

Wearable sensors in smart textiles

<https://www.neurodegenerationresearch.eu/survey/wearable-sensors-in-smart-textiles/>

Principal Investigators

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Country

Sweden

Title of project or programme

Wearable sensors in smart textiles

Source of funding information

Swedish Foundation for Strategic Research

Total sum awarded (Euro)

€ 3,046,790

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 project aims at developing a reliable, easy-to-use, wearable sensor system in the form of a comfortable garment with the possibility to continuously measure movements and other variables, in order to improve diagnosis, monitor disease progression or improvement and tailor treatment in epilepsy, Parkinson's disorder (PD) and stroke rehabilitation. An interdisciplinary research team is carefully put together to tackle the scientific challenges involved with partners representing the following research areas: (a) health care and clinical evaluation, focusing on the neurological disorders epilepsy, PD and stroke; (b) electronics and information technology,

focusing on sensor system integration, signal processing and data fusion & aggregation, and (c) textile technology, focusing on functional textile fibers and comfortable textiles with built-in sensor activity. We will develop textile sensors and signal processing algorithms and hardware for monitoring of physiological signals (e.g. respiration, oxygen saturation), electrophysiological signals (ECG, EMG) and movements, verified in clinical evaluations. Successful research results will strengthen Swedish medtech, textile and IT industry and facilitate new products with significant growth potential. We further believe that the strong Swedish medtech segment combined with the strong IT branch and innovative textile companies poses the ideal breeding ground for new companies and spin offs within the wearable sensor area.

Lay Summary

Further information available at:

Types:

Investments > €500k

Member States:

Sweden

Diseases:

Parkinson's disease & PD-related disorders

Years:

2016

Database Categories:

N/A

Database Tags:

N/A