

KATIE ANN PETERSON

EDUCATION

- 2013-2017 Ph.D., Medical Science (Psychiatry), University of Cambridge**
Supervisors: Prof Barbara J. Sahakian and Prof John D. Pickard
Thesis: *Cognition and apathy in normal pressure hydrocephalus*
- 2008-2012 MA (Hons), Psychology, University of Dundee**
Degree award: **1st class (Hons)**
Thesis: *The influence of priming, framing and executive function on moral judgements.*
Supervisor: Prof Trevor A. Harley

RESEARCH POSITIONS

- 2021 Research Associate – Deuterium Metabolic Imaging in Dementia**
Dept. Radiology, University of Cambridge, Pls: Dr Tomasz Matys and Prof James B. Rowe
Recruitment of patients with Alzheimer's disease and healthy controls for a study investigating a new MRI method for detecting dementia. Compiled an IRAS ethics amendment, coordinate study visits, administer memory tests with controls.
- 2020 Research Associate – 7Tesla Magnetic Resonance Imaging in Dementia**
Dept. Clinical Neurosciences, University of Cambridge, PI: Dr Thomas Cope
Recruitment of patients with primary progressive aphasia and healthy controls for 7Tesla MRI studies of dementia. Coordinated study visits, conducted neuropsychological and language assessment in patients and controls.
- 2017-2020 Research Associate – Development of the Mini Linguistic State Examination**
Dept. Clinical Neurosciences, University of Cambridge, Pls: Prof James B. Rowe, Prof Peter Garrard, and Prof Karalyn E. Patterson
Development of a novel test for the assessment of progressive aphasia. Recruited patients with primary progressive aphasia, progressive supranuclear palsy and corticobasal syndrome and healthy controls for an MRI study. Assessed cognition and language in participants. Conducted a literature review. Brain imaging and behavioural data analysis and write-up.
- 2013-2017 Ph.D. student – Cognition and apathy in normal pressure hydrocephalus**
Dept. Psychiatry, University of Cambridge, Pls: Prof Barbara J. Sahakian and Prof John D. Pickard
Investigated cognitive and neuropsychiatric symptoms in a rare form of dementia. Recruited patients with brain injury for research. Analysed behavioural and brain imaging data. Completed IRAS NHS ethics applications.
- 2011-2012 Undergraduate Research Assistant**
School of Psychology, University of Dundee
Programmed experiments and collected qualitative and quantitative data for experimental psychology studies.

CLINICAL POSITIONS

- 2013-2016 Research Neuropsychologist, NHS Cerebrospinal Fluid Disorders Clinic, Addenbrooke's Hospital, Cambridge**
Assessed cognitive function and mood in patients with suspected or established normal pressure hydrocephalus and benign intracranial hypertension. Assessed cognitive outcome post-shunt surgery/ lumbar drain. Wrote summary reports for the neurosurgical team, supervised by a clinical psychologist.

RELEVANT SKILLS

Clinical experience

Neuropsychological, neuropsychiatric, and language assessment (cerebrospinal fluid disorders, behavioural variant frontotemporal dementia, Alzheimer's disease, primary progressive aphasia, progressive supranuclear palsy, corticobasal syndrome); other clinical research experience (stroke, brain tumour, traumatic brain injury).

Data analysis

Analysis and visualisation (R, SPSS), neuroimaging analysis (Freesurfer, FSL, SPM, ITK-SNAP).

Research ethics

Good Clinical Practice training.

Completed multiple IRAS NHS/ university ethics applications and amendments.

Programming/coding

Strong skills in R, some experience with HTML, CSS, UNIX command line, Cedrus SuperLab.

Data management

REDCap, Microsoft Excel.

Written communication

Scientific and technical writing, editing and proofreading for non-native speakers, reviewing.

Production of study documentation including protocols, information sheets, and SOPs.

Oral communication

Presentation skills, listening skills, empathy, negotiation.

Considerable experience working with patients with complex communication needs.

