

Present position

2016-2021: Wellcome Trust Sir Henry Dale/Royal Society Fellow, IoN, UCL

Previous employment

2016-2016: Research Fellow, Stroke Association project grant Co-Investigator, IoN, UCL
2012-2015: Stroke Association Senior Research Fellow, Institute of Neurology, UCL.
2010-2011: Knowledge Transfer Fellow, School of Health, University of Bath.
2009-2010: Post-doctoral Visiting Fellow, NINDS, National Institutes of Health, USA.
2003-2009: Research Assistant, Clinical Neuroscience, Imperial College London.

Education

2006-2008: PhD Neuroscience, Imperial College London, UK.
2002-2003: MSc Neuroscience, UCL, UK (**First**).
1997-2002: BPT Physiotherapy, GIRM, India (**Distinction – College First**).

Membership to professional bodies

1. Health and Care Professions Council, UK – PH66645.
2. Indian Association of Physiotherapists – L1842.

Personal fellowships and scholarship

1. **Henry Dale Fellowship:** £905,754 from Wellcome Trust 2016-2021
2. **Senior Training Fellowship:** £174,917 from The Stroke Association 2012-2015
3. **Visiting Fellowship:** \$44,000 + research expenses, NIH, USA 2009-2010
4. **Master's scholarship:** £30,000 from HSBC Educational Trust, 2002-2003
5. **Travel grant:** £1500 from UKIERI, 2007 for identifying collaborators in India, 2007

Joint project grant

6. **Stroke Association project grant:** £210,000, 2016-2018, Co-I, UCL
7. **AHRC project grant:** £694,197, 2008-2011, Co-I, Imperial College

Expert reviewer for grant applications

1. Dunhill Medical Trust
2. Stroke Association
3. Multiple Sclerosis Society

Reviewed manuscripts for

1. Journal of Physiology
2. European Journal of Neuroscience
3. Neuropsychological rehabilitation
4. European Journal of Pain
5. Frontiers Neuroscience
6. Brain Stimulation

Invited talks

1. **June 2016** 'Mind the Brain' ICN 20th Anniversary
2. **Nov 2015** Brighton 9th Annual Stroke conference
3. **July 2015** Glenside rehabilitation conference
4. **Dec 2014** UK Stroke Forum, **UK**
5. **Nov 2010-Aug 2011:** Several talks to south-west county councils re rehabilitation and technology for assisted living, **UK**
6. **September 2009** Neurohike 2009, Motor control Meeting, **Canada**
7. **December 2007** Royal National Orthopaedic Hospital, **UK**
8. **July 2007** Princess Alexandra Hospital, Brisbane, **Australia**
9. **July 2007** Nanyang Technological University, **Singapore**
10. **January 2007** All India Institute of Medical Sciences, Delhi, **India**

Academic experience

1. **Teaching:** Delivered 'neurophysiology of motor control' lectures to undergraduate and postgraduate students (Imperial College)
2. **PhD supervision:** William De Doncker (Jan 2017-)
3. **Supervision:** Co-supervised 6 BSc (4 at Imperial College, 1 at NIH, USA, 1 at UCL) and 2 MSc projects (1 at Imperial and 1 at UCL), 2 MSc library projects (UCL)

Science related public engagement activities – national and international

1. **Phantom Sita:** 2004, a performing arts interactive project exploring ethics of medical research, UK, Portugal (UNESCO) and Australia
2. **Verticality:** 2006, visualising transcranial magnetic stimulation, UK
3. **Science open day:** 2008, TMS demo 11-16 year olds at Imperial College, UK
4. **Café Scientifique:** 2012, a public lecture on non-invasive brain stimulation, UK
5. **Music day:** 2012, a public lecture on music, memory and performance, India
6. **Science illustrator:** <http://www.inspire-foundation.org.uk/spinal-cord-dermatome-image/>

Skills

1. **Research methods:** Diagnostic and therapeutic transcranial magnetic stimulation (TMS) protocols, functional Magnetic Resonance Imaging (fMRI), electromyography (EMG), behavioural and clinical assessments.
2. **Software:** Signal, Spike, Sigmaplot, Sigmastat, Matlab -SPM,
3. **Management:** I have experience **leading multi-disciplinary groups**. In my current project I **manage** recruitment teams for my project across 11 NHS Trust hospitals. My PhD project required me to lead and manage a team of blinded clinical assessors (doctors, nurses and therapists). I have also lead teams of post graduate student demonstrators during demonstration of physiology practical. **Outside academia** I have experience managing **orchestral teams** of musicians. I choreograph and conduct Indian classical dance and music performances. I am extremely organised, punctual and particular about keeping deadlines.

