

PAUL McMAHAN MATTHEWS
OBE, MD, DPhil, FRCP, FMedSci

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CURRENT APPOINTMENTS

April 2017- Associate Director, UK Dementia Research Institute
 July 2014 - Edmond and Lily Safra Professor of Translational Neuroscience and Therapeutics Division of Brain Sciences, Department of Medicine, Imperial College London
 April 2012 - Professor and Head, Division of Brain Sciences, Department of Medicine, Imperial College London
 2006 - Hon. Consultant in Neurology, Imperial College Healthcare Trust
 1996 - Hon. Consultant in Neurology, Oxford University Hospitals Trust

PRIOR APPOINTMENTS

2005 - 2014 Vice-President Pharmaceuticals Research and Development, GlaxoSmithKline (joint appointment with Imperial College 2012-2014)
 2004 - 2005 Head, Department of Clinical Neurology, University of Oxford
 1998 - 2005 Professor of Clinical Neurology, University of Oxford
 1995 - 2005 Director, Oxford Centre for Functional Magnetic Imaging of the Brain
 1995 - 1998 Reader in Neurology, University of Oxford
 1993 - 1996 Assistant Professor of Neurology and Neurosurgery and Human Genetics, McGill University, Montreal, Canada

EDUCATION AND PROFESSIONAL TRAINING

Education

1974 - 1978 BA (Hons), Honour School of Natural Sciences (Chemistry), St. Edmund Hall, University of Oxford
 1978 - 1982 D. Phil., Dept. of Biochemistry, University of Oxford
 1983 - 1986 M.D., Stanford University School of Medicine

Research

1983 - 1984 Postdoctoral Fellow, Dept. of Pharmacology, Stanford University
 1990 - 1993 MRC (Canada) Clinician-Scientist, Genetics Laboratory, Department of Biochemistry, University of Oxford

CURRENT AND RECENT EXTERNAL COMMITTEE SERVICE

UK Research Council and related

2016 EPSRC Peer Review Associate College
 2014 - Lead, Translational Research Centre-Dementia (TRC-D), Imperial College London
 2013 - Executive Committee, Dementia Platforms UK and Chair, Dementia Platforms UK Imaging Network
 2012 Japan Science and Technology Research Council-MRC Committee for Bilateral Science
 2012 MRC Advanced Translational Training Panel (Chair, Imaging Sub-Panel)
 2011 EPSRC Medical Imaging Technologies Review Working Group
 2011 - 2014 Research Excellence Framework (REF) Sub-Panel 4: Neurosciences

Charities

2015 Sectioned membership panel for Clinical Medicine, Academe Europa
 2014 - Chair, *Brain* Board of Management
 2014 - Sectional Committee, Academy of Medical Sciences
 2012 - Working Party on Genomics, Health Records, Database Linkage and Privacy, Nuffield Council on Bioethics
 2011 - Chair, Imaging Enhancements Working Group, UK Biobank
 2011 - UK Biobank Steering Group

AWARDS

- NIHR Senior Investigator (2015)
- Fellowship of the Academe Europaea
- Fellowship of the Academy of Medical Sciences (2014)
- Hon. Officer of the Order of the British Empire (2008) awarded by HM Queen Elizabeth II for services to neuroscience
- Elected Membership, Association of Physicians (2010)
- MRC Clinical Research Professor (2000 - 2008) (full salary and research support competitively awarded in national competition for excellence in research, transitioning to honorary appointment with research funding after taking up GSK position [2005 - 2008])
- Elected and renewed serially as a Fellow by Special Election, St. Edmund Hall, University of Oxford (1997 - present)

Principal Investigator

- UK Dementia Research Institute at Imperial, funding from MRC and from UK DRI as part of a joint initiative. A UK DRI Centre for Neurotechnology, Metabolomics and the Microbiome PI, £7.7 million for foundation programmes, £5.3 million for infrastructure and equipment and £6 million for new staff recruitment (£19 million, total). (1 Sept 2017- 31 Aug 2022). 12 hrs/wk.
- MRC Experimental Medicine Pathfinder Grant, An experimental medicine study of the 18 kD translocator protein as a novel neuroimmunodulatory target for multiple sclerosis (MR/N026934/1). PI, £897,903 (1 June 2016- 31 May 2019). 4 hrs/wk.
- DPUK Experimental Medicine Grant. Exploration of a novel radioligand for astrocyte activation in patients with Alzheimer's disease. PI, £635,000 (scanning slots and direct grant) (1 Oct 2015-31 Sept 2017). 2 hr/wk.
- NIHR Imperial Biomedical Research Centre (BRC) Brain Sciences Theme Funding, Experimental medicine for translational discovery. PI, £1,275,000 (1 April 2017- 31 March 2022). 2 hrs/wk.
- NIHR Senior Investigator award. PI, £450,000 (£375,000 to ICH Trust) (1st April 2015- 31st March 2020). 0.5 hr/wk.
- Biogen IDEC, The OPTIMISE Portal: a flexible, eTRIKS-based platform for MS data capture and sharing, PI, €725,000 (1 Sept 2014-28 April 2018). 3 hr/wk.

