

## **Third HTTG Workshop: Telemedicine for Developing Countries**

**World Congress of Medical Physics and Biomedical Engineering, Beijing, China  
8:00 – 9:30    May 31, 2012    Thursday    Room 302**

**Chair:** Barry J Allen (E-mail: bja1940@optusnet.com.au)

**Co-Chair:** Ibrahim Duhaini

This workshop is organised by the Health Technology and Task Group (HTTG), under the auspices of the International Union of Physicists and Engineers in Medicine (IUPESM) and the World Health Organisation. The objective is to facilitate the provision of medical services in rural communities and developing countries by Telemedicine.

The workshop is to be a discussion forum for physicists, engineers and clinicians with the aim of developing recommendations for appropriate equipment and staffing for the introduction of telemedicine in rural hospitals and health centers. Among the recommendations of the First HTTG workshop: Palliative Radiotherapy for Developing Countries, Ho Chi Minh City, Vietnam, 2008 were the following:

- Telemedicine should be introduced between provincial and city hospitals first, then with district hospitals and health stations.
- Low complexity radiotherapy should be offered initially by the palliative care centers under telemedicine monitoring.
- Research into the further development of telemedicine should be encouraged.

This workshop will discuss the relevance of Telemedicine for all aspects of medical care. The program will include new equipment for remote management of health; equipment performance standards, sensors for biomarkers, radiation monitoring and the overall objectives of telemedicine.

Topics and speakers:

### **1. The potential role of telemedicine in medical services to rural communities**

Barry Allen, University Western Sydney, NSW Australia, E-mail: bja1940@optusnet.com.au

### **2. Telehealth approaches for managing disease and wellness: appropriateness for developing countries?**

Nigel Lovell, University New South Wales, NSW Australia, E-mail: N.Lovell@unsw.edu.au

**3. Teleradiology standards in resource-limited settings**

Cari Borrás, HTTG, IUPESM, Washington DC, United States, E-mail: borrasc@hotmail.com

**4. Low cost paper based point of care testing sensors for bacterial cells and biomarkers detection.**

Chenzhong Li, Nanobioengineering/Bioelectronics Lab, Department of Biomedical Engineering, Florida International University, Miami, United States, E-mail: licz@fiu.edu

**5. Occupational radiation monitoring at the radiology department of the university of the Ryukyus**

Hussein ALMasri, Radiology Department, Graduate School of Medical Science, University of the Ryukyus, E-mail: halmasri81@yahoo.com

**6. Apposite and Cost-Effective Radiotherapy Technology for Developing Countries like Bangladesh.**

Akram Hussain, Senior Consultant Oncologist, Lab Aid Specialized Hospital, Dhaka, Bangladesh, E-mail: syedmdakram@gmail.com

**Other telemedicine presentations at the WC 2012**

A10565

**7. The Potential role of Telemedicine in Medical Services to Rural Communities**

Barry Allen, University Western Sydney, NSW Australia, E-mail: bja1940@optusnet.com.au

A11166

**8. Exploring the implementation of e-health practices in a low income country**

Pedro GALVAN, Research Institute for Health Sciences (IICS-UNA), Asuncion, Paraguay, E-mail: ibiomedica@iics.una.py

A11499

**9. Telemonitoring of vital signs as a basic element of assistive technologies**

Jan Havlik, Faculty of Electrical Engineering, Czech Technical University in Prague, Prague, Czech Republic, E-mail: xhavlikj@fel.cvut.cz

A11808

**10. Model for empowerment and sustainability of community health workers using information and communication technology in Isingiro District Uganda**

Nargis Rakhimi, Biomedical Engineering Department, Karolinska University Hospital, Stockholm, Sweden, E-mail: rakhimi.nargis@karolinska.se

A12029

**11. Cost-Benefit Analysis versus Cost-Effectiveness Analysis**

Eve-Marie Rowe, Karolinska University Hospital, Stockholm, Sweden, E-mail: eve-marie.rowe@karolinska.se

A10720

**12. A Community Health Service Architecture Based on the Internet of Things on Health-Care**

Lei-hong Liu, Department of Biomedical Engineering, South China University of Technology, Guangzhou, China, E-mail: 412766170@qq.com

A10537

**13. Multi-device information management for real-time processing of biomedical signals**

Alvaro Cobreces, Biomedical Engineering Group (GIB), University of Seville, Seville, Spain, E-mail: alvaro.cobreces@gmail.com

A11067

**14. Remote measurement and visualization of data via wireless devices**

Ondrej Krejcar, Department of Information Technologies, University of Hradec Kralove, Hradec Kralove, Czech Republic, E-mail: ondrej.krejcar@remoteworld.net

A12153

**15. WBAN for physical activity monitoring in health care and wellness**

Ratko, Magjarevic, University of Zagreb, Zagreb, Croatia, E-mail: ratko.magjarevic@fer.hr

A10773

**16. The Control Technology of Physiological Data Transmission Through The Interface of Bluetooth in Android**

Shi Xiong, Department of Biomedical Engineering, South China University of Technology, Guangzhou, China, E-mail: hi0804@126.com