Parkinson’s disease – from genetic risk factors to molecular mechanisms and clinical phenotypes

https://www.neurodegenerationresearch.eu/survey/parkinsons-disease-from-genetic-risk-factors-to-molecular-mechanisms-and-clinical-phenotypes/

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Country

Norway

Title of project or programme

Parkinson's disease - from genetic risk factors to molecular mechanisms and clinical phenotypes

Source of funding information

RCN

Total sum awarded (Euro)

€ 728,408

Start date of award

01/01/2016

Total duration of award in years

3.0

The project/programme is most relevant to:

Parkinson's disease & PD-related disorders

Keywords
Research Abstract

This project is a cutting-edge study of Parkinson disease (PD), a devastating disease of the central nervous system affecting at least 5,000 adults in Norway. Over the last decade, research has demonstrated that vulnerability to brain disorders has a profound genetic component. A

major current challenge is to identify the relevant molecular mechanisms and characterize how variability on the level of genes and pathways translates into the phenotypically diverse condition seen in clinical practice. This knowledge is crucial for the development of novel therapies targeting specific pathogenic processes, and enabling tailored treatment for the individual patient. PD is characterized by progressive decline in motor function leading to disability and impaired quality of life. Heterogeneity in clinical presentation is widely acknowledged and the rate of disease progression varies considerably. Through recent work our group has gained considerable insights into the genetic risk factors predisposing to PD. Building upon our experience and results from previous and ongoing research, this project is aiming to identify molecular mechanisms for disease risk and for diverse PD phenotypes. We will apply new technologies and analytical methods to disentangle genomic risk regions for PD. We will then study epigenetic mechanisms, which hold great promise to reveal new insights into pathogenesis not identified by other research areas. By combining these molecular studies with the establishment of a longitudinal cohort study, we hypothesize that we will identify mechanisms that can be targeted in improved treatment strategies.

Lay Summary
Further information available at:

Types:
Investments > €500k

Member States:
Norway

Diseases:
Parkinson's disease & PD-related disorders

Years:
2016

Database Categories:
N/A

Database Tags:
N/A