contacts. There were some interesting, but more socially polite chats about the “Cool Brain” project &amp; the company. However, there wasn’t anything</td>
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| NeuronGuard  | Therapeutic Hypothermia | [http://oajost.com/inpress/101095.pdf](http://oajost.com/inpress/101095.pdf), is CE approved, operates within an ISO9001:2008 quality system and are in the process of being approved for the medical devices standard ISO13485. | which could form the basis as a plan for progressing the design/development or commercialisation of the project.  
It would be helpful to have reliable medical input and advise with regards to optimal brain temperature reduction in TBI, noninvasive means of measuring brain temperature and funding to bring the project to conclusion. | Confidential          |
<p>| Cerebrotech  | Spectroscopy    | See comments for Eurolec above. Advantage that cooling from the neck leaves the head clear to be worked on if required by a surgeon. It’s disadvantage may be that it does not cool the head. How does either product compare with existing paediatric caps? | A very interesting opportunity to meet with and present to expert clinicians. The event provided a platform for validation - concrete application of technology evidenced by generating expert curiosity. Good platform for networking with opinion leaders. | Confidential          |
| CellCap Technologies | Blood protein assays | Early days but has potential for collaborative work on indicators for stroke. Are there links to other blood indicators research? | Fantastic venue, facilitated interesting discussions both internally and externally with the panel. Would have been improved with a more focused setting but the variability in presentations was refreshing. | Confidential          |
| Imec         | Wearable technologies | The value of the interface between research and producer was clearly demonstrated. Very good potential here for application in both controlled | Brilliant location and very good learning experience. Received thorough feedback and enjoyed the experience. However, not functional as a networking model, structured | Confidential          |</p>
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<td>BrainInHand</td>
<td>App for independent living</td>
<td>wards or for patients at home to provide clear information to their GP’s, much better than one off assessments during a consultation. Is there a potential to link up with the MYH mood bracelet?</td>
<td>facilitating and heightened moderation of initial discussions required. However, no new connections resulted but furthered pre-existing collaborations with David Menon and Ari Ercole.</td>
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<tr>
<td>BrainInHand</td>
<td>App for independent living</td>
<td>Potential link here to other wearable technologies, also similar in some aspects to Neuropage operated by the Oliver Zangwill Centre. I introduced David Fry to Sue Bretnall(OZC) but do not know of the outcome from their discussions. I assume both BraininHand and OZC have similar issues when it comes to funding the ongoing service that falls between NHS and Social Services. Is there potential here for the tool to be made available with charity sector funding or as a self-funded item?</td>
<td>Thoroughly enjoyed the day and the potential to present to so many experts from such eclectic backgrounds. The format was good, would have been advanced with a particular cognition orientation. Opportunity to form new networks and contacts as well as potential collaborations.</td>
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<td>Diamentech</td>
<td>App for cognitive health</td>
<td>Appears to be a very good assessment tool but will it be cost effective?</td>
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<td>Cavendish Implants</td>
<td>Cranioplasty</td>
<td>A very impressive demonstration of the role for mathematical modelling prior to expensive prototype development and how this may be applied to brain trauma research</td>
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<td>Innovision</td>
<td>segmentation for imaging</td>
<td>role for mathematical modelling prior to expensive prototype development and how this may be applied to brain trauma research</td>
<td>event. Would like to be invited back for future events. However, perhaps a more central location would be optimal. Only improvement would be to have a focus upon imaging.</td>
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<td>Cambridge Innovation Technologies</td>
<td>Neuro-active implantable tech</td>
<td></td>
<td>Happy to have been invited, well organized small groupings, perhaps more relevant going forward? However, the small groupings limited the access to clinicians and academics. Perhaps going forward it could be arranged a more content-specific format could be arranged. Very happy with outcomes</td>
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