1. Summary and Scope

Recent years have witnessed the revolutionary changes brought about by the development of multimedia technologies. These changes can advance many disciplines and industries, and health is no exception. In such context, we observed: 1) with the help of crowd-based and social networking services, healthcare knowledge is more convenient to share, acquire and disseminate among health seekers and providers. This greatly facilitates the doctor-doctor, doctor-patient and patient-patient communication; 2) as compared to the traditional pure textual descriptions, health today is complementarily characterized by multi-modal data, such as images, audios and sometimes the videos. This enables doctors to concisely comprehend the health conditions of the patients; 3) rather than embrace doctors’ orders, patients nowadays actively seek for online health information, and post their disease control experiences. At the same time, they are frequently overwhelmed by uneven health data in quality; and 4) mobiles and other wearable health sensors are equipped by patients and doctors to track the health and exercises. This makes it possible for real-time monitoring and remote health support.

The remarkable changes in healthcare also bring us many research opportunities in a broad spectrum of application domains, such as health data quality assessment, cross-source learning for better lifestyles, personalized health with sensor data, and health data visualization.

In this special issue, we seek strong technical submissions that address societal health issues using multimedia technologies. The submissions should clearly demonstrate the evidence of benefits to society or large communities. Originality and impact on society, in combination with the multimedia nature and innovative technical aspects of the proposed solutions will be the major evaluation criteria.

The list of possible topics includes, but not limited to:

- Social media and public health
- Multimedia indexing and search for healthcare
- Cloud-based multimedia applications and services for e-health
o Visual analytics of skin diseases and interactive computation
o Text-based and content-based medical image retrieval
o Data security and protection for multimedia medical data
o Integrated multimedia patient record systems
o Tele-health and immersive health systems
o Music or game therapy
o Multi-modal analysis and mining in healthcare
o Multimedia sensing data in healthcare
o Health log analysis and visualization
o Mobile and augmented reality technology in healthcare
o Personalized lifestyles and medicine
o Multimedia delivery for healthcare
o Quality assessment of multimedia health data
o Community-based healthcare services
o Human computer interaction for medicine and healthcare

2. Submission Guideline

All the papers will be peer-reviewed following the Multimedia Tools and Applications reviewing procedures. Authors should prepare their manuscripts according to the online submission page of Multimedia Tools and Applications at http://www.springer.com/computer/information+systems+and+applications/journal/11042

3. Important Dates:

- Paper submission due: August 1, 2015
- First notification: September 15, 2015
- Revision: November 1, 2015
- Final decision: December 1, 2015
- Final Manuscript: December 20, 2015

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