Jane Helena Burridge, MCSP, LGSM, PhD, Professor of Restorative Neuroscience. Faculty of Health Sciences, University of Southampton E-Mail jhb1@soton.ac.uk

1973-1993	Basic grade and then Senior I Physiotherapist specialising in stroke rehabilitation
1978 - 1990	Raise a family, study music and practice as music teacher and freelance musician
1/93 - 1/99	Senior I / clinical specialist, research physiotherapist, Salisbury District Hospital
12/99 –1/03	Senior Lecturer, Head of Postgraduate Education, SOHPRS University of Southampton
1/03 – 9/08	Senior Research Fellow / Senior Lecturer, SOHPRS, University of Southampton
09/08	Professor of Restorative Neuroscience Faculty of Health Sciences, University of Southampton

Research interests:
Restorative Neuroscience and Neuro-rehabilitation: motor learning, cortical changes in response to interventions and spasticity. Rehabilitation Technology: Functional Electrical Stimulation (FES), Rehabilitation robotics. Most of my research is cross-disciplinary involving collaboration with the disciplines of: electronics & computer science, signal processing and health psychology. My PhD investigated muscle activation patterns following stroke and response to FES to facilitate walking.

I currently supervise seven PhD students, have supervised 10 PhD students to completion and examined over 20 PhDs of whom 9 were outside the UK.

- I led the REF 2014 Impact Case study: Innovative Technologies for Stroke Rehabilitation Rated 4* http://impact.ref.ac.uk/CaseStudies/CaseStudy.aspx?Id=43853
- My PhD research enabled response to Functional Electrical Stimulation for drop-foot to be better predicted by accurate measurement of muscle dysfunction
- I lead the Neurorehabilitation Research Group in the Faculty of Health Sciences and I chair the University of Southampton Strategic Research group 'Health Technology'.
- I am a Consultant for Rehabilitation Technology Companies: Bioness http://www.bioness.com/Home.php and MindMaze http://www.mindmaze.ch and member of the Scientific Board of Directors for Hocoma A/C Zurich http://www.hocoma.com/en/
- I am an Editorial Board member of the Journal of Neurorehabilitation and Neural Repair (IF 4.624)
- I am a reviewer for Wellcome Trust, EPSRC, NIHR, EU and Stroke Association. Chair of Research steering Group RfPB project TWIST and I am an Advisor to Wellcome Trust for a Health Innovations Challenge Award

Current and recent research grants:

1. 2015-2018: PI: NIHR i4i: Mechanical Muscle Activity with Real-time Kinematics (M-MARK): A novel combination of existing technologies to improve arm recovery following stroke (£1,016,576)
2. 2013- 2016: PI: INSPIRE Feasibility study of an iCycle for functional recovery after incomplete spinal cord injury (£38.057) Plus externally funded PhD studentship
3. 2011–2015: PI: NIHR RfPB: Development and pilot evaluation of a web-supported programme of Constraint Induced Therapy following stroke (LifeCIT) (£249,634) + (£19,217 from Solent Healthcare)
4. 2012-2015: CI: EU FP7 ICT Telemedicine System Empowering Stroke Patients to Fight Back StrokeBack (€3.03M)
5. 2011–2014: CI: EPSRC Restoration of Reach and Grasp in Stroke Patients using Electrical Stimulation and Haptic Feedback EP/I01909X/1 (£464,231)
6. 2009-2013: CI: NIHR Programme Grant: Development of an integrated service model incorporating innovative technology in rehabilitation of the upper limb following stroke (NIHR RP-PG-0707-10012) (£1.9M)
7. I was elected President of The Association of Chartered Physiotherapists in Neurology (ACPIN) in March 2017

Examples of recent publications:

1. Burridge, J., Lee, A., Turk, R., Stokes, M., Whitall, J., Vaidyanathan, R., Clatworthy, P., Hughes, A. M., Meagher, C., Franco, E. & Yardley, L. 1 Jul 2017 In : Journal of Neurologic Physical Therapy. 41, p. S32-S38. Telehealth, wearable sensors and the Internet: Will they improve stroke outcomes through increased intensity of therapy, motivation and adherence to rehabilitation programs?

