Newsletter April 2018

Children's Brain Tumour Drug Delivery Consortium Accelerating Progress in Drug Delivery

There are just three weeks to go until our inaugural workshop on drug delivery to the brain! Have you got your ticket yet?



Ideas for grant proposals will be developed throughout the day, with representatives from funding bodies on hand to advise on proposals and current funding opportunities. See our website for more information.

We are also looking for two Patient & Public Involvement representatives to join us at the workshop and feed in to discussions. Please get in touch if you are interested in this opportunity.

Blood brain barrier blog

We have recently written a blog article on the blood brain barrier for the charity Children with Cancer UK. You can read it here.

Giving you helpful information / resources



We are expanding our website and need your views on what you would find most useful. We already have details of <u>upcoming conferences</u> and the <u>collaborative research database</u>. Maybe we could host a blog and invite you to write for us?

Or maybe you would like access to videos about brain tumour treatments and/or patient stories. What about a list of open funding calls, or information on how to engage with policy makers or industry? Let us know by filling in this brief survey. Thank you.



Upcoming Conferences

- 1-3 May Cancer Research
 UK Brain Tumour
 Conference, London, UK
- **4 May** <u>CBTDDC Workshop</u> on Drug Delivery to the <u>Brain</u>, London, UK
- 8-9 May 4th Annual
 Formulation & Drug Delivery
 Congress, London, UK
- 19-20 June 4th Annual Blood-Brain Barrier, Boston, MA, USA
- 21-23 June Brain tumors: from biology to therapy, Warsaw, Poland
- 29 June 3 July <u>International Symposium</u> <u>on Pediatric Neuro-</u> Oncology, Denver, USA
- 30 June 3 July <u>Biennial</u>
 <u>Congress of the European</u>
 <u>Association for Cancer</u>
 <u>Research</u>, Amsterdam, The
 Netherlands
- 2-3 July World Drug Delivery and Formulation Summit, New Orleans, USA
- **4-6 July** <u>British Neuro-</u> Oncology Society Annual <u>Meeting</u>, Winchester, UK
- 19-21 July <u>BIT's Annual</u> <u>International Symposium of</u> <u>Drug Delivery Systems</u>, Saint Petersburg, Russian Federation
- 22-24 July <u>45th Annual</u> Meeting & Exposition of the Controlled Release Society, New York, USA

More conference are listed on our website, <u>here</u>.

Spotlight

In this newsletter, we feature CBTDDC member Prof Giuseppe Battaglia, Chair of Molecular Bionics and Honorary Professor of Chemical Engineering at University College London.

Based in the Department of Chemistry, Beppe (as everybody calls him) leads the Molecular Bionics Group. He is a Bioengineer/Biophysicist with a focus in Nanomedicine, specifically looking into how to create novel nanoscopic delivery systems. Using chemistry, physics and biological characterisation, Beppe engineers carriers capable of crossing the blood-brain barrier, targeting cancer cells and delivering the appropriate therapeutic cargo to a tumour while minimising side-effects.

His team have developed a workflow of activities that allows the design of super-selective nanocarriers, their study in complex *in vitro* models and their validation in relevant pre-clinical models.



In Beppe's words, 'For several years we had two parallel activities – one engineering new ways to target cancer cells and the other looking at ways to cross the brain vasculature by exploiting natural processes such as transcytosis. Under the auspices of the CwC-UK and EPSRC, we are now merging these two activities and focussing on diffuse gliomas, utilising our combined approach to propose entirely new therapies.'

'We are very excited to be part of the CBTDDC as we can engage with clinicians and life scientists to fine-tune and instruct our engineering tools. We hope that our technology will be a valuable asset to all the members, both for drug delivery and as a tool to study brain tumours.'

'I am looking forward to making new contacts and collaborations at the CBTDDC workshop on drug delivery to the brain in May. I hope to meet some of you there!'

More information can be found on Beppe's research page.



Contact details

Email:

cbtddc@nottingham.ac.uk

Website:

www.cbtddc.org

Twitter:

Follow us @cbtddc

Collaborative research database:

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

Image/video of the month

Staining of medulloblastoma cells reveals extracellular vesicles / exosomes (green) tracking through a delicate network of alpha-tubulin (red). Nuclei are stained blue.

A larger image is available on our website <u>here</u>.

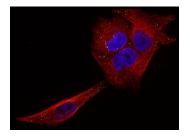


Image kindly supplied by Hannah Jackson, The University of Nottingham, UK

To share an image or video in this newsletter, please <u>send</u> <u>us</u> the file plus a caption.