Research Project Proposal
Academic year 2020-2021

Máster en Investigación Biomédica

Project Nº 26

Title: Amylin as a therapeutic target in Parkinson's disease

Department/ Laboratory *Laboratorio Enfermedad de Parkinson. Neurociencias. CIMA*

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Summary Parkinson's disease is a devastating neurodegenerative disease that affects approximately to more than 6 million people worldwide. The exact mechanisms of neuronal death in Parkinson's disease remains elusive, but certain risk factors have been demonstrated to increase the likelihood of developing this disease.

Besides aging, other factors greatly contribute to the incidence of Parkinson's disease. One of these factors is type 2 diabetes mellitus. Although several pathological processes appear to be shared by these two diseases, the exact molecular links remain unclear. The goal of this project is to generate a definite answer of the amylin role in Parkinson's disease. Amylin is a small protein implicated in β-cell loss, the pathological hallmark of type 2 diabetes mellitus. Our group has provided new and exciting evidences of the importance of oligomeric amylin in neurodegenerative diseases.

Therefore, the aim of this work is to study the role of amylin in the etiopathogenesis of Parkinson's disease. To achieve this goal. we will study the transcriptomic changes produced after the injection of amyloidogenic amylin in mice to later validate the results obtained in the mouse brain in brains of subjects diagnosed with Parkinson's disease and in neurologically asymptomatic subjects.

yes	**X**
no	

Does the project include the possibility of supervised animal manipulation to complete the training for animal manipulator?