Dr Thomas Hugh Massey

MA MSci BM BCh DPhil MRCP (Neurology)

| Address | : | Cardiff University | Email | : | MasseyT1@cardiff.ac.uk |
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Cardiff CF24 4HQ, UK GMC Number : 7040601

Current positions

| 2023 - present | Senior Clinical Research Fellow in Neurology, Cardiff University |
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| 2023 - present | Group Leader, UK Dementia Research Institute at Cardiff |
| 2021 - present | Consultant Neurologist, Cardiff & Vale University Health Board |

Previous positions _____

| 2013 - 2021 | Clinical Research Fellow and Neurology Registrar, Cardiff University |
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| 2009 - 2013 | Junior doctor in Neurology and Internal Medicine, Severn Deanery |

Education and Qualifications

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| 2021 | Certificate of Completion of Training (Neurology). Entry onto Specialist Register |
| 2020 | Neurology Specialty Certificate Examination (SCE) |
| 2012 | Membership of the Royal College of Physicians (MRCP) UK |
| 2009 | BM BCh (Medicine and Surgery) with distinction, Keble College, Oxford University |
| 2004 | DPhil (Biochemistry). DNA recombination/repair; supervisor Prof David Sherratt |
| | Magdalen College, Oxford University |
| 2000 | MA MSci in Natural Sciences (Biochemistry). First Class. |
| | Gonville and Caius College, Cambridge University |
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Fellowships, Awards, Prizes

| 2023 - 2028 | MRC Clinician Scientist Fellowship |
|-------------|---|
| 2022 | UK Clinical academic trainee conference poster prize (first place) |
| 2021 - 2023 | Guarantors of Brain post-CCT clinical research Fellowship |
| 2016 - 2019 | MRC clinical research training Fellowship (post-doctoral) |
| 2016 - 2019 | Patrick Berthoud Charitable Trust/ABN research Fellowship (consumables) |
| 2013 - 2021 | Welsh Clinical Academic Training (WCAT) Fellowship in Neurology |
| 2005 - 2009 | Keble College scholarships and prize in Medicine |
| 2001 - 2004 | Microbiology scholarship and Magdalen College Research Prize (2004). |

Academic Activities

Positions of responsibility

| 2024 - present | Co-director, Huntington's Disease Centre in Wales |
|----------------|---|
| 2023 - present | Co-chair elect, UK HD Network |
| 2022 - present | Specialty Lead for Neurology and Neurodegeneration clinical research in Wales |
| 2019 - present | Co-chair of European HD Network genetic modifiers working group |
| 2017 - present | Associate member, Scientific Advisory Board, LoQus23 Therapeutics Ltd |
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Academic peer review

| 2018 - present | Grants: including MRC, Huntington Society of Canada, Fondazione telethon (Italy) |
|----------------|--|
| 2016 - present | Manuscripts: including Nature Neuroscience, Annals of Neurology, Disease Models |

Clinical trials

| 2023 - present | Local Princi | pal Investigator | for EXPERTS-ALS and HD trials |
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2017 - present Local organisation and delivery of intrathecal tominersen trials in HD; Co-I on

various HD trials

Selected Grant and Fellowship Funding

| 2023 - present | MRC Clinician Scientist Fellowship (£2.1 M as PI) |
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| 2023 - present | Moondance Foundation (£90 k as PI) |
| 2021 - 2023 | Guarantors of Brain Clinical Post Doctoral Fellowship (£65 k as PI) |
| 2021 - 2023 | Academy of Medical Sciences Starter Grant for Clinical Lecturers (£24 k as PI) |
| 2021 - 2023 | Cure Huntington's Disease Initiative (CHDI; £698 k, PI from June 2022). |
| 2020 - 2023 | Ataxia UK (£492 k as co-I. PI Prof Henry Houlden, UCL) |
| 2019 - 2021 | LoQus23 Therapeutics Ltd (£535 k as co-I. PI Prof Lesley Jones, Cardiff University) |
| 2016 - 2019 | MRC clinical research training Fellowship (post-doctoral; £381 k as PI) |
| 2016 - 2019 | Patrick Berthoud Charitable Trust/ABN Fellowship (£30 k as PI) |
| 2016 - 2017 | European HD Network (EHDN) seed fund (£20 k as PI) |
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Selected Publications