2. Meadmore, K., EXELL, T. I. M. O. T. H. Y., Burridge, J., Hughes, A-M., Freeman, C. & Benson, V. 9 Jun 2017 In : Disability and Rehabilitation. Upper limb and eye movement coordination during reaching tasks in people with stroke
3. Burridge, J. 29 May 2017 In : European Journal of Neurology. 24, 7. European consensus on the concepts and measurement of the pathophysiological neuromuscular responses to passive muscle stretch
4. Clark, B., Whitall, J., Kwakkel, G., Mehrholz, J., Ewings, S. & Burridge, J. 29 Mar 2017 In : Cochrane Database of Systematic Reviews. 19 p. Time spent in rehabilitation and effect on measures of activity after stroke
5. Hughes, A-M., Meagher, C. & Burridge, J. 2 Jan 2017 *Safe at Home with Assistive Technology* . Kollak, I. (ed.). Springer International Publishing, p. 59-79. Arm Rehabilitation at Home for People with Stroke: Staying Safe: Encouraging Results from the Co-designed LifeCIT Programme
6. Mehrholz, J., Thomas, S., Burridge, J., Schmidt, A., Scheffler, B., Schellin, R., Rückriem, S., Meißner, D., Mehrholz, K., Sauter, W., Bodechtel, U. & Elsner, B. 24 Nov 2016 In : Trials. 17, 559, p. 1-11. Fitness and mobility training in patients with Intensive Care Unit-acquired muscle weakness (FITonICU): study protocol for a randomised controlled trial
7. Hughes, A. M., Barbosa Boucas, S., Burridge, J. H., Alt-Murphy, M., Buurke, J., Feys, P., Klamroth-Marganska, V., Lamers, I., Prange-Lasonder, G., Timmermans, A. & Keller, T. 1 Sep 2016 In : Journal of NeuroEngineering and Rehabilitation. p. 1-25. Evaluation of upper extremity neurorehabilitation using technology: A European Delphi consensus study within the EU COST Action Network on Robotics for Neurorehabilitation
8. Thomas, S., Burridge, J. H., Pohl, M., Oehmichen, F. & Mehrholz, J. 29 Jun 2016 In : Journal of Rehabilitation Medicine. 48, p. 1-7. Recovery of sit-to-stand function in patients with intensive-care-unit-acquired muscle weakness: results from the general weakness syndrome therapy (gymnast) cohort study
9. Sweeney, D., Corley, G.J., Browne, P., Burridge, J.H., Quinlan, L.R. and O'Laighin, G. (2016) Design of a smartphone application with integrated functional electrical stimulation (FES) treatment randomization and on-the-fly stimulus parameter adjustment for streamlining the clinical evaluation of FES protocols *Journal of Health & Medical InformaticsVolume:07, (02)Page Range:1-9doi:10.4172/2157-7420.1000220*
10. Seng Kwee Wee, AM Hughes, JH Burridge. (2015) Impact of Trunk Support on Upper Extremity Function in People With Chronic Stroke and Healthy Controls doi: 10.2522/ ptj.2014048 Physical Therapy
11. L. Tedesco Triccas, JH Burridge, et al. (2015) Multiple sessions of transcranial direct current stimulation and upper extremity rehabilitation in stroke: A review and meta-analysis. Clinical Neurophysiology
12. Mehrholz, J., Pohl, M., Kugler, J., Burridge, Jane and Muckel, S. (2015) Physical rehabilitation for critical illness myopathy and neuropathy (Review). The Cochrane Library
13. Wee SK, Hughes AM, Warner MB, Brown S and Burridge JH. Impact of Trunk Support on Upper Extremity Function in People With Chronic Stroke and Healthy Controls 26 February 2015 doi: 10.2522/ ptj.2014048 Physical Therapy
14. Seng Kwee Wee, AM Hughes, JH Burridge. (2014) Trunk restraint to promote upper extremity recovery in stroke patients: a systematic review and meta-analysis. Neurorehabilitation Neural Repair, 1-19.
15. Meadmore, K.L ., Exell, T., Hallewell, E., Hughes, A.M., Freeman, C.T., Kutlu, M., Benson, V., Rogers, E and Burridge, J.H. (2014) The application of precisely controlled functional electrical stimulation to the shoulder, elbow and wrist for upper limb stroke rehabilitation: a feasibility study. Journal of NeuroEngineering and Rehabilitation, 11, (105)
16. Sampson, P. A., Freeman, C.T., Burridge, J.H. and Hughes, A.M. (2014) Can functional electrical stimulation mediated by repetitive control suppress induced tremor. IEEE Transactions on Biomedical Engineering (Submitted).
17. Johnson, Louise, Burridge, Jane H. and Demain, Sara H. (2013) Internal and external focus of attention during gait re-education: an observational study of physical therapist practice in stroke rehabilitation. Physical Therapy, 93, (7), 957-966. (doi:10.2522/ ptj.20120300). (PMID:23559523).
18. Hughes AM, Burridge JH.(2014) Translation of evidence-based Assistive Technologies into stroke rehabilitation: users'perceptions of the barriers and opportunities. BMC Health Services Research
19. Demain, Sara, Burridge, Jane, Ellis-Hill, Caroline, Hughes, Ann-Marie, Yardley, Lucy, Tedesco-Triccas, Lisa and Swain, Ian (2013) Assistive technologies after stroke: self-management or fending for yourself? A focus group study. BMC Health Services Research, 13, (1), 334. (doi:10.1186/1472-6963-13-334). (PMID:23968362).

20. Hughes, A.M., Barbosa Boucas, S., Burridge, J.H., Alt-Murphy, M., Buurke, J., Feys, P., Klamroth-Marganska, V., Lamers, I., Prange-Lasonder, G., Timmermans, A. and Keller, T. (2016) Evaluation of upper extremity neurorehabilitation using technology: A European Delphi consensus study within the EU COST Action Network on Robotics for Neurorehabilitation. *Journal of NeuroEngineering and Rehabilitation*, 1-25.
21. Meagher, C, Burridge, JH, Hughes, AM, Ewings, S, Goncalves, AC, Alt, C.H.S., Pollet, S and Yardley, L Feasibility randomised control trial of LifeCIT, a web-based support programme for Constraint Induced Therapy (CIT) following stroke compared with usual care. In Review

Impact:
Head of Neurorehabilitation Research Group; Lead for Rehabilitation Technologies within the Institute for Life Sciences; Reviewer of proposals and projects for EU FP7 and (H2020), Future and Emerging Technologies, Wellcome Trust, NIHR, EPSRC; President of the International Functional Electrical Stimulation Society 2011- 2014; Editorial board member of Journal of Neurorehabilitation and Neural Repair, Neuromodulation and International Journal of Research in Rehabilitation; Invited speaker at major International conferences and EU summer schools e.g. EURON Winter School rehabilitation Robotics, Consultant for International rehabilitation technology companies including Bioness http://www.bioness.com/Home.php and MindMaze http://www.mindmaze.ch and member of the Scientific Board of Directors, Hocoma A/C Zurich http://www.hocoma.com/en/.

Please find our LifeCIT paper in review at:
http://www.southampton.ac.uk/healthsciences/about/staff/jane_burridge.page#publications