

Tissue Application Information sheet

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General Information

Newcastle Brain Tissue Resource (formerly Newcastle Brain Bank) was established over 40 years ago and has supported major advances in the understanding of dementia and neurodegenerative disease and identifying therapeutic targets. Current cholinergic therapy for dementia was based in part on studies carried out on tissue from NBTR. It currently receives core funding from the Medical Research Council. NBTR works in co-operation with other brain banks in the UK and is part of the Brains for Dementia Research network funded by the Alzheimer's Society and Alzheimer's Research UK.

Governance

The Newcastle Brain Tissue Resource (NBTR) is a licensed research tissue bank based at Newcastle University which operates to standards set by the Human Tissue Authority and complies with all current legislation and guidance for working with human tissue. It is covered by the Newcastle University Human Tissue Authority license (HTA license number 12534). It also has a favourable ethical opinion from Newcastle and North Tyneside 1 REC (Ref 19/NE/0008) for its methods of collecting, processing, storing, and distributing tissue samples for research. This generic approval allows NBTR to issue samples to UK based projects which do not have their own ethical approvals. Tissue samples are provided to applicants whose projects are approved by the NBTR committee (this has both scientific and lay members and an independent chair who is not involved in the

Newcastle Brain Tissue Resource

Information for
researchers interested
in obtaining tissue for
research into
dementia and
neurodegenerative
disease

research). Applications for tissue are welcomed for any studies which can be demonstrated to be ethically and scientifically sound.

Applicants from outside the UK are also welcomed although they will need to demonstrate that either they have their own ethical approval for their project or that approval is not required for work with de-identified post mortem samples (IRB exemption).

NBTR is also happy to consider applications from commercial organisations.

What kinds of samples does NBTR offer?

NBTR consists of human brain tissue which has been donated post mortem for research. All tissue is collected with informed consent. The vast majority of cases will have both fixed and frozen tissue available. This can be supplied as required e.g as frozen blocks or frozen sections. Fixed tissue will usually be supplied as FFPE unstained sections. Sections (fixed or frozen) will be cut on request and specialist slides can be used if required. Some cases may have additional tissues available such as spinal cord, CSF (collected post mortem), or peripheral tissue samples. The majority of donors are recruited from those clinically diagnosed with dementias or neurodegenerative diseases (e.g Dementia with Lewy Bodies, Alzheimer's Disease, Parkinson's Disease, Vascular Dementia , stroke , metabolic / mitochondrial disease, motor neurone disease. We also have a collection of rare and unusual cases. We do have normal control tissue but this is in high demand. As this is a collection extending back some years, not all brain areas will be available from all cases.

Current cases will have standard clinical and neuropathological data available although this may not always be available to the same degree for historic cases.

A search of NBTR cases can be carried out on the MRC UK Brain Banks network database <https://brainbanknetwork.cse.bris.ac.uk/> . Additional case data may be also available by contacting the NBTR manager. We are happy to select suitable cases using your criteria so it is not essential that you choose the cases.

Tissue is routinely supplied with information regarding the age, sex, diagnosis and PM delay. Requests involving collection of additional clinical data can often be accommodated but this will normally be done on a collaborative basis.

The application process

The current NBTR application form can be found here (<https://nbtr.ncl.ac.uk/>). Please include as much information as possible. Students should ensure that their supervisor is also named on the application. Once you have submitted this application to the NBTR Manager it will be circulated to members of the committee for approval. The committee includes several lay members so please make your lay summary as easy to understand as possible. You will then be informed of the decision and we will discuss the best way of filling your request. For large applications tissue may be requested and supplied in installments. If you have special requirements about the way in which the cases are selected or processed please contact us and we will try to help. It is easier for us to supply the correct brain area if requests are specify Brodmann Area.

Before you receive your tissue a Materials Transfer Agreement will be set up between Newcastle University and your institution. If you are within Newcastle University, you will be asked to sign an Internal User Agreement.

Cost recovery

There are also now standard charges across the UK Brain bank network for preparing tissue samples. These can be found at: <https://mrc.ukri.org/research/facilities-and-resources-for-researchers/brain-banks/tariffs-for-brain-tissue/>.

After your request is approved, you will be supplied with an estimate of costs, including admin, packaging and shipping using a specialised courier, to enable you to raise a Purchase Order. Samples will then be prepared and dispatched to you as soon as possible.

Acknowledgement

We do request that we are acknowledged in, and sent copies of, any publications resulting from use of the tissue as well as an annual report on the progress of the research. It is very important to continued funding of the resource that we are able to demonstrate our contribution to research in this way. You will be provided with a standard acknowledgement that would prefer you to use if possible.

If you have any queries please contact the NBTR Manager Debbie Lett d.j.lett@ncl.ac.uk