Biomedical devices for easier and quicker screening procedures of the Alzheimer disease

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Name of Fellow

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Institution Funder

FCT

Contact information of fellow Country

Portugal

Title of project/programme

Biomedical devices for easier and quicker screening procedures of the Alzheimer disease

Source of funding information

FCT

Total sum awarded (Euro)

€ 116,640

Start date of award

01/01/14

Total duration of award in years

6.0

The project/programme is most relevant to:

Parkinson's disease & PD-related disorders

Keywords

Research Abstract

Alzheimer's disease (AD) is a progressive and degenerative disease of the central nervous system. It is the main cause of memory loss and dementia in the elderly, affecting currently ~90,000 people in Portugal[1]. Early detection and diagnosis of AD is a major goal, because early clinical intervention may slow-down the progression of the disease.

This plan proposes for this purpose new portable biosensors for multi-biomarker screening of AD in point-of-care. This is achieved by: (i) developing novel synthetic capture-probes for targeted AD biomarkers; (ii) including such probes in a nanostructured material displaying good electrical features and compatibility with electrical transducers; (iii) adapting each of the previous materials to a low-cost support (paper, cork or PET). As this work is running side-by-side with the Starting Grant/ERC-3P's, attempts will be made to fuse the device with a solar-cell operation, aiming at its full autonomy. Multi-biomarker platforms are also tried out.

Types:

Fellowships

Member States: Portugal

Diseases: Parkinson's disease & PD-related disorders

Years: 2016

Database Categories: N/A

Database Tags: N/A