

STRENGTH: Survival, Trigger and Risk, Epigenetic, eNvironmental and Genetic Targets for motor neuron Health

<https://neurodegenerationresearch.eu/survey/strength-survival-trigger-and-risk-epigenetic-environmental-and-genetic-targets-for-motor-neuron-health-3/>

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Country

United Kingdom|Netherlands|Belgium|Italy|France|Switzerland|Sweden|Germany|Ireland

Title of project or programme

STRENGTH: Survival, Trigger and Risk, Epigenetic, eNvironmental and Genetic Targets for motor neuron Health

Source of funding information

JPND-Risk Factors

Total sum awarded (Euro)

€ 4,265,102

Start date of award

01/02/2014

Total duration of award in years

3.0

The project/programme is most relevant to:

Motor neurone diseases

Keywords

Research Abstract

Amyotrophic lateral sclerosis (ALS) is a devastating neurological disease causing relentless and

progressive paralysis. Most people die within three years of first symptoms when the muscles controlling breathing become too weak to work properly. ALS kills one in every 300 people and affects about 50,000 people in Europe at any time. It is a greatly feared diagnosis and is the commonest reason to seek assisted suicide. Finding a treatment that will slow, stop or reverse ALS is essential, but the design of new drugs is hampered by our lack of knowledge, and the tendency to consider all ALS as if it is a single, uniform disease.

The aim of STRENGTH is to discover factors that change the risk of ALS, trigger ALS or affect how rapidly it progresses, so that these can be used to target the design of new treatments.

To do this, STRENGTH uses a novel approach:

- Clinical features, laboratory findings and statistics are used to detect subgroups of ALS that might share risk, trigger or modifying factors in common
- Multiple layers of genetic, environmental and clinical information are analysed within each group.

STRENGTH consortium partners have DNA, exposure information and clinical information from people with ALS enrolled in pan-European population registers covering a population of about 120 million people. This is the largest such resource for studying ALS in the world and is unique because the information is population-based. STRENGTH takes advantage of existing projects such as the EU-FP7-funded EuroMotor, designed to help consortium partners collect large amounts of information, and the JPND-supported SOPHIA, which makes sure all information is collected the same way. By studying a large, well collected set of multi-layered data in a novel and powerful way, STRENGTH will find the factors that influence ALS, and identify targets for the design of new therapies

Lay Summary

Further information available at:

Types:

Investments > €500k, JPND Projects

Member States:

Belgium, France, Germany, Ireland, Italy, JPND, Netherlands, Sweden, Switzerland, United Kingdom

Diseases:

Motor neurone diseases

Years:

2016

Database Categories:

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Database Tags:

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