- 1: De Doncker W, Dantzer R, Ormstad H, **Kuppuswamy A**. Mechanisms of poststroke fatigue. *J Neurol Neurosurg Psychiatry*. 2017 Sep 22.
- 2: **Kuppuswamy A**. The fatigue conundrum. *Brain*. 2017 Aug 1;140(8):2240-2245
- 3: Clark EV, Ward NS, **Kuppuswamy A**. Prior physical exertion modulates allocentric distance perception: a demonstration of task-irrelevant cross-modal transfer. *Exp Brain Res*. 2016 Aug;234(8):2363-7
- 4: Wu S, Duncan F, Anderson NH, **Kuppuswamy A**, Macloed MR, Mead GE. Exploratory Cohort Study of Associations between Serum C - Reactive Protein and Fatigue after Stroke. *PLoS One*. 2015 Nov 24;10(11):e0143784.
- 5: **Kuppuswamy A**, Rothwell J, Ward N. A model of poststroke fatigue based on sensorimotor deficits. *Curr Opin Neurol*. 2015 Dec;28(6):582-6.
- 6: **Kuppuswamy A**, Clark E, Rothwell J, Ward NS. Limb Heaviness: A Perceptual Phenomenon Associated With Poststroke Fatigue? *Neurorehabil Neural Repair*. 2016 May;30(4):360-2.
- 7: **Kuppuswamy A**, Clark EV, Sandhu KS, Rothwell JC, Ward NS. Post-stroke fatigue: a problem of altered corticomotor control? *J Neurol Neurosurg Psychiatry*. 2015 Aug;86(8):902-4.
- 8: Vasquez N, Balasubramaniam V, **Kuppuswamy A**, Knight S, Susser J, Gall A, Ellaway PH, Craggs MD. The interaction of cortico-spinal pathways and sacral sphincter reflexes in subjects with incomplete spinal cord injury: a pilot study. *NeuroUrol Urodyn*. 2015 Apr;34(4):349-55.
- 9: **Kuppuswamy A**, Clark EV, Turner IF, Rothwell JC, Ward NS. Post-stroke fatigue: a deficit in corticomotor excitability? *Brain*. 2015 Jan;138(Pt 1):136-48.
- 10: Jola C, Abedian-Amiri A, **Kuppuswamy A**, Pollick FE, Grosbras MH. Motor simulation without motor expertise: enhanced corticospinal excitability in visually experienced dance spectators. *PLoS One*. 2012;7(3):e33343.
- 11: McGregor AH, Henley A, Morris TP, Doré CJ; FASTER team. An evaluation of a postoperative rehabilitation program after spinal surgery and its impact on outcome. *Spine (Phila Pa 1976)*. 2012 Apr 1;37(7):E417-22.
- 12: **Kuppuswamy A**, Balasubramaniam AV, Maksimovic R, Mathias CJ, Gall A, Craggs MD, Ellaway PH. Action of 5 Hz repetitive transcranial magnetic stimulation on sensory, motor and autonomic function in human spinal cord injury. *Clin Neurophysiol*. 2011 Dec;122(12):2452-61.
- 13: Ellaway PH, **Kuppuswamy A**, Balasubramaniam AV, Maksimovic R, Gall A, Craggs MD, Mathias CJ, Bacon M, Prochazka A, Kowalczewski J, Conway BA, Galen S, Catton

CJ, Allan DB, Curt A, Wirth B, van Hedel HJ. Development of quantitative and sensitive assessments of physiological and functional outcome during recovery from spinal cord injury: a clinical initiative. *Brain Res Bull.* 2011 Mar 10;84(4-5):343-57.

14: Ellaway PH, **Kuppuswamy A**, Nicotra A, Mathias CJ. Sweat production and the sympathetic skin response: improving the clinical assessment of autonomic function. *Auton Neurosci.* 2010 Jun 24;155(1-2):109-14.

15: Triscott S, Gordon J, **Kuppuswamy A**, King N, Davey N, Ellaway P. Differential effects of endurance and resistance training on central fatigue. *J Sports Sci.* 2008 Jul;26(9):941-51.

16: **Kuppuswamy A**, Catley M, King NK, Strutton PH, Davey NJ, Ellaway PH. Cortical control of erector spinae muscles during arm abduction in humans. *Gait Posture.* 2008 Apr;27(3):478-84.

17: Ellaway PH, Catley M, Davey NJ, **Kuppuswamy A**, Strutton P, Frankel HL, Jamous A, Savic G. Review of physiological motor outcome measures in spinal cord injury using transcranial magnetic stimulation and spinal reflexes. *J Rehabil Res Dev.* 2007;44(1):69-76.

18: **Kuppuswamy A**, Theodorou S, Catley M, Strutton PH, Ellaway PH, McGregor AH, Davey NJ. Motor neurone excitability in back muscles assessed using mechanically evoked reflexes in spinal cord injured patients. *J Neurol Neurosurg Psychiatry.* 2005 Sep;76(9):1259-63.

19: King NK, **Kuppuswamy A**, Strutton PH, Davey NJ. Estimation of cortical silent period following transcranial magnetic stimulation using a computerised cumulative sum method. *J Neurosci Methods.* 2006 Jan 15;150(1):96-104.

20: Specterman M, Bhuiya A, **Kuppuswamy A**, Strutton PH, Catley M, Davey NJ. The effect of an energy drink containing glucose and caffeine on human corticospinal excitability. *Physiol Behav.* 2005 Jan 17;83(5):723-8.