Newsletter October 2019

Children's Brain Tumour Drug Delivery Consortium

Accelerating Progress in Drug Delivery

Core funded by Children with Cancer UK

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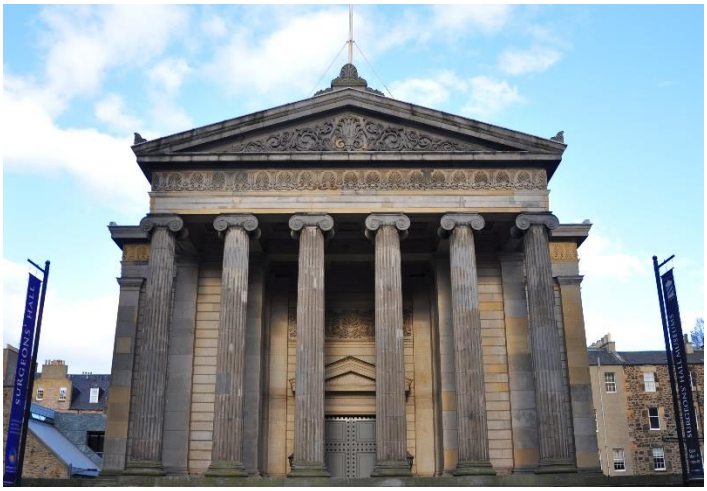
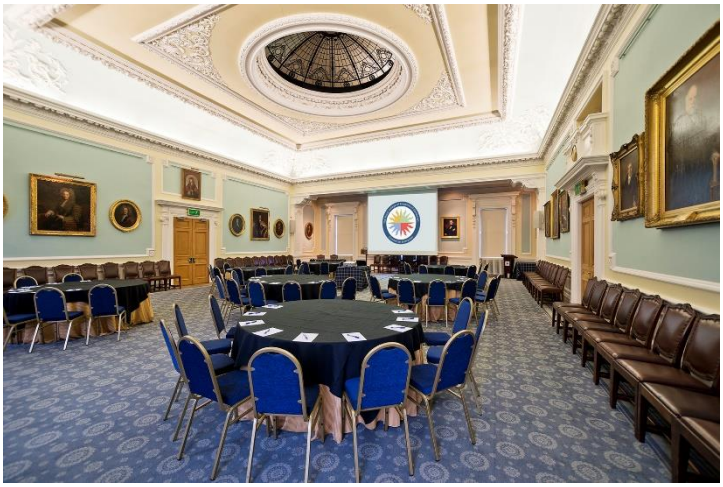
Workshop on drug delivery to the brain with linked funding call

We are delighted to announce details of our second Workshop on Drug Delivery to the Brain.

This will be held on Thursday 27th February 2020 in Edinburgh (optional evening buffet on Wednesday 26th February).



The workshop will comprise inspiring presentations and discussions around potential new collaborative research projects and grant proposals. These will focus on accelerating translational research into drug delivery systems to treat brain diseases, including children's brain tumours.



Workshop delegates will have the exclusive opportunity to apply for pump prime funding (max £5k per project). The Principal Investigator must attend the workshop and be a non-tenured researcher. We are particularly encouraging post-doctoral researchers and clinical fellows to lead these bids.

Find out more here.

Upcoming conferences

7-8 Oct – PODD Partnerships in Drug Delivery, Boston, USA

16-19 Oct - Biomedical Engineering Society, Annual Meeting, Philadelphia, USA

19-23 Oct – Neuroscience 2019, Chicago, USA

20-24 Oct - International Society for Pediatric Neurosurgery, Birmingham, UK

23-26 Oct - International Society of Paediatric Oncology, Lyon, France

20-21 Nov - SNO-SCIDOT: Therapeutic Delivery to CNS, Phoenix, USA

20-24 Nov - Society for Neuro-Oncology 2019, Phoenix, USA

6 Dec – 3rd Annual Miami Brain Symposium, Florida, USA

6-7 Feb – 8th Accelerate Paediatric Oncology Meeting, Brussels, Belgium

27 Feb - CBTDDC Workshop on Drug Delivery to the Brain, Edinburgh, UK

28-29 Feb - Novel Drug Delivery 2020, Rome, Italy

4-8 May - SIOPe Annual Meeting, Valencia, Spain

14-19 June – Barriers of the CNS, New Hampshire, USA

More conferences are listed on our website, here.

