



Exciting opportunities for new research using brain stem cells

Stem cells are cells which have the potential to become any type of cell in the human body, such as a liver cell, heart cell or brain cell. Researchers are able to create stem cells from donated tissue and to develop them further so they become different cell types. The newly-created cells have the same characteristics as the cells of the donor tissue. For instance, if we take a piece of brain tissue from someone with Alzheimer's disease (as confirmed by post mortem examination), we can create a collection of cells which will have exactly the same genetic material as the original donor cells. These newly-formed cells

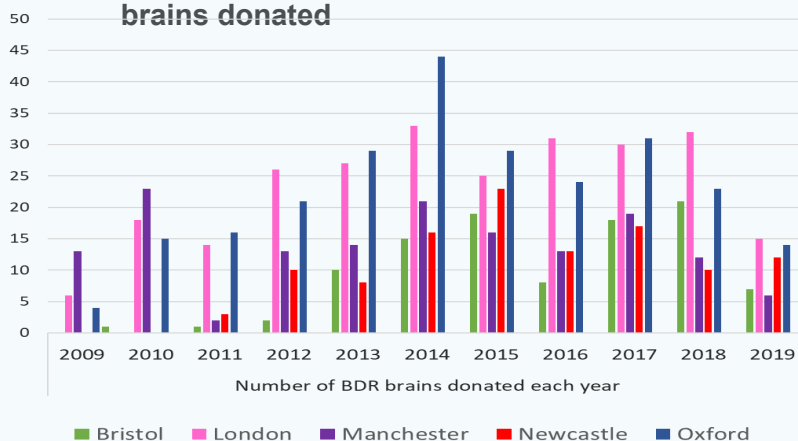
function the same way as brain cells in someone living with Alzheimer's disease and so the cells can be used in the testing and development of new drug therapies and to aid our understanding of the disease.

Dr Chris Morris (pictured above) works at the BDR Centre in Newcastle and has successfully grown stem cells using donated brain tissue. This new initiative presents an amazing and unique opportunity to advance our understanding of neurodegenerative diseases as not only do we have BDR tissue of known diagnosis but we also have a large and rich amount of data associated with that tissue making this collection one of the most valuable resources available globally.

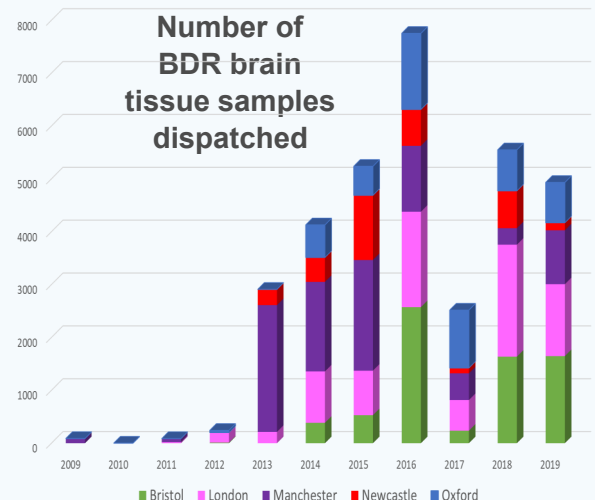
Donations made and samples used to-date

Only through the generosity of our donors are we able to provide human brain tissue to be used in research. As you will see from the chart (below left), since the start of BDR, there have been over 862 donations made and over 35,000 tissue samples have been dispatched to be used in research. The value of this resource to the scientific community can not be underestimated.

Number of BDR brains donated



Number of BDR brain tissue samples dispatched



What's happening in your local BDR?

You are invited to a BDR Research Event



The **BDR ENGAGEMENT EVENTS** are open to all BDR Study Participants, their Study Partners, families of participants who have already donated tissue, BDR staff, researchers and anyone interested in the BDR Programme. The events are free of charge and include refreshments and lunch. Our next events, held in the Spring of 2020 will take place in Bristol and Cardiff with details of future events at the Centres in Manchester and Newcastle being made available in due course.

Join us! **in Cardiff**



Date Thurs 12th March, 2020

Time 09:30 - 14:30

Venue Hadyn Ellis Building,
Cardiff University, CF24 4HQ

If you would like to register your attendance or find out more about the event, please go to:

<https://bit.ly/2RzoiTO>

Alternatively, you can contact the BDR team in Cardiff by emailing dementiaresearch@cardiff.ac.uk or telephone 02920 688 042

Join us! **in Bristol**

Date Weds 29th April, 2020

Time 10:00 - 15:00

Venue Concorde Room,
BAWA, Southmead Rd, Filton,
Bristol, BS34 7RF

Your local BDR team will be contacting you either by email or post, inviting you to this event.

You can also find out information about the event by contacting the BDR team in Bristol on telephone 0117 4147 821 or by emailing uob-bdr-event@bristol.ac.uk



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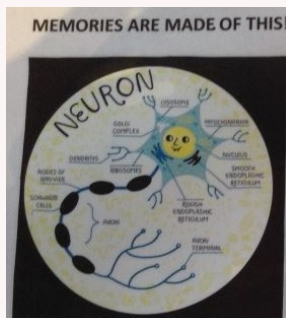
Memories are made of this

We were delighted to learn from one of our BDR participants based in Newcastle, about the work that she and fellow volunteers have engaged in, to help make their locality Dementia Friendly.

Mrs Beryl Downing (pictured below), together with others from the Jesmond Dementia Action Alliance, are aiming to make Jesmond a more Dementia Friendly community by facilitating dementia-inclusive activities, organisations and businesses in the area.

This year they entered the local Christmas tree competition with their tree entitled 'Memories are made of this' and they came away with the third prize!

The Dementia Friends decorated their tree with some sparkly neurones, using wooden stars to fashion the nerve cells, raffia to make the axons and some beautiful pom-poms to create the synapses.



Their neurologically-themed tree, was also decorated with photographs from the 1940/50s along with adverts from that time to signify the theme of 'memories'.

As you can see this was a fantastic effort!

We'd like to thank all our volunteers for your amazing support and to wish you a very, MERRY CHRISTMAS and a happy and peaceful NEW YEAR

If you would prefer not to receive future newsletters, please let us know by contacting your local study team