

Insights into Parkinson's disease, Crohn's disease, and leprosy: a common role for LRRK2

<https://neurodegenerationresearch.eu/survey/insights-into-parkinsons-disease-crohns-disease-and-leprosy-a-common-role-for-lrrk2/>

Principal Investigators

Park, David S; Gibbings, Derrick J; Hayley, Shawn P; Philpott, Dana J; Rioux, John D; Schlossmacher, Michael G; Schurr, Erwin A

Institution

University of Ottawa

Contact information of lead PI

Country

Canada

Title of project or programme

Insights into Parkinson's disease, Crohn's disease, and leprosy: a common role for LRRK2

Source of funding information

CIHR

Total sum awarded (Euro)

€ 1,588,275

Start date of award

01/07/2014

Total duration of award in years

5.0

The project/programme is most relevant to:

Parkinson's disease & PD-related disorders

Keywords

Research Abstract

The immune system has increasingly been shown to play a role in various disease states, though the manner by which the immune system responds is complex and not fully understood.

Recent evidence has identified a potential common immune system response that may underlie three different chronic diseases: Parkinson's disease, Crohn's disease, and leprosy. LRRK2 is a gene that has been associated with an increased susceptibility for these diseases, and is thought to play a role in regulating immune system function. The present research is designed to develop a comprehensive understanding of the role of LRRK2 in immune system modulation, and how dysfunction of this pathway may lead to the development of Parkinson's disease, Crohn's disease, or leprosy. To achieve this we have assembled a multidisciplinary team with expertise in LRRK2 biology, genetics, and the immune system. Together, these three disorders represent an incredible burden on health care costs and human suffering worldwide. The identification of commonalities related to immune dysregulation could lead to unique therapeutic strategies, and has the potential to transform clinical outcomes of patients suffering from these conditions.

Lay Summary

Further information available at:

Types:

Investments > €500k

Member States:

Canada

Diseases:

Parkinson's disease & PD-related disorders

Years:

2016

Database Categories:

N/A

Database Tags:

N/A