Starting in the 1960s emotion and affective phenomenon research has entered an *Emotion Renaissance* era due to new findings establishing the universality of emotions across the human species along with their evolutionary adaptive and functional role in ‘rational’ intelligence (e.g. memory, decision-making), social intelligence (e.g. communication, adaptation). In the past decade, additional studies such as the one related in Descarte’s Error (Damasio, 1994), revealed surprising results about the nervous system organization, suggesting that emotions and affective processes might play an even more important role in intelligence, health recovery and prevention, and overall well-being than ever suspected.

These findings on emotions and affects from psychology, neuroscience and sociology call for innovation in information and communications technology for enabling, and facilitating intelligent interpretation of affective health data; decision support systems for diagnostic, computer assisted health care; remote guidance and virtual reality applications in diagnostic and therapeutic procedures; privacy security and trust necessary for user acceptance of technologies; human-computer interfacing and usability engineering; novel patient modelling; and multimodal intelligent affective user interfaces.

This special issue will focus on the novel and practical ways, and solid contributions, to improve affective computing and pervasive technologies. We welcome papers that focus on novel applications of wireless telemedicine, of embedded sensor and actuators for affective processing, novel user interfaces and patient-modeling for use by caregivers and/or patients in a variety of health care domains, virtual reality and virtual environments for psychotherapeutic diagnostic, treatment, and support/assistance coaching. We also encourage surveys of available technologies, and reporting on user experiences. Papers that do not focus on affective social processing for healthcare and applications will not be reviewed. Specific interests are in (but not limited to) the following areas:

- Network architectures for wireless telemedicine
- Mobile service platform for continuity of healthcare
- Privacy and security in affective/pervasive healthcare
- Wireless and pervasive networks for telemedicine
- Autonomic wireless sensor networks
- Body area networks
- Affective signal processing techniques
- Sensors and mobile devices for continuous patient monitoring of affect-relevant events
- Multimodal integration and fusion for contextual information processing for healthcare systems
- Actuators, prompters, and virtual environments/characters for rehabilitation and behavior modification
- Social intelligent orthotics
- Privacy architectures for affective medical records
- Issues in healthcare technology standards, interoperability, security, usability, cost, ethics and privacy, etc.
- Emotional and social context awareness
- Context-awareness user-modeling for healthcare
- Implementation and design issues for human-centered socially intelligent user-interfaces
- User acceptance issues and challenges (patients and caregivers)
Manuscripts must be prepared according to the format of the IEEE Transactions (http://bme.ee.cuhk.edu.hk/TITB/) and electronically submitted to Manuscript Central (http://embs-ieee.manuscriptcentral.com/). In submitting indicate that the paper is intended for the Special Issue on Affective and Pervasive Computing for Healthcare.

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