

## **NEWS RELEASE**

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### **Leading experts come together to help enhance the rehabilitation of stroke patients**

The European Commission has committed over 3.6 million Euros to a project which will look to enhance the rehabilitation of stroke sufferers, a third of whom will experience long term physiological and/or cognitive disabilities. Co-ordinated by the University of Birmingham, CogWatch aims to develop advanced and highly intelligent, common objects and tools which will help to re-train patients on how to carry out activities of daily living (ADL), by providing persistent multimodal feedback.

The three year project is supported by a number of specialist partners including: The Stroke Association; RGB Medical Devices; Universidad Politécnica de Madrid; Technische Universität München; Headwise Ltd and BMT Group which has long standing experience of participating in successful EU funded projects.

Every year over 150,000 people in the UK suffer from a stroke. In England alone, there are 450,000 people who are severely disabled as a result of a stroke incident<sup>1</sup>. A significant proportion of patients can suffer from Apraxia or Action Disorganisation Syndrome (AADS) which, among other symptoms, are demonstrated by the impairment of cognitive abilities to carry out ADL.

Professor Alan Wing of the University of Birmingham comments: "Simple tasks such as making a cup of tea can become quite daunting and stressful for stroke sufferers. They can sometimes get stuck in the sequence, repeat things or carry out tasks out of the normal order. Through this project we want to help patients to cope when they may have done something wrong or out of sequence, by giving them continuous and helpful feedback."

The current and most common rehabilitation systems focus on treating physiological aspects of a stroke such as limb movement and are based on robot and/or virtual environmental platforms that are expensive and sometimes impractical for home installations. CogWatch will look to develop a new type of cognitive rehabilitation system that will introduce intelligent

<sup>1</sup>The Stroke Association 2006

instrumented objects which are wearable or ambient devices that are part of a patient's everyday environment and can therefore be used to monitor behaviour and assess progress. For instance, an '*intelligent*' handle on a teaspoon that knows where it is, both spatially and where it is in the sequence it is involved in, can give useful feedback to a patient.

Professor Wing concludes: "AADS patients are impaired in their daily life and frequently cannot live independently which can place significant pressure not only on the patient but also their families. This project is committed to helping patients address their cognitive challenges by introducing these advanced objects and tools and therefore improve their quality of life in the long term."

**Ends**

**Notes to Editors:**

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