

# Handalysis – Kinematic Data Processing

- Providing unbiased assessment of motor function degeneration



## **Opportunity:**

Finger tapping and other physical movements are commonly used in the assessment of motor function for neuro-degenerative disorders such as Parkinson's and Huntington's disease. Currently, the decline in motor function is assessed visually by a clinician and these assessments are vulnerable to inter-rater variability and are highly subjective. Consequently several independent assessments as well as video recording are required after which the different clinical assessors must agree on clinical rating.

Researchers at University College Dublin have developed an alternative approach to rate the decline in neurodegeneration which utilises a discreet wearable device incorporating digital signal processing to accurately measure and characterise finger tapping movement in patients.

# **Applications:**

Accurate motor function rating during the assessment of neurodegenerative disorders such as Parkinson's and Huntington's disease.

## **Key Features/Advantages:**

- Reduces inter-rater variability and subjectivity.
- Allows clinicians to assess patients in a standardised and controlled way.
- Removes the requirement for video capture and multiple diagnoses.
- Reduces time burden on clinicians.

**FUNDERS:** 



#### Value Proposition:

Non-biased clinical assessment of neurodegeneration that is faster, cheaper and more accurate than existing clinician led methods.

## Market:

Health, Medical Devices, Bioengineering.

## Lead Inventor:

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**IP Status/Publication:** EPO patent application: EP19187680.4.



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