BiOCAS 2011

Biomedical Circuits and Systems Conference Engineering Tomorrow's Healthcare

http://www.biocas2011.org 10th-12th November 2011



San Diego, California, USA

Call for Papers

Advances in circuits and systems engineering are driving a technology revolution in the life sciences, enabling effective and sustainable solutions to pressing problems in medicine and health care. The annual IEEE Biomedical Circuits and Systems (BioCAS) Conference is the premier forum for bringing together scientists, engineers, medical researchers, and health care practitioners to drive these advances and share in cross-cutting research at the interface between circuits, systems, biology, and medicine.

Conference Venue: BioCAS 2011 will be held Nov 10 – 12, 2011 at the *Hilton La Jolla Torrey Pines*, a golf and beach resort 15 miles from the San Diego International Airport and within minutes of the University of California San Diego, Salk Institute, Scripps Research Institute, and vibrant wireless and biotechnology industry.

Conference Program: BioCAS 2011 will offer tutorials, keynote addresses, and oral and poster technical sessions along with new initiatives to catalyze interactions between academia, industry, and the clinical sector that are critical for translating technology advances into progress in clinical practice and global health. With the active participation of the IEEE Circuits and Systems (CAS) and Engineering in Medicine in Biology (EMB) Societies, this unique blend of technical activities enables participants to broaden their insight into emerging medical applications and technologies while demonstrating the latest capabilities of CAS and EMB technical platforms to clinical experts.

New this year: BioCAS 2011 will feature a lively and interactive *Demonstration Session* in addition to the oral and poster presentations. Paper authors will be invited, in a separate call for demonstration abstracts, to join participants from industry and the clinical sector in showcasing the latest BioCAS technologies. BioCAS 2011 will also confer Best Student Paper, Best Poster, and Best Demonstration awards.

Topics: Original papers are solicited in the multidisplinary and emerging research areas at the crossroad of life sciences and circuits and systems engineering disciplines, including (but not limited to):

- Wireless, wearable, and implantable/injectable technology
- Medical information and telecare systems
- Harvesting/scavenging energy for biomedical devices
- Biometrics, biomedical signal processing and bioimaging technology
- Integrated biomedical systems, BioMEMS, bio-sensors/actuators and lab-on-a-chip microfluidics
- Bio-inspired and biomolecular circuits and systems
- Circuits for biomedical systems

We particularly welcome contributions highlighting innovative solutions for today's health problems at the frontiers of biomedical engineering that exemplify the theme of the IEEE BioCAS 2011 conference: *Engineering Tomorrow's Healthcare*.

Submission: For oral and poster presentations, a complete 4-page paper in standard IEEE double-column format including a short abstract is requested. Papers must be submitted electronically in PDF format -see the conference website http://www.biocas2011.org for detailed author instructions.

Publication: All papers will be peer-reviewed, and accepted papers will be published in the IEEE BioCAS 2011 Proceedings posted on-line and indexed through IEEExplore. As in previous years, the IEEE Transactions on Biomedical Circuits and Systems will publish a Special Issue on the BioCAS 2011 Conference. Extended versions of selected papers will be invited for the Special Issue.

Important D	ates	
Regular paper submission deadline	17 June	2011
Notification of paper acceptance	24 August	2011
Final paper submission	16 September	2011







General Chairs Gert Cauwenberghs UC San Diego Andrew Mason Michigan State University

Technical Program Chairs

Timothy G. Constandinou Imperial College London Philipp Häfliger University of Oslo

Tutorial Chairs

<u>Shantanu Chakrabartty</u> Michigan State University

Roman Genov University of Toronto

Special Session Chairs

Wen Li Michigan State University Rahul Sarpeshkar Massachusetts Institute of Technology

Demo Session Chairs

Eugenio Culurciello Yale University <u>Noam Ziv</u> Qualcomm Inc.

International Liaisons

Sandro Carrara EPFL, Switzerland Ralph Etienne Cummings Johns Hopkins University Yong Lian National University of Singapore

Local Arrangements

<u>Aleks Tasic</u> Qualcomm Inc.

Publications Chairs

<u>Milutin Stanacevic</u> Stony Brook University <u>Theodore Yu</u> UC San Diego

Conference Organizer Barbara Wehner Alliance Management Group