

Development and validation of functional cell therapies for Huntington's and Parkinson's diseases

<https://neurodegenerationresearch.eu/survey/title-of-pidevelopment-and-validation-of-functional-cell-therapies-for-huntingtons-and-parkinsons-diseases/>

Title of project or programme

Title of PI Development and validation of functional cell therapies for Huntington's and Parkinson's diseases

Principal Investigators of project/programme grant

Title	Forname	Surname	Institution	Country
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Professor Stephen	Dunnett	Cardiff University	UK
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Address of institution of lead PI

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- United Kingdom

Source of funding information

Medical Research Council

Total sum awarded (Euro)

1867100.12

Start date of award

01-02-2006

Total duration of award in months

60

The project/programme is most relevant to

- Parkinson's disease
- Huntington's disease

Keywords

Research abstract in English

The UK is taking an international lead in developing stem cells for cell-based therapy applicable to a broad range of diseases. However, for these new sources of cells to come to effective application in the clinic requires that they are first evaluated and validated for specificity and functional potential in appropriate model systems, both in vitro and in vivo.

The proposed project establishes quality-controlled processing of cells in vitro, determines optimal dissection, preparation handling and transplantation protocols, develops the experimental models for functional analysis, and refines our understanding of the theoretical principles and mechanisms of function for application of cell-based therapies in two specific human neurodegenerative diseases, Huntington's and Parkinson's. The programme sustains a centre of expertise developing the quality-controlled facilities necessary to progress specific cell sources (fetal now, expanded progenitors imminently, and stem cells in the foreseeable future) to clinical application rapidly and efficiently.

Lay summary

In which category does this research fall?

- Basic research