# Evan **Edmond**

## contact
eedmond@gmail.com

## languages
English – native
Tamil – mothertongue
French – conversational

## portfolio
https://evan.science

Google Scholar profile

## goal
I am building fundamental experience in clinical research working with patients with neurodegenerative disorders. I hope to contribute towards the global challenge in dementia care. With new targeted therapies emerging, a global infrastructure for diagnosis, research, and targeted treatment is required.

## education

| | | |
|---|---|---|
| 2019-2022 | **DPhil** | *University of Oxford* |
| 2016 | **MRCP, UK** | |
| 2008-2014 | **BMBCh** | *University of Oxford* |
| 2008-2011 | **BA in Medical Sciences** (2:1) | *University of Oxford* |
| 2006-2008 | **A-levels** | *Manchester Grammar School* |

Maths, Further Maths, Physics, Chemistry, Biology. Aggregate mark – 98%

## research

**2018-2022**  **ABN/Dunhill Medical Trust Clinical Research Fellowship**  *University of Oxford*

Funded PhD programme at Nuffield Department of Clinical Neurosciences. Supervised by Prof. Martin Turner. I recruited a cohort of patients with amyotrophic lateral sclerosis (ALS), along with those at high genetic risk. In addition to clinical assessment, blood tests and lumbar puncture over more than 200 study visits, I applied advanced neuroimaging techniques (MRI and MEG) to discover early imaging biomarkers of cortical excitability. We found promising candidate biomarkers of pathological disinhibition that may be a target for modulation or treatment outcome in future.

**2015-2016**  **Research project along full time clinical work**  *Acute Vascular Imaging Centre, University of Oxford*

Supervised by George Harston and James Kennedy, I performed a head-to-head comparison of image acceleration by readout segmentation of MR diffusion weighted imaging in acute stroke, learning fundamental image analysis skills using FSL.

**2014-2016**  **Medical school research project**  *University of Oxford*

Along with colleagues, I designed and conducted a study involving community survey to investigate the risk of injury in people who played Quidditch. Our findings on head injury had implications for positional and contact rules, were associated with implementation of a concussion protocol, as well as having wider implications for mixed-sex sport.

**2014**  **Medical elective research project**  *Singapore General Hospital*

Supervised by Prof. Chan Ling Ling, I analysed MR angiography data in a cohort of East Asian patients with hemifacial spasm, comparing vertebrobasilar tortuosity between the groups. I was involved in study design, image analysis, statistics and manuscript preparation.

**2011**  **Research project – intercalated BA**  *University of Oxford*

Supervised by Prof. Robin Choudhury, I investigated the spatial association between perivascular adipose tissue and atherosclerotic plaques in the carotid arteries and aorta. I was involved in study design, MR image analysis with custom scripting, manuscript preparation and statistics.

## research outputs

**publications**    Alexander G. Thompson, Elizabeth Gray,… **Evan C. Edmond**, …, Pamela Shaw, Martin R. Turner et. al. Multicentre appraisal of amyotrophic lateral sclerosis biofluid biomarkers shows primacy of blood neurofilament light chain, *Brain Communications*, Volume 4, Issue 1, 2022.

Dharmadasa T, Scaber J, **Edmond E**, et al. Genetic testing in motor neurone disease. Practical Neurology 2022;22:107-116.

Andrushko, J.W., Levenstein, J.M., Zich, C., **Edmond EC**, *et al.* Repeated unilateral handgrip contractions alter functional connectivity and improve contralateral limb response times. *Sci Rep* **13**, 6437 (2023). https://doi.org/10.1038/s41598-023-33106-1

Holland C, **Edmond EC**, Moore C, Tobert V, Klein JC, Turner MR. A nudge towards better lumbar puncture practice. Clin Med (Lond). 2020 Sep;20(5):477-479. doi: 10.7861/clinmed.2020-0201. PMID: 32934040; PMCID: PMC7539725.

**Edmond, Evan C.**, Prakash, Edmond, and Carroll, Fiona. 'RoboDoc: Critical Ethical Issues to Consider for the Design and Development of a Robotic Doctor Experience'. 1 Jan. 2020 : 59 – 63.

**Edmond EC**, Stagg CJ, Turner MR. Therapeutic non-invasive brain stimulation in amyotrophic lateral sclerosis: rationale, methods and experience. J Neurol Neurosurg Psychiatry. 2019 May 9.