- 1. Kim, KH... **Massey TH**... & Lee, JM. (2024) Posttranscriptional regulation of *FAN1* by miR-124-3p at rs3512 underlies onset-delaying genetic modification in Huntington's disease. Proc Natl Acad Sci USA; 121(16):e2322924121. doi: 10.1073/pnas.2322924121.
- 2. **Massey, TH*** & McLauchlan, DJ (2024) Huntington's disease: a clinical primer for acute and general physicians. Clin Med (Lond), 100200. doi: 10.1016/j.clinme.2024.100200.
- 3. Hong EP... **Massey TH**...& Lee JM. (2024) Modification of Huntington's disease by short tandem repeats. Brain Commun., 6, fcae016. doi: 10.1093/braincomms/fcae016.
- 4. Wheeler, V, Stone, J, **Massey TH**, & Mouro Pinto, R (2024) The instability of the Huntington's disease CAG repeat mutation. Book chapter in: Huntington's Disease Pathogenic Mechanisms and Implications for Therapeutics (Eds: Yang, Thompson, Heiman). Academic Press (Elsevier).
- 5. Stöberl, N... **Massey, TH** & Allen ND (2023) Mutant huntingtin confers cell-autonomous phenotypes on Huntington's disease iPSC-derived microglia. Sci Rep., 13, 20477.
- 6. McAllister, B, Donaldson, J...& Massey, TH* (2022) Exome sequencing of individuals with Huntington's disease implicates FAN1 nuclease activity in slowing CAG expansion and disease onset. Nature Neuroscience 25, 446-457; doi: 10.1038/s41593-022-01033-5.
- Lobanov, S... Massey, TH* & Jones, L (2022) Huntington's disease age at motor onset is modified by the tandem hexamer repeat in TCERG1. NPJ Genomic Medicine, 7, 53. 10.1038/s41525-022-00317-w.
- 8. Lee, JM ... Massey TH... & Gusella, JF (2022) Genetic modifiers of Huntington disease differentially influence motor and cognitive domains. Am. J. Hum. Genet., 109, 885-899.
- 9. **Massey, TH**, McAllister, B, Rosser, AE & Jones, L. (2022) Author Response: Timing and Impact of Psychiatric, Cognitive, and Motor Abnormalities in Huntington Disease. Neurology, 98, 515.
- 10. Massey, TH & Robertson, NP (2021) Medication-overuse headache: causes, consequences and management. J. Neurol., 268, 3505-3507. doi: 10.1007/s00415-021-10720-5
- 11. Hong, EP...Massey, TH...& Lee, JM (2021) Association Analysis of Chromosome X to Identify Genetic Modifiers of Huntington's Disease. J. Huntingtons Dis., 10, 367-375.
- 12. McAllister, B... & Massey, TH* (2021) The timing and impact of psychiatric, cognitive and motor abnormalities in Huntington's disease. Neurology doi: 10.1212/WNL.000000000011893
- 13. Ellis N... **Massey TH**... Holmans P (2020) Genetic Risk Underlying Psychiatric and Cognitive Symptoms in Huntington's disease. Biol Psychiatry, 87, 857-865.
- 14. Genetic Modifiers of Huntington's Disease (GeM-HD) Consortium (2019)* CAG repeat not polyglutamine length determines timing of Huntington's disease onset. Cell, 178, 887-900.
- 15. Tabrizi SJ, Phase 1–2a IONIS-HTTRx Study Site Teams* et al. (2019) Targeting Huntingtin Expression in Patients with Huntington's Disease. N. Engl. J. Med., 380, 2307-2316.
- 16. Cronin T, Rosser A & <u>Massey T</u>H* (2019) Clinical presentation and features of Juvenile-onset Huntington's disease: a systematic review. J. Huntingtons Dis., 8, 171-179.
- 17. **Massey, TH** & Jones L. (2018) The central role of DNA damage and repair in CAG repeat diseases. Dis. Model. Mech., 11(1), pii: dmm031930. doi: 10.1242/dmm.031930.
- 18. Massey, TH... & Löwe, J. (2006) DNA translocation by hexameric FtsK. Mol. Cell, 23, 457-469.
- 19. **Massey, TH**... & Sherratt, D.J. (2004) Asymmetric activation of Xer recombination by FtsK. EMBO Rep., 5, 309-404.