

SHORT CV - Nigel David Harris

Present appointment:

- 2009 - Director, Designability (Bath Institute of Medical Engineering)
Wolfson Centre, Royal United Hospital, Bath BA1 3NG
- 2014 - Visiting Professor, Department of Health, University of Bath
- 2017 - Visiting Professor, Faculty of Engineering and Technology,
University of the West of England

Telephone number: 01225 824103 **Email:** n.harris@bath.ac.uk

Registered Clinical Scientist: CSP CS00995

Fellow of Institute of Physics and Engineering in Medicine, 2005 – to date

Degrees:

- BSc (2:1) Hons North East London Polytechnic (1980) Biophysical Science
- MSc University of Manchester, Department of Medical Biophysics (1982)
- PhD University of Sheffield, Department of Medical Physics (1991)

Posts held:

- 1982-1989 Basic Grade Physicist, Royal Hallamshire Hospital, Sheffield
- 1989-2001 Principal Physicist, Royal Hallamshire Hospital, Sheffield.
- 2001-2009 Head of Clinical Measurement and Medical Imaging, Royal
National Hospital for Rheumatic Diseases, Bath.
- 2001-2011 Honorary Senior Lecturer, School for Health, University of Bath

Grants and Awards:

- 2003 EPSRC EQUAL Program Consortium Grant 'Smart rehabilitation'
- 2004 Physiotherapy Research Foundation.
Evaluation of a repetitive practice scheme to improve sit to stand performance following stroke.
- 2005 Department of Health New and Emerging Applications of Technology
Emergency Head Articulation Control System.
- 2005 Arthritis Research Campaign
Understanding neuropathic/allodynic pain in Rheumatic Disease.
- 2006 Department of Health NEAT Programme
3D Ultrasound Imaging for the detection and monitoring of joint damage in Rheumatoid Arthritis
- 2006 Arthritis Research Council
Insights into novel mechanisms of chronic pain in rheumatic disease: An investigation of
allodynia, pain and autonomic vasomotor responses in controls, osteoarthritis (OA), rheumatoid
arthritis (RA) and complex regional pain syndrome (CRPS) Type I.
- 2008 NIHR Research for Patient Benefit
Promoting activity and adherence to activity in patients with Chronic Obstructive Pulmonary
Disease: A feasibility study. With University of Bath and Royal United Hospital
- 2010 Engineering and Physical Sciences Research Council £180,000 24 months
inTouch: A video link system to improve social inclusion for people with dementia
With University of Bath
- 2010 Knowledge Transfer Partnership, £90,000 24 months
Integration of product design and state of the art manufacturing into a formal product development
process, supporting redesign of existing products and new product development. With University
of Bath
- 2010 Technology Strategy Board: Smart Village (Smart energy metering and power management)
Bath Institute of Medical Engineering, SET, A2E, Choose Independence
- 2010 NIHR i4i Programme. £440,000, 36 months. Head Articulation Control System
- 2011 Knowledge Transfer Partnership £80,000 10 months.
Development of a toolkit for user interface design.
- 2012 South West Dementia Partnerships £90,000
Development of a memory technology library for people living with dementia.
- 2014 Technology Strategy Board £60,000 12 months A secure, multi-application network of shared
sensors for assisted living, energy efficiency and home security.
- 2014 EU ALL Breathe Project £180,000. 30 months Providing support for informal carers
- 2015 Dunhill Medical Trust £203,000. 30 Months. Exploring the feasibility of a client-centred electronic
prompting tool for supporting everyday activities in individuals with mild to moderate dementia.

- 2016 Innovate UK SBRI Long Term Care revolution £2,200,000 24 months.. CHIRON - Care at Home using Intelligent Robotic Omni-functional Nodes
- 2016 Innovate UK SBRI. £209,000 36 months FLOURISH – Connected and autonomous vehicles.

Recent selected publications:

Rehabilitation and Assistive Technology

Cheston, R., Evans, N.D., Harris, N. "Personal message cards: an evaluation of an alternative method of delivering simulated presence therapy.", *Dementia* 0(0) 1-13 (2015)

C.A.E. Dyer, N.D. Harris, E. Jenkin, C. Langley-Johnson, R. Lewis, G.J. Taylor, K. Gruffydd-Jones
Activity levels after pulmonary rehabilitation – what really happens?
J. Physiotherapy. 2012, 9,

N Evans, N Harris, A Kuppaswamy
A smarter future: technology to enhance an independent lifestyle for our future selves
International Journal of Therapy and Rehabilitation 2011, 18(12), Page 694-699

T Adlam, B Carey-Smith, N Evans, N Harris -
Implementing smart home technology for people with dementia in the community *Gerontechnology*, 2010; 9(2), Pages 146-147

G Mountain, S Wilson, C Eccleston, S Mawson, J Hammerton, T Ware, H Zheng, R Davies, N Black, Norman, N Harris, T Stone, H Hu, 'Developing and testing a telerehabilitation system for people following stroke: issues of usability', *Journal of Engineering Design*. 2010, 21: 2, 223 — 236,

Boyd, H.C., Evans, N.M., Orpwood, R.D. and Harris, N.D., 2015. Using simple technology to prompt multistep tasks in the home for people with dementia: An exploratory study comparing prompting formats. *Dementia*, p.1471301215602417.

Boyd, H., Evans, N. and Harris, N., 2016. A Clock That Does Not Tell the Time: How the Day Clock Meets the Needs of People Living with Dementia. In *Designing Around People* (pp. 137-146). Springer International Publishing.

Austin, L., Harris, N. and Nagle, C., 2015, July. ifOnly: a smart phone app to capture unmet need and support the development of new products for people living with long term conditions. In *Proceedings of the 8th ACM International Conference on Pervasive Technologies Related to Assistive Environments* (p. 87). ACM.

Evans, N., Cheston, R. and Harris, N., 2015. Personal message cards: An evaluation of an alternative method of delivering simulated presence therapy. *Dementia*, p.1471301215574363.

Boyd, H., Jones, S., Harris, N., Panteli, N., Leake, J. and Jones, R., 2014, November. Development and testing of the inTouch video link for people with dementia: Design approach and practical challenges. In *Bioinformatics and Biomedicine (BIBM), 2014 IEEE International Conference on* (pp. 608-612). IEEE.

Lyons, Z., Barak, O., Caleb-Solly, P., Harris, N., O'Neill, B., da Silva Ramos, S. and Watts, L., 2015. Establishing Design Requirements for a Virtual Therapy Aid for Executive Dysfunction. In *The 2015 International Conference on Brain Informatics and Health*. University of Bath.

Harris N.D., 2017 The Design and Development of Assistive Technology. *IEEE Potentials* 36(1):24-28

Bray N., Noyes J., Harris N.D, and Tudor Edwards R. 2017. Measuring the health-related quality of life of children with impaired mobility: Examining correlation and agreement between children and parent proxies. *BMC Research Notes*

Bray N., Noyes J., Harris N.D, and Tudor Edwards R. 2017. Defining health-related quality of life for young wheelchair users: A qualitative health economics study
PLoS ONE 12(6):e0179269

I have over 80 peer reviewed publications and over 2,500 citations, with a sustained track record of attracting major research grants over 30+ years.

https://www.researchgate.net/profile/N_Harris/stats

