

# Industrial Academic Initial Training Network towards focused treatment of age-related motor symptoms.

<https://neurodegenerationresearch.eu/survey/industrial-academic-initial-training-network-towards-focused-treatment-of-age-related-motor-symptoms/>

## **Name of Fellow**

**Institution**

**Funder**

European Commission FP7-Seventh Framework Programme

## **Contact information of fellow**

**Country**

EC

## **Title of project/programme**

Industrial Academic Initial Training Network towards focused treatment of age-related motor symptoms.

## **Source of funding information**

European Commission FP7-Seventh Framework Programme

## **Total sum awarded (Euro)**

€ 2,438,657

## **Start date of award**

01/10/12

## **Total duration of award in years**

4.3

## **The project/programme is most relevant to:**

Parkinson's disease & PD-related disorders

## **Keywords**

Ageing | Neurological disorders | Parkinson | Motor symptoms | Diagnostics | Treatment | Pathways

## **Research Abstract**

Gait and postural control impairments, and falls are ubiquitous among the elderly, and lead to enormous personal, occupational and health care burden. Especially patients with PD are severely affected by the progressive deterioration of these gait and postural control mechanisms. Elucidating mechanisms of age- and disease-related motor control impairments and devising focussed treatment strategies to counteract these symptoms represent major challenges for future research. Moving beyond focuses on the role of supraspinal motor control mechanisms in ageing and PD. It will span the entire spectrum from basic understanding of these mechanisms, over diagnostics to therapeutic applications of supraspinal motor control deficits. In particular, we aim to pursue the following aspects: (i) pathways of the basal ganglia, (ii) balance and postural control, (ii) sensorimotor integration aspects, (iii) fractal properties of gait, (iv) freezing of gait, and (v) central adjustment strategies. We will employ promising diagnostic strategies and tools such as (i) electroencephalography during locomotion, (ii) virtual reality, (iii) body worn movement monitors, and (iv) instrumented movement assessments. Treatment strategies in Moving beyond include (i) therapeutic cues, and (ii) modelling of an individualized training proposal. The network consists of a rare combination of experts from basic and translational research as well as from the industry. They will cover the entire range of expertise necessary and utilize cutting edge technology to educate students and fellows in the complex problem of the impact of supraspinal motor control mechanisms in ageing and PD. The comprehensive inter-sectoral and multidisciplinary training program will comprise a unique set of state of the art scientific and soft skill training measures pursuing general and individually tailored training approaches. Outreach and dissemination activities form a crucial part of Moving beyond.

**Types:**

Fellowships

**Member States:**

N/A

**Diseases:**

Parkinson's disease & PD-related disorders

**Years:**

2016

**Database Categories:**

N/A

**Database Tags:**

N/A