



The Irish Longitudinal  
Study on Ageing

## **PhD opportunities in Biomedical Engineering and Autonomic Function**

Autonomic regulation of the cardiovascular system (neurocardiovascular regulation) is important in a wide variety of health conditions and is paramount in falls, cognitive impairment and frailty in older adults. As part of a growing biomedical engineering strand within The Irish Longitudinal Study on Ageing (TILDA) we are interested in using quantitative techniques i.e. physiological modelling and signal processing to help elucidate the underlying biological and neural control mechanisms which govern peripheral and central autonomic function with a view to developing new measurement, diagnostic and therapeutic techniques for autonomic dysfunction and related conditions.

Students with a background in signal processing or mathematical modelling who are interested in applying for The Irish Research Council for Science, Engineering & Technology (**IRCSET**) fellowship (for a PhD) working with TILDA, please contact Dr. Ciarán Finucane at [ciaranfinucane@yahoo.com](mailto:ciaranfinucane@yahoo.com), by 10th February 2012 to discuss your proposal.