



## **New Research Project on Autonomic Function in ME/CFS**

MERGE has recently changed its working name - to ME Research UK, a title which we think more clearly describes our main aims: to commission and fund high-quality scientific (biomedical) investigation into the causes, consequences and treatment of ME/CFS and to "Energise ME Research" globally. We also have a new logo - and hope you like it!

As part of our new drive, we're shortly to announce funding for three projects, and one of these - entitled, 'Longitudinal Cohort Study to determine the Prevalence of Autonomic Dysfunction and Relationship with Outcome in Patients with ME/CFS' - will be headed by Dr Julia Newton of the School of Clinical Medical Sciences, University of Newcastle.

Why have we chosen to fund work in this area? Well, Dr Peter Rowe, Dr David Bell and others have shown that ME/CFS patients can have significant problems when standing upright, manifested by changes in vascular volume/heart rate/blood pressure. Some psychiatrists suggest that the cardiovascular changes to upright tilt were simply caused by cardiovascular deconditioning, but this is not the case in many patients. In an article in 'The Biologist' in 2004, Vance Spence outlined some of the 'physical' arguments surrounding this aspect of the illness.

### **Excess Mortality Risk**

But because past studies of autonomic dysfunction in ME/CFS have proved contradictory, undoubtedly due to the limitations of technology, the Newcastle researchers propose to bring autonomic assessment techniques previously developed in other patient groups to the assessment of this illness. Their Cardiovascular Laboratory is arguably the largest autonomic testing laboratory in Europe with all the necessary equipment and expertise for comprehensive autonomic testing. The initial hypothesis is that patients with ME/CFS will have abnormalities of autonomic function and that, if present, these abnormalities may predict outcome by putting patients at risk of excess mortality.

They will use a well-validated battery of Autonomic Function Tests that, by assessing heart rate and blood pressure responses to a variety of manoeuvres, determine the integrity of cardiovascular reflexes. The severity of dysfunction and whether the abnormalities lie predominantly in the parasympathetic or sympathetic nervous system can be determined. Among other things, during all cardiovascular autonomic reflex tests surface ECG and beat-to-beat blood pressure will be measured simultaneously and continuously recorded. The intention is to examine 100 ME/CFS patients initially, and - depending on the findings - to monitor their progress over time using further tests.

ME Research UK is delighted that this laboratory has chosen to turn its attention towards the investigation of ME/CFS patients - another step in the biomedical investigation of the illness.