Co-Principal Investigator

- UK Biobank Imaging Enhancement (Co-I with Biobank CEO as PI and Chair, Imaging Working Group), MRC/Wellcome Strategic Award (£36m). 1 hr/wk. (1 Jan 2014- 31 Dec 2015).
- Wellcome Trust-GSK Training Programme in Translational Medicine (co-PI and Deputy Director, £5,500,000) (2009-2017). (1 Sept 2009- 31 Aug 2017). 2 hrs/wk.

Co-investigator

- Wellcome Trust Strategic Award, Ultra-High field (7T MRI) Clinical Imaging Research Facility. Co-I, £4 million. 2017-2019. 0.5 hr/wk.
- EPSRC, Centre for Mathematics of Precision Healthcare (EP/N014529/1), Co-I, £1.89 million (1 Oct 2015-31 Sept 2019). 2 hrs/wk.
- MRC, MRC Dementias Platform (MR/L015382/1), co-I, £4.5 M (1 April 2014-31 March 2019). 2 hr wk.

REPRESENTATIVE RECENT PUBLICATIONS

Over 370 peer-reviewed papers published and in press; co-authored 5 books published or in press (including a 2004 IPPY Award Winner for Best Books of the Year); Google Scholar h-index 124 (84 since 2012); i10 index 338 (281 since 2012).

Stangel M, Kuhlmann T, **Matthews PM**, Kilpatrick TJ. Achievements and obstacles of remyelinating therapies in multiple sclerosis. *Nat Rev Neurol*. 2017 Dec;13(12):742-754.

Suzuki H, Gao H, Bai W, Evangelou E, Glocker B, O'Regan DP, Elliott P, **Matthews PM**. Abnormal brain white matter microstructure is associated with both pre-hypertension and hypertension. *PLoS One*. 2017 Nov 16;12(11):e0187600.

Alfaro-Almagro F, Jenkinson M, Bangerter NK, Andersson JLR, Griffanti L, Douaud G, Sotiropoulos SN, Jbabdi S, Hernandez-Fernandez M, Vallee E, Vidaurre D, Webster M, McCarthy P, Rorden C, Daducci A, Alexander DC, Zhang H, Dragonu I, **Matthews PM**, Miller KL, Smith SM. Image processing and Quality Control for the first 10,000 brain imaging datasets from UK Biobank. *Neuroimage*. 2018 Feb 1;166:400-424.

Owen DR, Fan J, Campioli E, Venugopal S, Midzak A, Daly E, Harlay A, Issop L, Libri V, Kalogiannopoulou D, Oliver E, Gallego-Colon E, Colasanti A, Huson L, Rabiner EA, Suppiah P, Essagian C, **Matthews PM**, Papadopoulos V. TSPO mutations in rats and a human polymorphism impair the rate of steroid synthesis. *Biochem J*. 2017 Nov 21;474(23):3985-3999.

Datta G, Colasanti A, Rabiner EA, Gunn RN, Malik O, Ciccarelli O, Nicholas R, Van Vlierberghe E, Van Hecke W, Searle G, Santos-Ribeiro A, **Matthews PM**. Neuroinflammation and its relationship to changes in brain volume and white matter lesions in multiple sclerosis. *Brain*. 2017 Nov 1;140(11):2927-2938.

Coffey S, Lewandowski AJ, Garratt S, Meijer R, Lynam S, Bedi R, Paterson J, Yaqub M, Noble JA, Neubauer S, Petersen SE, Allen N, Sudlow C, Collins R, **Matthews PM**, Leeson P. Protocol and quality assurance for carotid imaging in 100,000 participants of UK Biobank: development and assessment. *Eur J Prev Cardiol*. 2017 Nov;24(17):1799-1806.

Matthews PM. Advanced MRI measures like DTI or fMRI should be outcome measures in future clinical trials - NO. 2017 Oct. 23(11):1456-1458.

Datta G, Violante IR, Scott G, Zimmerman K, Santos-Ribeiro A, Rabiner EA, Gunn RN, Malik O, Ciccarelli O, Nicholas R, **Matthews PM**. Translocator positron-emission tomography and magnetic resonance spectroscopic imaging of brain glial cell activation in multiple sclerosis. *Mult Scler*. 2017 Oct. 23(11):1469-1478.