ELIZABETH YORK

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EMPLOYMENT

Postdoctoral Research Fellow
Jan '22 - present

Institute for Neuroscience and Cardiovascular Research, University of Edinburgh

- develop/apply quantitative microstructural MRI analysis methods in multiple sclerosis cohorts
- application of ultra-high field MRI in multiple sclerosis
- multivariate statistical analyses inc. MRI, blood biomarkers, cognitive and clinical indices
- report and disseminate results at conferences and as published literature

EDUCATION

Doctor of Philosophy (PhD) in Clinical Brain Sciences
Sept '17 – Dec '21 (award March '22)

Centre for Clinical Brain Sciences, University of Edinburgh

Thesis: Magnetisation transfer imaging biomarkers of demyelination in multiple sclerosis (primary supervisor: Professor Adam Waldman; secondary supervisor: Professor David Hunt)

Dual Master of Science (MSc) in Brain and Mind Sciences
Sept '15 – Aug '17

Year 1: University College London

Dissertation with merit: Brain Abnormalities in Congenital Hypothyroidism: a Resting-State fMRI & Voxel-Based Morphometry Study' (supervisors: Professor Chris Clark and Dr Hannah Cooper)

- Introductory Science and Methods
- Imaging Modalities
- Pathology and Diagnostic Neuroimaging
- Foundational Neuroanatomy, Systems and Disease
- Disease of the Nervous System: Epilepsy, Tumours, Pain and Infection
- Cellular and Molecular Mechanisms of Disease

Year 2: Sorbonne University (UPMC) & École Normale Supérieure, Paris, France

Dissertation with 'mention assez bien': Cerebral Bases of Visual Processing and Spatial Cognition in Normal Ageing: a Resting-State fMRI Study (supervisors: Dr Angelo Arleo and Dr Stephen Ramanoël)

- Physiology of the Neuron
- Systems Neuroscience
- Neuroscience of Consciousness
- Neurobiology of Psychiatric Disorders

Bachelor of Arts (MA) in Psychology and French (with ERASMUS year abroad) Upper second class honours
Sept '10 – Sept '15

University of Glasgow

Dissertation: 'Click and it's gone! The questionable existence of an impairment effect on memory from taking photographs and the influence of expectation' (supervisor: Professor Frank E Pollick)

Key modules include:

- Physiological Psychology
- Cognitive Psychology
- Statistics
- Social Psychology
- Human Development
- Individual Differences
- Professional Skills.

LAB PLACEMENTS AND EXCHANGES

Microstructural MRI SINAPSE exchange visit (Prof Derek Jones)
Nov, Dec '22 (2 weeks)

Cardiff University Brain Research Imaging Centre (CUBRIC)

Placement in Aging in Vision and Action Lab (Dr Angelo Arleo)
Jan – Apr '17

Institut de la Vision, CNRS–INSERM–UPMC, Paris

Placement in Developmental Imaging & Biophysics Lab (Prof Chris Clark)
Jan – May '16

UCL Great Ormond Street Institute of Child Health

GRANTS AND AWARDS

◦ RS MacDonald Seedcorn Fund (£10,000) with matched funding from Imaging Centre of Excellence (ICE) QEUH and Anne Rowling Regenerative Neurology Clinic	July '23
◦ SINAPSE Early Career Researcher Exchange Fund (£2450)	Oct '22
◦ CSO Scottish PhD Research & Innovation Network Traineeships in MND/MS	Sept '17 – Dec '21
◦ ISMRM Education Stipend (travel grant)	2019, 2020, 2022
◦ Guarantors of Brain Travel Grant	2020
◦ BICISMRM Student Stipend	2020

SUPERVISION AND TEACHING

◦ Primary supervisor of MSc student project (1)	2025
◦ Primary supervisor of final-year BSc/intercalating medical student project (2)	2023, 2025
◦ Primary supervisor of research interns (2)	2025
◦ Co-supervisor of Wellcome Trust PhD student rotation projects (2)	2023, 2024
◦ Co-supervision of intercalating medical student projects (1)	2021
◦ Training of BSc and PhD students and research assistants	*Ad hoc*
◦ Contributing teaching lectures to online MSc course	*Ad hoc*

