

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

<https://www.neurodegenerationresearch.eu/survey/biomedical-devices-for-easier-and-quicker-screening-procedures-of-the-alzheimer-disease/>

## **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:**

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**Database Categories:**

N/A

**Database Tags:**

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