

## **HIC'08 workshop proposal**

### **Clinical applications and requirements for ambulatory monitoring technologies**

Monitoring of physiological signals in outpatient settings and home environment provides opportunities to collect and analyse new clinically relevant information that has not been available in the past. New techniques using unobtrusive sensors, measurement devices and novel signal processing or data analysis algorithms may enable new clinical applications and models of delivering health care.

Identification of appropriate end user requirements for the envisioned future application of these technologies would be better facilitated through discussions between technology researchers and clinicians in the respective application areas. In order to facilitate such discussion between clinicians and technology research at RMIT University and CSIRO, The Australian e-Health Research Centre would like to propose a workshop for HIC 2008. The goal of the workshop is to bring together leading research in Australia to discuss the clinical applications and requirements of using measurement technology in outpatient settings.

The workshop agenda will be divided into two parts:

- 1) Technology for outpatient monitoring (Presentations, 90minutes)
- 2) Requirements from healthcare (Discussion and posters, 30 minutes)

The intended length of the workshop is two hours.

The invited presenters are made up from Australian Universities, Industry and Research Centres, as follows:

- "Wearable technologies for clinical use", Dr Richard Helmer (CSIRO Textile and Electronics Laboratory, Geelong)
- "Sleep apnoea detection", Dr Dean Cvetkovic (RMIT University)
- "ECG monitoring management and data analysis systems in stroke applications", Dr Aaron Ginzburg (IM Medical)
- "Arrhythmia detection and Personal Health Manager application" Dr Peter Leijdekkers (University of Technology Sydney)
- "Anaesthesia data analysis", Qing Zhang (CSIRO, The Australian e-Health Research Centre)
- "Remote physiological monitoring in cardiac rehabilitation" Dr Niranjana Bidargaddi (CSIRO, The Australian e-Health Research Centre)

Firstly, the presentations in the first section will enable participants to gain insight into each presenters' work on the technology development and the envisioned clinical applications. The requirements in the second section will be conducted as a supervised discussion in which the participants are encouraged to provide their views and visions on possible clinical applications and the main requirements for the monitoring solutions. The workshop includes a poster presentation, which will facilitate one on one discussion related to specific projects.