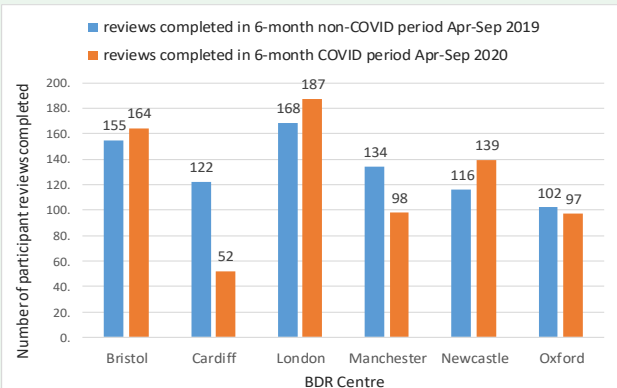


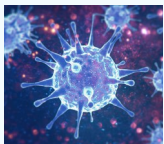


The Brain Banks are OPEN! During the difficult period of the first lockdown, the Brain Banks were forced to close with only essential services (such as freezer alarms going off!) being retained. Increased demands on NHS mortuary services and the need to reduce the risk of spreading corona virus also led to a reduction in our ability to accept brain donations. Fortunately this interruption was only temporary, as from the summer onwards, the Brain Banks have gradually opened and although we are still experiencing some issues, we will do our utmost to accept donations. Please do get in touch if a loved one dies, as we will always aim to fulfil their wishes and continue with this valuable research.

Assessment update We are delighted with the support we have received over this challenging period. With your help, we have been able to complete our assessments over the phone and when we compared the number of reviews completed in the 6 months from 1st Apr – 30th Sept 2019 (a typical non-COVID period) with the same period this year, we discovered that there was only a very slight overall drop of around 8% (see chart, right) and some Centres actually completed more assessments during the period of COVID!



When will we be able to meet face-to-face? We really appreciate being able to maintain such high levels of contact but for a variety of reasons, it has not always been feasible to speak to everyone by phone. Ideally we would like to recommence face-to-face assessments as soon as possible. Recently NHS clinical services and research programmes have started to engage directly with patients and research participants and we hope that in the near future, BDR staff will be able to visit you in your own homes. To achieve this, we will follow both national and local guidance and any face-to-face visits will involve using the necessary safeguards to reduce the risk of COVID infection. We realise that when this becomes feasible, it may not be desirable or appropriate to have face-to-face meetings with all our participants and so face-to-face appointments will be arranged on a case-by-case basis.



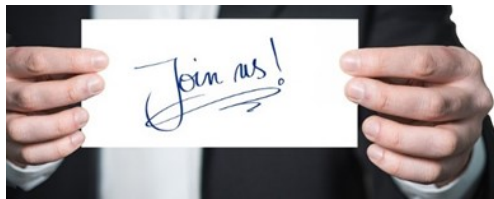
Despite the corona virus, research into dementia has continued. In the six months from 1st Apr - 30th Sept 2020, **19 brain donations** went ahead successfully and **37 requests** to use human brain tissue for research were approved. The brain banks dispatched **2,556** samples and although some researchers request BDR data only, this is still extremely valuable. In this year, a total of **9 data requests** have been approved.

Publications

Every study using BDR data and tissue advances our knowledge of dementia. Even during lockdown, researchers continued to publish their findings and in 2020, there have been **22 publications** citing BDR. As BDR is a unique resource offering clinical assessment data, blood samples, brain tissue and soon stem cells, its value to the international research community cannot be underestimated.



What's happening in your local BDR?



We are always keen to meet with you, our supporters to thank you personally for your contribution to the success of this programme and to update you on progress. To this end, in the spring of 2020, we had intended to convene in Cardiff and in Bristol but the outbreak of the pandemic led to these events being cancelled. The BDR teams in Newcastle and Manchester have also scheduled events for the spring of 2021 and although we would like them to go ahead, we appreciate that this may be unrealistic. In response we have tried to adapt and instead of meeting in person, we plan to host a series of virtual meetings.

The Director of BDR, Professor Alan Thomas, would like you to join him and a number of BDR staff and researchers at a series of online events where we will update you on progress, engage in discussion about the research and answer questions that you might have. We plan to host four events between January and April of 2021 and BDR participants, study partners and friends and family are welcome to attend. The events will be accessed by video conferencing, the details of which will be made available on the website from early January 2021. There will be time for questions at each event and you can also submit questions in advance of an event by emailing the BDR Coordinating Centre at the following email address: BDR.Coordinatingcentre@ncl.ac.uk. Where common themes emerge, we will do our best to respond at the events. For further details, please go to the website

www.brainsfordementiaresearch.org.uk

Researchers in Bristol focus on SLEEP ^{zzZ}

During the pandemic, we have all been encouraged to do our best to maintain our physical and mental well-being and this includes the maintenance of healthy sleep patterns. Dr Liz Coulthard (pictured) is an Associate Professor in Dementia Neurology working closely with the Bristol BDR team. Together with colleagues Alfie Wearn and Neil Carrigan, she has carried out extensive research looking at the process of sleep and the possible link with cognitive decline. Their results indicate that sleep quality might be important in preventing the onset of dementia, as the natural brain waves seen in deep sleep, appear to have the function of filtering toxins from the brain. One such toxin is amyloid, a protein that we know builds up in the brain during dementia. By improving our sleep, we may be able to reduce the amount of amyloid deposits in the brain and therefore reduce our risk of dementia. To learn more about this ground breaking research, Dr Coulthard produced a short video. <https://www.alzheimers-brace.org/research-snapshot-dr-liz-coulthard-how-does-poor-sleep-relate-to-alzheimers-disease>



Sleep and the impact of COVID To understand more about the impact of maintaining good quality sleep, the researchers developed an online study named "Sleep Quest". They used the unique circumstances which came with the COVID restrictions to look at the impact of two factors which help protect against sleep disturbance specifically, exposure to daylight and regular exercise. They wanted to know how limiting these two factors, impacted on individual's sleep quality and how they interact with an individual's chronotype, i.e., whether someone is a "morning" person or an "evening" person or somewhere in between. Their findings indicated that significantly more people reported worsened rather than improved sleep. This was due to low mood, anxiety and suspected, proven or at risk of COVID-19 symptoms. Sleep improvement was related to the increased length of time spent outside. Older people's sleep quality was less affected than younger people and better sleep quality was associated with going outside and exercising earlier, rather than later, in the day. However, the benefit of being outside early is driven by improved sleep in 'owl' and not 'lark' chronotype, whereas, the benefit of early exercise (inside or outside) did not depend on chronotype. The team plan to collect long-term follow-up data, the first round being Nov 2020, that will allow them to track the potential effects of lockdown stress on sleep, mental health and dementia progression. Defining the interaction between chronotype, mental health and behaviour will be critical for targeted lifestyle adaptations to protect brain health through current and future crises.