A multi-hit model of Parkinson’s disease: LRRKing inflammatory mechanisms.

https://neurodegenerationresearch.eu/survey/a-multi-hit-model-of-parkinsons-disease-lrrking-inflammatory-mechanisms/

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A multi-hit model of Parkinson's disease: LRRKing inflammatory mechanisms.

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Research Abstract

The vast majority of cases of Parkinson’s disease (PD) are of unknown origin and environmental influences have been repeatedly implicated. That said, certain genetic changes, such as those involving a gene that appears to influence the inflammatory immune system, (called LRRK2), might engender a vulnerability to the impact of environmental toxicants. We presently hypothesize that activation of LRRK2, along with immune system messenger proteins, called cytokines, together give rise to PD. We will test this hypothesis using genetically modified mice (that either lack LRRK2 or express abnormal levels of this gene) and administering certain cytokines, immune agents (e.g. compounds that mimic viral and bacterial infections) and

environmental toxicants (e.g. pesticides linked to PD).

Further information available at:

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