SYNACTION: Unravelling the pathophysiological role of alpha-synuclein aggregation, transmission and neuroinflammation in neurodegeneration

https://www.neurodegenerationresearch.eu/survey/synaction-unravelling-the-pathophysiological-role-of-alpha-synuclein-aggregation-transmission-and-neuroinflammation-in-neurodegeneration/

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Country

Belgium|France|Germany

Title of project or programme

SYNACTION: Unravelling the pathophysiological role of alpha-synuclein aggregation, transmission and neuroinflammation in neurodegeneration

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JPND-JPcofuND

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€ 948,291

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01/01/2016

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3.0

The project/programme is most relevant to:

Parkinson's disease and PD-related disorders|Alzheimer's disease & other dementias

Keywords
Research Abstract

Several neurodegenerative disorders, including Parkinson?s disease (PD), dementia with Lewy bodies (DLB) and multiple system atrophy (MSA) are caused by aggregates of a single protein, known as alpha-synuclein, in different brain regions and cell types.

For a long time, researchers have been puzzled by how a single protein can be involved in these different di- seases. Now, recent intriguing findings by our consortium (Peelaerts et al. 2015, Nature) propose that the shape of the alpha-synuclein aggregates might explain this clinical heterogeneity. Moreover, these diseases are accompanied by different neuroinflammation profiles in humans and in animal models.

In this project, we will use alpha-synuclein aggregates from human brain samples of PD, DLB and MSA pa- tients and study their pathological and inflammatory effects in advanced experimental rodent and non- human primate models. These new insights will contribute to early diagnosis, prevention and the develop- ment of novel therapeutic strategies for alpha-synuclein-related disorders

Lay Summary
Further information available at:

Types:
Investments > €500k, JPND Projects

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Belgium, France, Germany, JPND

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