## Conferencia: Self-management of health and wellbeing: The role of Smart Environments

17/12/2014

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Topic

Investigación

Foto Chris Nugent

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One of the key challenges facing society as our population continues to grow is the demands being placed on healthcare provision. This is coupled with the need to develop new approaches to allow the general public to take more control of their own health and lifestyle management. The increased prevalence of technology usage, its reduced costs and improved processing and communication speeds are all key factors which have resulted in new technology based solutions being investigated to address these challenges.

Through a consolidation of sensing technology with the ability to record data, intelligent data analysis to interpret the data collected and personalised interfaces to support interaction with users it has now become possible to deliver support when it is required, where it is required. This core paradigm can be personalised to each individual user's needs through the analysis of subtle changes over time in an effort to provide a practical framework to self-manage both health and lifestyle.

This talk aims to discuss the evolution of technological solutions which have been developed to support self-management of health and wellbeing. It aims to discuss the practical challenges associated with creating and sustaining smart environments in addition to assessing the impact which they have made to date.

## **BIOGRAPHY:**

Professor Chris Nugent, Professor of Biomedical Engineering, School of Computing and Mathematics, University of Ulster

Chris received a Bachelor of Engineering in Electronic Systems and DPhil in Biomedical Engineering both from the University of Ulster. He now holds the position of Professor of Biomedical Engineering at the University of Ulster.

His research within biomedical engineering addresses the themes of the design, development and evaluation of mobile and pervasive technologies within smart environments. The main application of this work to date has been within the domain of ambient assisted living. He has published extensively in these areas with over 400 publications spanning theoretical, clinical and biomedical engineering domains (h-index=25).

He has been a grant holder of Research Projects totalling in excess of £12M funded by national (EPSRC, ESRC, MRC, DEL and HPSSNI), European (European Union IST (FP5, FP6 and FP7), InterRegIIIa, InterRegIVb) and International (Alzheimer's Association) funding bodies. Amongst these projects he was the Scientific co-

ordinator of the European Union MEDICATE consortium, Technical co-ordinator of the European Union CogKnow consortium and Technical co-ordinator of the ESRC New Dynamics of Aging Well Consortium.

At present he is Group Leader of the Smart Environments Research Group which was established in 2009 and is co-PI of the Connected Health Innovation Centre at the University of Ulster. He currently holds the position of Visiting Professor of Mobile and Pervasive Computing at Lulea Technical University, Sweden.