

IEEE Consumer Communications & Networking Conference (CCNC)
Held in conjunction with the International Consumer Electronics Show,
Las Vegas, NV, USA
January 09-12, 2016

## Call for Papers for Wireless Communications and Applications Issues for eHealth Special Session

## **Scope and Motivation:**

Partially replacing the assistance of nursing staff by small health surveillance and communication equipments like sensors, networks, monitoring software could be cost effective and would also increase life standard. The objective is to develop and implement innovative solutions based on information technologies and wireless communication for the benefit of those needing medical permanence. Recent Advances in technology has led to the development of small, intelligent, wearable sensors capable of remotely performing critical health monitoring tasks and then transmitting patient's data back to health care centers over wireless medium. Such wireless health monitoring platforms aim to continuously monitor mobile patients needing permanent surveillance. Patients benefit from continuous ambulatory monitoring as a part of a diagnostic procedure, optimal maintenance of a chronic condition or during supervised recovery from an acute event or surgical procedure. However, to set up such platforms several issues along the communication chain should be resolved. The acquisition of medical information via a set of wireless sensors embedded in the patient himself, the treatment and use of this information either by a local contractor equipment or offset after transfer in 3G and/or WiFi connection to a data server, the access to the collected data, ...etc. are some of the important challenges that we have to consider. Each level represents a fairly complex subsystem with a local hierarchy employed to ensure efficiency, portability, security, and reduced cost.

eHealth special session aims to provide a forum for the interaction of these multiple areas as an important chance to discuss and understand what aspects have to be considered to provide effective pervasive wireless healthcare systems.

Authors of accepted papers will be invited to submit an extended version of their paper to the open special issue on Healthcare on Smart and Mobile Devices (Springer Annals of Telecommunications)

## **Main Topics of Interest:**

The Wireless Communications and Applications Issues for eHealth special Session seeks original contributions in the following topical areas, plus others that are not explicitly listed but are closely related:

- Mobile devices for healthcare
- Wearable and Implantable Wireless sensors for healthcare
- Communications and computing infrastructure for mobile healthcare apps
- Protocols for wireless healthcare
- Scalability, performance and reliability of mobile healthcare apps
- Pervasive Wireless communications in healthcare
- Service and device discovery
- Data fusion and context elaboration
- Wireless monitoring and ambient assisted applications for healthcare
- Energy Efficiency in Wireless health monitoring
- Pervasive Health Systems and Services
- Authentication and Sensors' monitoring
- Confidentiality and Data Security
- Mobile Interfaces for Data Visualization
- Realizations and Platforms
- Standards for mobile healthcare
- Healthcare cloud computing

## **Track Chairs:**

- **Dr. Saadi Boudjit,** University of Paris 13. France
- Dr. Nadjib Achir, University of Paris 13. France