



2006 - 2016 : Back to Benevento



# CALL FOR PAPERS

## FOR THE SPECIAL SESSION

### SMART DEVICES FOR BIOMEDICAL APPLICATIONS AND HEALTH PARAMETERS MONITORING

#### ABSTRACT

The large diffusion of smart devices (smartphones, wearables, motes, microcomputers) together with their capability to monitor physiological signals has stimulated Researchers to develop many biomedical applications to improve health care and quality of life. New transducers and signal processing techniques are proposed in order to extend the health parameters to be monitored, and increase the accuracy. The purpose of this special session is to gather the experiences of the Researchers and Companies working in these areas and interested in sharing their results. All the papers addressing the above-mentioned topics are welcome. The accepted and presented papers will be included in the conference proceedings and submitted to the databases of IEEEExplore.

#### CHAIRS



**M.D. Vitaliano Spagnuolo,**  
Clinical and Therapeutic Unit of Arterial Hypertension  
Unit of Internal Medicine –AO of Cosenza, Italy.  
vitalianos@yahoo.com

**P.E. Francesco Lamonaca, Ph.D.**  
Department of Engineering  
University of Sannio, Italy.  
flamonaca@unisannio.it



**Francesco Lamonaca (M'10)**, received: M.S. degree in Computer Science Engineering in 2005 and Ph.D. degree in Computer and System Science in 2010 from the University of Calabria, Italy; doctorate equivalences in Science (2010) and Engineering Science (2011) from the Université Libre de Bruxelles, Belgium. He is now associate professor of Electronic Measurements at the University of Sannio. He won competitions as first classified: University of Calabria, Young Researchers 2010, and 2012; GMEE, mobility research grant 2011; TE-RE-RD, Best Paper Awards 2014. He is a member of: TC 25 Medical Measurement of the IEEE Society on Instrumentation and Measurement (IM), IEEE, IM, GMEE, IAHR. He has authored and co-authored over 140 papers published in international journals and conference proceedings. He is Reviewer of international journals and conferences. He organized the special session "Synchronization Service for Measurement and Monitoring" at IMEKO TC4, 2014. His current researches include: measurement for medical use, characterization of human tissue by thermal analysis, digital signal and image processing for health parameters monitoring, noninvasive monitoring and testing, synchronization of networking measurement instruments and sensors.

**Vitaliano Spagnuolo**, received the M.S. degree in Medicine and Surgery in 1991 and the Specialization in Internal Medicine in 1997 from the University of Reggio Calabria. In 2001 he won the grant of Italian Society for the study of atherosclerosis. He was responsible of the laboratories of dyslipidemia and diabetes mellitus, Policlinico Universitario "Mater Domini" Catanzaro, Italy. He is component of the Ethics Committee of Calabria Region – Section Area North. He organized over 30 national and international scientific congresses. He has authored and co-authored over 200 papers published in international journals and conference proceedings. His current researches include: metabolic diseases, diabetes mellitus, prevention of cardiovascular diseases, hypertransaminasemia, atherosclerosis and hypertension, innovative use of medical measurement instruments for the evaluation of co-causes of diabetes, evaluation and measurement of visceral fat by means of ultrasound methods correlated with insulin resistance, study of the relationship of visceral adiposity and insulin resistance, innovative methods for blood pressure evaluation, validation of smart devices for medical purposes.

#### TOPICS

- Topics of interest include but are not limited to:
- Smartphone applications for health and wellness.
  - Wearable, implantable, and miniaturized smart devices.
  - Transducers for the acquisition of physiological signals.
  - Signal processing to evaluate health parameters.
  - Fault detection and misuse detection.
  - Health parameters accuracy evaluation.
  - Health parameters monitoring systems.
  - Internet of things in healthcare.
  - Wired and wireless sensor networks for health parameters monitoring.
  - Smart devices for homecare and rehabilitation.
  - Validation of smart devices for medical purposes.

#### DATES

- **January 17, 2016** - Submission of Final Paper (5-6 pages) - first version
- **March 10, 2016** – Submission of revised Final Paper
- **April 4, 2016** - Final Submission, Registration

#### SUBMISSION

Prospective authors must electronically submit a final paper (5-6 pages, including figures) by January 10, 2016, by pointing out the related Special Session. All papers will receive multiple peer reviews; authors will receive timely notification of paper acceptance. If accepted, final papers must be no more than 6 pages and will be submitted electronically.

Papers must be presented at the conference orally by an author, will appear in the final conference proceedings, and will be indexed in the Scopus citation index.

#### MORE INFORMATION

For further information, please visit MeMeA2016 website at



[memea2016.ieee-ims.org](http://memea2016.ieee-ims.org)

#### BENEVENTO

Benevento, due to the Santa Sofia's Church with its Cloister, has been part of UNESCO World Heritage Sites as "Longobards in Italy. Places of the power".