PUBLICATIONS (in date order, *joint first author)

Meijboom, R, Foley, P, MacDougall, N, Mina, Y, **York, EN** et al. (2024) Fatigue in early multiple sclerosis ; MRI metrics of neuroinflammation, relapse and neurodegeneration. Brain Communications, fcae278. https://doi.org/10.1093/braincomms/fcae278

Kampaite, A, Gustafsson, R, **York, EN** et al. (2024) Brain connectivity changes underlying depression and fatigue in relapsing-remitting multiple sclerosis: a systematic review. Plos one, 19(3), e0299634. https://doi.org/10.1101/2022.12.07.22283104

Harper, J,* **York, EN*** et al. (2023) Quantitative T1 brain mapping in early relapsing-remitting multiple sclerosis: longitudinal changes, lesion heterogeneity and disability. European Radiology, 1-14. https://doi.org/10.1007/s00330-023-10351-6

Blesa Cábez, M, Vaher, K, **York, EN** et al. (2023) Characterisation of the neonatal brain using myelin-sensitive magnetisation transfer imaging. Imaging Neuroscience, 1: 1-17. https://doi.org/10.1101/2023.02.01.23285326

Meijboom, R, **York, EN** et al. (2023) Patterns of brain atrophy in recently-diagnosed relapsing-remitting multiple sclerosis. Plos one, 18(7), e0288967. https://doi.org/10.1371/journal.pone.0288967

York, EN et al. (2022) Longitudinal microstructural MRI markers of demyelination and neurodegeneration in early relapsing-remitting multiple sclerosis: Magnetisation transfer, water diffusion and g-ratio. NeuroImage Clinical. 36:103228. https://doi.org/10.1016/j.nicl.2022.103228

York, EN et al. (2022) Quantitative magnetization transfer imaging in relapsing-remitting multiple sclerosis: a systematic review and meta-analysis. Brain Communications, 4(2), fcac088. https://doi.org/10.1093/braincomms/fcac088

Meijboom, R, Wiseman, SJ, **York, EN** et al. (2022) Rationale and design of the brain magnetic resonance imaging protocol for FutureMS: a longitudinal multi-centre study of newly diagnosed patients with relapsing-remitting multiple sclerosis in Scotland. Wellcome Open Res., 7:94. https://doi.org/10.12688/wellcomeopenres.17731.1

Kearns, PKA, Martin, SJ, Chang, YT, Meijboom, R, **York, EN** et al. (2022) FutureMS cohort profile: a Scottish multicentre inception cohort study of relapsing-remitting multiple sclerosis. BMJ Open, 12:e058506. https://doi.org/10.1136/bmjopen-2021-058506

York, EN*, Martin, SJ* et al. (2021) MRI-derived g-ratio and lesion severity in newly diagnosed multiple sclerosis. Brain Communications, 3(4), fcab249. https://doi.org/10.1093/braincomms/fcab249

Ng Kee Kwong, KC, Mollison, D, Meijboom, R, **York, EN** et al. (2021) Rim lesions are demonstrated in early relapsing–remitting multiple sclerosis using 3 T-based susceptibility-weighted imaging in a multi-institutional setting. Neuroradiology, 64(1):109-117. https://doi.org/10.1007/s00234-021-02768-x

Ng Kee Kwong, KC, Mollison, D, Meijboom, R, **York, EN** et al. (2021). The prevalence of paramagnetic rim lesions in multiple sclerosis: A systematic review and meta-analysis. Plos one, 16(9), e0256845. https://doi.org/10.1371/journal.pone.0256845

Ramanoël, S, **York, E** et al. (2019) Age-related differences in functional and structural connectivity in the spatial navigation brain network. Frontiers in neural circuits, 13, 69. https://doi.org/10.3389/fncir.2019.00069

Ramanoël, S, **York, E** and Habas, C, (2018) Participation of the caudal cerebellar lobule IX to the dorsal attentional network. Cerebellum & ataxias, 5(1), 1-5. https://doi.org/10.1186/s40673-018-0088-8

