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presents

Multisensory processes and ageing

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Prof. Fiona Newell is a graduate in Psychology from Trinity College Dublin. She obtained her PhD from the University of Durham, UK in 1993. During her post-doctoral training she spent time in various academic institutions including the MRC Cognition and Brain Sciences Unit, Cambridge, UK, the Weizmann institute, Israel and the Max Plank Institute for Biological Cybernetics, Germany. She returned to Trinity College in 2000 to take up a lectureship position in the School of Psychology. Since then, she became a College Fellow in 2005, and in 2008 was appointed as an Associate Professor.

She has published in many of the leading journals in Psychology and Neuroscience and is also currently associate editor of two international journals, namely *Seeing & Perceiving* and *Cognitive Neuroscience*. She is an active member of many international conferences and organisations including International Multisensory Research Forum, Psychonomics Society, USA, World Haptics Organisation, Experimental Psychology Society, UK. Her research is funded by several organisations including the EU (ICT programme), Science Foundation Ireland, Health Research Board and Intel/IDA TRIL project.

Prof. Newell's main research interests are in human sensory and perceptual processes. The main goal of her research is to provide a better understanding of how information is shared across the senses and to elucidate the brain processes involved in the perception of objects, faces and places across the main human sensory systems. More recently, she has developed a research programme under the TRIL project into the effects developmental processes, particularly ageing, on the maintenance of efficient multisensory integration. Her latest research findings offer important insights into the cause of loss of balance in older persons and may suggest important rehabilitative training procedures that may prevent this decline in multisensory processing.

Selected publications (2007-to date)

Edited books

1. Newell, F.N. & Shams, L. (2007). *Advances in Multisensory Perception*. Guest Editors of the journal 'Perception'. 36, 10, 1-3. Pion Press, UK.

Journal articles

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Chan JS, Simões-Franklin C, Garavan H, **Newell FN**. (2010). Static images of novel, moveable objects learned through touch activate visual area hMT+. *Neuroimage*. 15;49(2):1708-16.

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- Whitaker TA, Simões-Franklin C, **Newell FN**. (2008). Vision and touch: independent or integrated systems for the perception of texture? *Brain Res*. 25; 1242: 59-72
- Woods AT, Moore A, Newell FN. (2008). Canonical views in haptic object perception. *Perception*; 37(12):1867-78.
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- Ernst MO, Lange, C. & **Newell FN**. (2007). Multisensory recognition of actively explored objects. *Canadian Journal of Experimental Psychology*; 61(3): 242-53.
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