

## UCL SPCR internship projects 2025

**Name & email supervisor(s):**

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**Length and dates of internship:**

Total 140 hours starting 9 June 2025 (flexible)

Full-time: 5 days/week (35 hours/week) for 4 weeks

Part-time: minimum 2 days/week (14 hours/week) for 10 weeks or shorter if more than 2 days/week but must be completed by September 2025 at the latest

**Host department:**

Research Department of Primary Care and Population Health, University College London

**How will the internship be conducted:**

- In person at the university
- Virtual/ from home
- Both are possible, depending on preference of student

**Title internship project:**

**Mapping patient reported symptom tracking to the MDS-Unified Disease Rating Scale (MDS-UPDRS) and MDS-Non-Motor Symptom fluctuations scale in people with Parkinson's disease**

**Summary of the internship project:** *(max 250 words, can include hyperlinks to further information)*

The Movement Disorders Society Unified Parkinson's Disease Rating Scale (MDS-UPDRS) is a widely used tool in clinical research and practice to assess the severity of Parkinson's disease. The MDS-UPDRS has four parts that evaluate different aspects of Parkinson's disease: Part I assesses non-motor aspects of experiences of daily living e.g., cognitive function, mood and behaviour; Part II assesses motor aspects of experiences of daily living e.g. eating, dressing and hygiene; Part III evaluates motor symptoms e.g. tremor, rigidity, bradykinesia (slow movement) and motor instability; and Part IV addresses complications related to Parkinson's treatment e.g. dyskinesia (involuntary movement) and motor fluctuations (changes in motor performance).

Parkinson's disease commonly requires ongoing therapy, which can sometimes lead to complications. Part IV of the MDS-UPDRS evaluates the impact of medication on the patient's symptoms and overall well-being. It provides a structured framework to assess the effectiveness of treatment and to identify any adverse effects that may be related to therapy.

The MDS-Non-Motor Symptoms scale (MDS-NMS) is a scale specifically assessing the non-motor symptoms of Parkinson's disease and includes a Non-Motor Fluctuations subscale (MDS-NMF), assessing the fluctuations of non-motor symptoms in response to medication.

As part of the Personalised Care for Parkinson's disease (PD-Care) study we have developed a toolkit to facilitate people with Parkinson's to self-manage their condition and symptoms. The toolkit consists of information sections on what Parkinson's is, symptoms, treatment and practical advice to optimise well-being. The toolkit also contains personalised sections, which includes a

'Tracker' where people can record and monitor changes in their medication, activity and symptoms. Additionally, we have collected MDS-UPDRS and MDS-NMS data at three time points: baseline, 6-months (post-intervention) and 12-months (maintenance). In this internship, the student will map MDS-UPDRS Part IV and MDS-NMF data to digital analytic data from the toolkit 'Tacker' to determine the usefulness of the tracker for people experiencing symptom fluctuations.

More information about the PD-Care study can be found here:

<https://trialsjournal.biomedcentral.com/articles/10.1186/s13063-023-07700-7> and <https://www.ucl.ac.uk/ion/research/research-departments/clinical-and-movement-neurosciences/personalised-care-people>

**Learning objectives:**

Upon completing this internship, the student will be able to:

- Describe the practical application of rating scales in monitoring symptoms in clinical practice in people with Parkinson's disease.
- Demonstrate proficiency in independently and collaboratively analysing and interpreting data.
- Synthesise findings from the mapping exercise and describe the overall utility of the PD-Care toolkit 'Tracker' in people experiencing Parkinson's symptom fluctuations.

**Any further information:**

As an integrated member of the PD-Care clinical trial team, the student will have the opportunity to attend regular meetings and get involved in dissemination and implementation activities. The student could also attend departmental seminars to gain understanding of a variety of research methods and topics and present their project findings to a wide audience.