CONFERENCES, TALKS AND WORKSHOPS

Northern Connections in MS Meeting 2025, Edinburgh, attended	2025
Cambridge Centre for Myelin Repair Symposium, Cambridge, invited speaker	2025
MS Society Early Career Researcher Retreat, Cambridge, participant	2025
Wellcome Centre for Integrative Neuroimaging Microstructure Day, Oxford, invited speaker	2025
Neuroimmunology & MS meeting, Edinburgh, poster	2025
MS Society Edinburgh Centre of Excellence Research Symposium, Edinburgh, co-organised	2025
Let's talk about AI and Ethics, Edinburgh, attended workshop	2025
Let's talk about Patient and Public Involvement, Edinburgh, attended workshop	2025
ECTRIMS Conference 2024, Copenhagen, poster	2024
MS Frontiers Conference and Early Career Researcher Afternoon, Liverpool, attended	2024
Northern Connections in MS Meeting 2024, Edinburgh, attended	2024
SINAPSE ASM 2024, Stirling, attended	2024
ISMRM & ISMRT Annual Meeting & Exhibition, Singapore, poster	2024
British Society of Neuroradiologists Annual Meeting, Edinburgh, presentation and poster	2023
Northern Connections in MS Meeting 2023, Edinburgh, attended	2023
Edinburgh-Cambridge MS Society Research Symposium, Edinburgh, presentation	2023
SINAPSE ASM 2022, Glasgow, presentation *(awarded best speaker in category)*	2022
Microstructure Imaging meets Machine Learning, post-ISMRM workshop, London, attended	2022
Joint Annual Meeting ISMRM-ESMRMB & ISMRT, London, three posters	2022
Northern Connections in MS Conference 2021, Edinburgh, attended	2021
ISMRM & SMRT Virtual Conference & Exhibition, Virtual, poster	2020
ESMRMB 36th Annual Meeting, Rotterdam, lightning talk and poster	2019

BICISMRM Annual Meeting, Sheffield, presentation 2019

4th MS Society Edinburgh Centre for MS Research Meeting, Edinburgh, invited talk 2019

Northern Connections in MS Conference 2019, Edinburgh, attended 2019

ISMRM 27th Annual Meeting & Exhibition, Montréal, poster 2019

Edinburgh Imaging Conference, Edinburgh, poster 2017

Neuroscience Workshop Saclay: Neural Circuits and Behavior, Paris, poster 2017

British Psychological Society Undergraduate Conference, Glasgow, presentation 2015

PEER REVIEW

◦ RS Macdonald Seedcorn Fund Reviewer and Selection Panel Member 2025

◦ MS Society ECR Mock Review Panel Member 2025

◦ Journal peer reviewer for:

- *MSJ: Experimental, Translational and Clinical*
- *Brain Imaging and Behavior*
- *Frontiers in Neurology*
- *Frontiers in Neuroscience*

PATIENT AND PUBLIC INVOLVEMENT AND ENGAGEMENT (PPIE)

◦ Supervision of school work experience student, Edinburgh 2025

◦ MS Society Centre of Excellence Research Survey for people with MS, Edinburgh 2025

◦ Cambridge Centre for Myelin Repair (CCMR) public engagement garden party, Cambridge 2025

◦ Community Science Festival, Edinburgh 2025

◦ Anne Rowling Regenerative Neurology Clinic (ARRNC) research evening, Edinburgh 2024

◦ Patient engagement evening, online 2024

◦ Supervision of school work experience student, Edinburgh 2024

◦ Café Med public outreach project, Aberdeen 2019

◦ getPROTECTED workshop for primary schools, Edinburgh 2017

SOFTWARE

York, EN, Thrippleton, MJ, Waldman, A (2020) Magnetisation transfer saturation (MTsat) processing, [software]. University of Edinburgh. Centre for Clinical Brain Sciences. https://doi.org/10.7488/ds/2965.

OTHER RELEVANT SKILLS

Computing	R; MATLAB; Bash; Linux; LaTeX; FSL, SPM12; MS Office; Mac OSX.
Languages	English (native); French (fluent); Spanish (B1); Italian (A2).
Courses	Introduction to Good Clinical Practice (Aug ‘23); Good Clinical Practice Refresher (Aug ’25); Informed Consent in Clinical Practice (Nov ‘23)