Alkhalil M, **Edmond E**, Edgar L, et al. The relationship of perivascular adipose tissue and atherosclerosis in the aorta and carotid arteries, determined by magnetic resonance imaging. *Diabetes and Vascular Disease Research*. 2018;15(4):286-293.

**Edmond EC**, Sim SX, Li HH, Tan EK, Chan LL. Vascular tortuosity in relationship with hypertension and posterior fossa volume in hemifacial spasm. BMC Neurology. 2016 Jul 29;16:120.

| selected platform presentations | |
|---|---|

**Evan C Edmond**, Malcolm Proudfoot, Ricarda Menke, Alexander Thompson, Kevin Talbot, Charlotte J Stagg, Martin R Turner. Task related brain network remodelling in ALS. Association of British Neurologists Annual Conference (2021).

**Evan C Edmond**, Thanuja Dharmadasa, William Clarke, Kevin Talbot, Charlotte J Stagg, Martin R Turner. Motor cortical activation and neurochemistry in amyotrophic lateral sclerosis and asymptomatic at-risk individuals. Association of British Neurologists Annual Conference (2020).

Do W, Wang T, **Edmond EC**. Hospital in Hand: Smartphone app for healthcare professionals. National Foundation Doctors Presentation Day 2015.

# clinical work

| 2021- | **Specialist registrar - Neurology** | *East of England* |
|---|---|---|

Placements to date include 1 year of general neurology in Ipswich Hospital, with on-call cover of thrombolysis and acute neurology at Addenbrooke's Hospital, Cambridge, 1 year at Addenbrooke's Hospital including stroke thrombolysis/thrombectomy rotation, MND/peripheral nerve clinics & firm, and Cognitive firm (Dementia, PSP, and FTD clinics), and 1 year at Norwich Hospital (Senior registrar, general and acute neurology).

| 2020-2021 | **Clinical redeployment during COVID-19 pandemic** | *Oxford University Hospitals NHS Trust* |
|---|---|---|

With patient facing research suspended I was redeployed as a neurology registrar from April-June 2020, and to a covid HDU with the Infectious Diseases team from January-March 2021.

| 2016-2018 | **Core Medical Training Doctor** | *Oxford University Hospitals NHS Trust* |
|---|---|---|

First stage of clinical specialist training for medical (physician) specialties. Rotations in neurology, geriatrics, respiratory and renal medicine. Experience of acute take, procedures including chest drain, lumbar puncture, central line, cardioversion and leading resuscitation calls.

| 2014-2016 | **Foundation Doctor** | *Oxford University Hospitals NHS Trust* |
|---|---|---|

NHS Foundation programme. Rotations in general surgery, transplant medicine, general medicine, endocrinology, general practice and spinal rehabilitation.

# teaching

| 2018-2021 | **Richard Doll Teaching Fellow** | *Green Templeton College* *University of Oxford* |
|---|---|---|

Stipendiary teaching fellow position at Green Templeton College. Responsible for organising year-round teaching programme for clinical medical students in 4/5/6 years. Includes lecture based teaching, regular bedside teaching, and annual mock OSCE and interview preparation.

| 2013-2014 | **Med Ed course** | *University of Oxford* |
|---|---|---|

Teaching course in core clinical skills organised by final year medical students for new clinical students. Delivered regular bedside teaching over 2 blocks over 6 months. Involved in revising course handbook and graphic design.

| 2012-2013 | **Tutor in Cardiovascular Physiology** | *Oxford Programme of Undergraduate Studies, OPUS* |
|---|---|---|

Weekly essay based tutorials with undergraduate exchange students at University of Oxford.

| 2010-2011 | **Neuroanatomy lab demonstrator** | *University of Oxford* |
|---|---|---|

Teaching and practical demonstration in neuroanatomy "wet lab" for 2nd year medical students.

# other projects

| Ongoing | **Open source software contributions** | |
|---|---|---|

Contributions to several open source projects including nilearn (code), fsl_mrs (beta testing),  fslpy (code), and development/packaging of simple tool for missing data / analyses checking: https://pypi.org/project/print-partial-datasets/

| 2014-2017 | **Hospital in Hand – mobile app** | |
|---|---|---|

Hospital in Hand is a mobile application that acts as a directory of phone numbers, guidelines and other useful information. Funding of £20000 awarded by the 2023 Innovation Challenge held by the Thames Valley Leadership Academy. Core team of 3 junior doctors. My responsibilities were backend design, clinical governance, and user testing.