Using novel 3'UTR targeting based approaches to study gene function and treat neurodegenerative disease

https://www.neurodegenerationresearch.eu/survey/using-novel-3%c2%92utr-targeting-based-approaches-to-study-gene-function-and-treat-neurodegenerative-disease/

Principal Investigators

Andressoo Jaan-Olle

Institution

University of Helsinki

Contact information of lead PI Country

Finland

Title of project or programme

Using novel 3'UTR targeting based approaches to study gene function and treat neurodegenerative disease

Source of funding information

Academy of Finland

Total sum awarded (Euro)

€ 456,305

Start date of award

01/01/2017

Total duration of award in years

3.7

Keywords

Research Abstract

Brain function depends on neuronal networks built and maintained in part via accurate spatiotemporal expression of neurotrophic factors (NTFs). In neurodegenerative diseases such as Parkinson's disease, contacts between specific neurons are lost. In theory, elevation of NTFs in the correct target neurons would enable restoration of the original neuronal network connections. However, currently no means to specifically elevate the levels of NTFs limited to

the correct expression site are available. By identifying molecules responsible for regulation of endogenous NTF levels and developing new genetics tools we aim to show that restoration of neural networks is possible. The new tools already generated in my laboratory or under construction provide a new way to study gene function, have a potential to reveal novel drug targets and provide insight into how NTFs regulate specific neuronal network function.

Further information available at:

Types: Investments < €500k
Member States: Finland
Diseases: N/A
Years: 2016
Database Categories: N/A
Database Tags:

N/A