

USE OF STEM CELLS IN RESEARCH POSITION STATEMENT

Background

Stem cells are specialised cells in our bodies, which can grow into any other type of cell – for example, blood, bone or brain cells. This unique ability makes them extremely useful for research.

In some areas of medical research, stem cells are being explored as potential new treatments for disease. Although there are no treatments that use stem cells for Alzheimer's disease and other dementias, scientists can:

- Turn stem cells into functioning networks of nerve cells.
- Use these to study brain cells, and the effects of Alzheimer's and other diseases that cause dementia, in the lab.
- Use these to screen potential new treatments for Alzheimer's and other dementias.

Stem cells come from two sources:

- Adults. Stem cells can be created from cells taken in a small skin biopsy.
- Embryos. Stem cells can be collected from embryos after abortions, or from embryos leftover from IVF treatments.

Increasingly stem cell research uses skin derived stem cells rather than embryonic stem cells. All UK research involving stem cells from embryos is strictly regulated by the Human Fertilisation and Embryology Authority.

Our position

We support research using stem cells. This is because they could help us understand Alzheimer's and other dementias. They could also aid in the development of new treatments.

In 2014 we launched the Alzheimer's Research UK Stem Cell Research Centre, a collaboration between researchers at the University of Cambridge and University College London, using the latest human stem cell technology to understand the biology of Alzheimer's disease and screen for new treatments. Researchers can take skin cells from people with Alzheimer's disease, and reprogramme them into working nerve cells, which have many of the features of the nerve cells in the brain that become damaged in dementia. These can then be used to help create better models of the disease.

How can I support dementia research, but not projects that use stem cells?

We can restrict any donation to non-stem cell research projects. You simply need to let us know when making a [donation](#).

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