

Human brain research made easier by database

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Researchers will be able to access samples from more than 7,000 donated human brains to help study major brain diseases, thanks to a new on-line database, launched by the Medical Research Council (MRC) today.

The UK [Brain](#) Banks Network database speeds up access to donated brain samples held across 10 brain banks in the UK and allows researchers studying Multiple Sclerosis, Alzheimer's, Parkinson's and a range of other neurodegenerative and developmental diseases to track down human tissue samples for their work.

Thanks to a unique collaboration between the MRC and five leading charities, the database will help scientists from academia and industry investigate the underlying causes of major [brain diseases](#) and understand how they take hold in our bodies.

Although scientists can model diseases in the lab, to fully understand dementia and other brain-related disorders they need to study human [brain tissue](#). A lot of research relies on donated brain tissue stored in brain banks across the UK. Until today, researchers had to apply to each brain bank in turn to find out if they held the samples they needed and find the 'control' samples (donated brains free from disease) for comparison – a long and drawn out process. Now samples can be found with the click of a button from one source.

Professor James Ironside, Director of the MRC UK Brain Banks

Network, said:

"The database is the result of four years of painstaking planning and data analysis by very dedicated people. It will enable quick and easy access for researchers who are already working on neurological or [psychiatric disease](#) (perhaps in animal models or cells) and would like to translate their findings into human tissue and is very useful for those who are planning a grant application. The brain banks have already been given ethical approval, cutting out the need for researchers to go through a separate ethics application.

We must remember that vital research would not be possible without the generosity of those individuals who donate their brains to medical research. We're working hard to make sure that the access for researchers studying brain samples is much easier. The next step is to improve the systems for those wishing to donate their brain to medical research."

Five leading charities helped to supply data for the database; the MS Society, Parkinson's UK, Alzheimer's Society, Alzheimer's Research UK and Autistica.

Dr Susan Kohlhass, Head of Biomedical Research at the MS Society, said:

"This is a fantastic initiative that we're proud to be a part of. Working together in this coordinated way will ensure that researchers have better access to [human tissue](#) which will benefit MS research and ultimately the lives of people with MS."

Professor Paul Francis, Director of Brains for Dementia Research which is funded by Alzheimer's Society and Alzheimer's Research UK, in association with the Medical Research Council, said:

"Finding better treatments and ultimately a cure is the holy grail of dementia research. This new online database is another step forward which will ensure that even more researchers are able to make the most of these valuable resources. Without the generosity of people willing to pledge to donate their brains, this research would not be possible and our hopes of transforming the lives of people with dementia would be unattainable."

Dr Kieran Breen, Director of Research and Innovation at Parkinson's UK, said:

"It's vital that every person who makes the amazing decision to donate their brain knows that their tissue will be used in the most effective way possible. This new brain tissue database will make research into brain conditions like Parkinson's easier, faster and more effective - and bring us closer to what all our donors and their families want most, a cure for the condition."

Christine Swabey, CEO, Autistica, said:

"Post-mortem tissue research plays an essential role in helping us to understand autism and other complex neurological conditions. We are always deeply moved and motivated by this gift people give to improve lives in future generations."

Lorna Hall, brain donor, said:

"As the sister of someone with autism, it is important to me that I contribute to research in any way I can. When my own life has ended, donating my brain means that I can still contribute to research that will improve the lives of others - people like my brother and families like mine."

More information: For more information about the database visit:
www.mrc.ac.uk/brainbanksnetwork

Provided by Medical Research Council

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