PEER-REVIEWED PUBLICATIONS

Peterson, K.A., Patterson, K., & Rowe, J. B. (2019). Language impairment in progressive supranuclear palsy and corticobasal syndrome. *Journal of Neurology*, 1-14. doi: 10.1007/s00415-019-09463-1

Savulich, G., Thorp, E., Piercy, T., **Peterson, K.A.,** Pickard, J.D., & Sahakian, B.J. (2019). Improvements in attention following cognitive training with the novel "Decoder" game on an iPad. *Frontiers in Behavioural Neuroscience*, doi: 10.3389/fnbeh.2019.00002

Peterson, K.A., Mole, T.B., Keong, N.C.H., DeVito, E.E., Savulich, G., Pickard, J.D., & Sahakian, B.J. (2019). Structural correlates of cognitive impairment in normal pressure hydrocephalus. *Acta Neurologica Scandinavica*, 139(3), 305-312. doi: 10.1111/ane.13052

Peterson, K.A., Savulich, G., Jackson, D., Killikelly, C., Pickard, J.D., & Sahakian, B.J. (2016). The effect of shunt surgery on neuropsychological performance in normal pressure hydrocephalus: a systematic review and meta-analysis. *Journal of Neurology*, 263(8), 1669-1677. doi:10.1007/s00415-016-8097-0

Peterson, K.A., Housden, C.R., Killikelly, C., DeVito, E.E., Keong, N.C., Savulich, G., Czosnyka, Z., Pickard, J.D., & Sahakian, B.J. (2016). Apathy, ventriculomegaly and neurocognitive improvement following shunt surgery in normal pressure hydrocephalus. *British Journal of Neurosurgery*, 30(1), 38-42. doi:10.3109/02688697.2015.1029429

FORTHCOMING PUBLICATIONS

Patel, N., **Peterson, K.A.,** Ingram, R., Storey, I., Cappa, S.F., Catricala, E., Patterson, K.E., Lambon Ralph, M.A., Rowe, J.B., & Garrard, P. The Mini Linguistic State Examination (MLSE): a brief but accurate assessment tool for classifying Primary Progressive Aphasia. (*Under review, preprint:* <https://www.medrxiv.org/content/10.1101/2020.06.02.20119974v1>)

Peterson, K.A., Jones, P.S., Patel, N., Tsvetanov, K.A., Ingram, R., Cappa, S.F., Lambon Ralph, M.A., Patterson, K., Garrard, P., & Rowe, J.B. Language disorder in progressive supranuclear palsy and corticobasal syndrome: neural correlates and detection by the MLSE screening tool. (*Under review, preprint:* <https://www.medrxiv.org/content/10.1101/2021.03.04.21252852v1>)

SELECTED PRESENTATIONS

- **Language impairment in progressive supranuclear palsy and corticobasal syndrome: The MLSE screening test and its neural correlates.** The Alzheimer's Association International Conference. Virtual event, 2020. [Poster presentation]
- **Development of the standardised, multilingual Mini Linguistic State Examination (MLSE) to classify and monitor primary progressive aphasia.** The Alzheimer's Association International Conference. Chicago, Illinois, United States, 2018. [Poster presentation]
- **Language impairment in progressive supranuclear palsy and corticobasal syndrome.** The Alzheimer's Association International Conference. Chicago, Illinois, United States, 2018. [Poster presentation]
- **Cognition, motivation, and apathy following brain injury.** The 1st Annual Cambridge Psychiatry Graduate Symposium. Cambridge, UK, 2015. [Oral presentation]
- **Does crime pay or do good deeds lead to heaven? The influence of priming, framing, and executive function on moral judgements.** British Psychological Society (Scotland) Conference for Undergraduate Research Projects. Glasgow, UK, 2012. [Oral presentation]

AD-HOC REVIEWER

Journal of Neuroscience, Psychological Medicine, Neurobiology of Aging, Parkinsonism & Related Disorders, Journal of the International Neuropsychological Society, Journal of Geriatric Psychiatry and Neurology, SAGE Open Medicine

TEACHING AND MENTORING

2021	University of Birmingham mentorship scheme Mentor to an undergraduate student of Biomedical Sciences
2017-2018	University of Cambridge undergraduate supervision scheme Co-supervised the final year research project of a Psychology undergraduate
2011-2012	University of Dundee peer support mentorship scheme Mentored a first-year psychology student
2005-2007	Various primary schools, Shetland Befriender/ mentor/ group teaching experience

FURTHER ACTIVITIES

Outreach	2020 Member of a focus group to facilitate virtual community centres during the COVID-19 lockdown. 2019 Produced a research newsletter for patients and carers attending the dementia clinics at Addenbrooke's Hospital.
Volunteering	2015-2016 Green Impact Project, investigated and implemented green initiatives in the Department of Psychiatry, University of Cambridge. 2006-2007 Befriender/ volunteer at various care homes, Shetland