WILLIAM DAVID RICHARDSON FMedSci FRS Curriculum 0-4-1 2023

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Education				
1970-1973 1973-1977	University of Manchester. BSc (Physics) 1 st class honours King's College London. PhD (Biophysics) April 1978			
Employment				
1979-1982	Fogarty International Fellow, National Institute for Child Health and Human Development National Institutes of Health, Bethesda, Maryland, USA			
1981-1982	Visiting Associate, National Institutes of Health, USA			
1982-1985	Staff Scientist, Division of Biochemistry, National Institute for Medical Research, London			
1985-1990	"New Blood" Lecturer in Molecular Genetics, Dept of Biology, UCL			
1990-present	Reader, then Professor of Biology			
1994-1999	Group Leader, MRC Laboratory for Molecular Cell Biology, UCL			
2001-2007	Head of Department of Biology, UCL			
2012-2016	Director, Wolfson Institute for Biomedical Research, UCL			
2000-present	Head, Centre for Neural Development, Plasticity and Repair Wolfson Institute for Biomedical Research, Division of Medicine, UCL			
Grants and Awards (past five years, as principal applicant unless otherwise stated)				

2019-2024	Wellcome Trust Investigator Award 214286/Z/18/Z "Adaptive myelination in learning and memory"	£1.3M
2013-2019	Wellcome Trust Senior Investigator Award WT100269M/ "Transcriptional control of CNS myelination in development and maturity"	A £1.95M
2019-2022	BBSRC Research Grant BB/S008934/1 "Control of oligodendrocyte development by OLIG2 and chromatin remodelling complexes"	£505,623
2016-2021	Wellcome Trust Strategic Award 108726/Z/15/Z "Functional neuromics of the cerebral cortex" with Kenneth Harris (principal applicant) and 7 co-applicants from UCL, Oxford U and Karolinska Inst.	£293,000 (total award £4.4M)

Publications (past 10 years, selected from >140 total since 1980)

Web of Science: h-index 78, >22,800 lifetime citations (excluding self-citations). >400 citations/year in each of the past 30 years (>1000/year since 2016). 64 articles cited \geq 100 times. Google Scholar: h-index 89, >35,800 citations

- Wright, J., Jiang, Y., Rajeeve, V., Cutillas, P., Li, H.[§] and Richardson, W.D.[§] (2024). The INO80 chromatin remodelling complex regulates oligodendrocyte precursor proliferation by controlling histone H2A dynamics. *Submitted* [§] joint senior authors
- Shimizu,* T., Nayar,* S.G., Swire, M., Jiang, Y., Grist, M., Kaller, M., Sampaio-Baptista, C.,
 Johansen-Berg, H., Bannerman, D.M., Ogasawara, K., Tohyama, K., Li, H. and Richardson,
 W.D. (2023). Oligodendrocyte dynamics determine cognitive performance outcomes of working
 memory training in mice. *Nat Commun.* 14:6499 * equal contributions
- Nishiyama, A.[§], Shimizu, T., Sherafat, A., and Richardson, W.D.[§] (2021). Life-long oligodendrocyte development. *Seminars Cell Dev Biol* 116, 25-37. [§] joint senior authors
- Stierli, S., Napoli, I., (..9 authors..), Richardson, W.D. and Lloyd, A.C. (2018). The regulation of the homeostasis and regeneration of peripheral nerve is distinct from the CNS and independent of a stem cell population. *Development* 145, dev170316.
- Jolly, S.*, Bazargani, N.*, Quiroga, A.C., Pringle, N.P., Attwell, D.[§], Richardson, W.D.[§] and Li, H.[§] (2018). G protein-coupled receptor 37-like 1 modulates astrocyte glutamate transporters and neuronal NMDA receptors and is neuroprotective in ischemia. *Glia* 66, 47-61. *equal contributions [§] joint senior authors
- Tripathi, R. B., Jackiewicz, M., McKenzie, I.A., Kougioumtzidou, E., Grist, M. and Richardson, W.D. (2017). Remarkable stability of myelinating oligodendrocytes in mice. *Cell Reports* 21, 316-323.
- Kougioumtzidou, E., Shimizu, T., Hamilton, N.B., Tohyama, K., Sprengel, R., Monyer, H., Attwell, D.[§] and Richardson, W.D.[§] (2017). Signalling through AMPA-type glutamate receptors on oligodendrocyte precursors promotes myelination by enhancing oligodendrocyte survival. *eLife* 2017;6:e28080 [§] joint senior authors
- Espinosa-Medina, I., Saha, O., Boismoreau, F., Cettouh, Z., Rossi, F., Richardson, W.D. and Brunet, J.-F. (2016) The sacral autonomic outflow is sympathetic. *Science* 354, 893-897.
- Marques, S., Zeisel, A., (..18 authors..), Richardson, W.D., Linnarsson, S., Castelo-Branco, G. (2016). Oligodendrocyte heterogeneity in the mouse juvenile and adult central nervous system. *Science* 352, 1326-1329.
- Xiao, L., Ohayon, D, McKenzie, I.A., Sinclair-Wilson, A., Wright, J.L., Fudge, A.D., Emery, B., Li, H. and Richardson, W.D. (2016). Rapid production of new oligodendrocytes is required in the earliest stages of motor-skill learning. *Nat Neurosci* 19, 1210-1217.
- McKenzie, I.A., Ohayon, D., Li, H., Paes de Faria, J., Emery, B., Tohyama, K. and Richardson, W.D. (2014). Motor skill learning requires active central myelination. *Science* 346, 318-322. *equal contributions F1000Prime 6* exceptional. <u>http://f1000.com/prime/722496230</u>
- Young, K.M., Psachoulia, K., Tripathi, R.B., Dunn, S.-J., Cossell, L., Attwell, D., Tohyama, K. and Richardson, W.D. (2013). Oligodendrocyte dynamics in the healthy adult CNS: evidence for myelin remodelling. *Neuron* 77, 873-885. F1000Prime 10* <u>http://f1000.com/prime/717988342</u>