Adult neural stem cells from post-mortem human brain: Towards an in vitro model for stimulating neurogenesis in neurodegenerative diseases.

https://neurodegenerationresearch.eu/survey/adult-neural-stem-cells-from-post-mortem-human-brain-towards-an-in-vitro-model-for-stimulating-neurogenesis-in-neurodegenerative-diseases/

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Contact information of lead PI Country

Netherlands

Title of project or programme

Adult neural stem cells from post-mortem human brain: Towards an in vitro model for stimulating neurogenesis in neurodegenerative diseases.

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ZonMw

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€ 300,000

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3

Keywords Research Abstract

Our main aim is to find drugable targets in adult human NSCs, which can be stimulated to increase neurogenesis in the SVZ

and thereby facilitate repair of striatal dysfunction in Parkinson, and validate these targets in

novel human cell models.

Our world-wide unique human adult NSC cultures will disclose novel molecular and cellular information, which is essential to

develop future therapies based on activating the brain's own repair capacity. Adult human NCS-lines are currently not available,

but are required to search for compounds that can stimulate endogenous neurogenesis.

The proposed approach is not only relevant for Parkinson patients, but also for patients suffering from other neurological

diseases, such as Huntington disease, in which the medium spiny neurons in the striatum are affected, and for patients

suffering from stroke. Stimulating endogenous neurogenesis has so far mainly been studied in animals. The application of adult

human NSC-lines will lead to a replacement, reduction and refinement of animals used to study neurogenesis in several

neurological disorders. The immortalized human NSCs will be valuable tools for the world-wide research community to screen

for NSC activating compounds.

Further information available at:

Types:

Investments < €500k

Member States:

Netherlands

Diseases:

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