Spotlight on the DIPG All-In Initiative

Over the past decade, much has been learned about DIPG. Pre-clinical tools including cell lines and animal models have been developed and several 'active' agents have been identified. However, for a drug to have clinical benefit, sufficient exposure must be obtained at its site of action, generally, the tumour site.

Gaps in drug development exist where disease-specific activity, effective biologic exposure and determination of drug delivery to the tumour site are not determined for the majority of agents in clinical trial for children with DIPG. In 2016, Drs Michelle Monje and Katherine Warren met to discuss how to best address these gaps and overcome major obstacles to successfully treating children with DIPG.

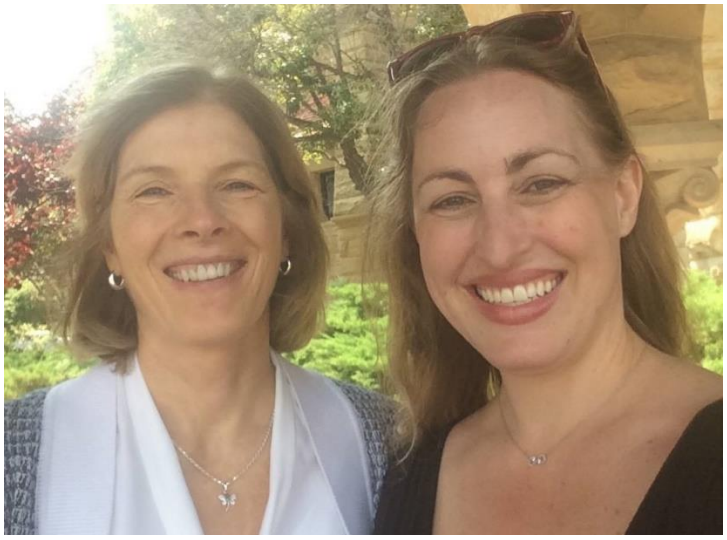


Photo: Drs Katherine Warren and Michelle Monje.

The DIPG All-In Initiative was created to address these issues. This initiative represents a collaborative effort between scientists, foundations, government and pharma with a goal of expanding pre-clinical studies to strengthen the scientific rationale and optimize study design for DIPG clinical trials. This pre-clinical information includes:

- Activity of an agent for a specific disease
- Identify agent dose/exposure necessary for desired effect
- CNS penetration, preferably to the pons
- Pharmacokinetics and safety in a related/predictive model
- Effect of concomitant medications.

The DIPG All-In initiative provides expertise and financial support of pre-clinical studies to ensure sufficient pre-clinical data are obtained, where appropriate and feasible, to fill in the information gaps, particularly those not 'fundable'. To date, the initiative has funded seven projects, each aiming to expand pre-clinical information to optimize clinical trials of 'active' agents for DIPG. Proposals are screened to ensure they meet the objectives of the initiative and vetted by an oversight committee consisting of DIPG experts and foundation leaders.

For more information on DIPG All-In, email Katherine Warren.

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Contact details

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Collaborative research database:
http://www.cbtddc.org/research/list.aspx

Image/video of the month

MIT engineers have developed a magnetically steerable, thread-like robot that can actively glide through narrow, winding pathways, such as the brain vasculature. The robots contain microscopic magnetic particles, with a remote magnet directing the robots' course.

Click on link embedded in image.

Video reproduced here with permission from the Massachusetts Institute of Technology.