



IEEE EMBC 2012

August 28 - September 1, 2012
Hilton San Diego Bayfront Hotel
San Diego, CA, USA

Engineering Innovation in Global Health

Proposals for organized sessions and submissions are invited in the following themes:

- Biomedical Signal Processing
- Biomedical Imaging & Image Processing
- Bioinstrumentation: Sensors, Micro, Nano and Wearable Technologies
- Bioinformatics, Computational Biology, Systems Biology, Modeling Methodologies
- Cardiovascular & Respiratory Systems Engineering
- Neural Engineering, Neuromuscular Systems & Rehabilitation Engineering
- Molecular and Cellular Biomechanics, Tissue Engineering, Biomaterials
- Bio-Robotics, Surgical Planning and Biomechanics
- Therapeutic & Diagnostic Systems, Devices and Technologies, Clinical Engineering
- Healthcare Information Systems, Telemedicine

Conference Committee

Conference Chair: Michael Khoo, USC
Program Co-Chairs: Gert Cauwenberghs, UCSD
James Weiland, USC
International Program Chair: Shu Chien, UCSD
Tutorials & Workshops Chair: Atam Dhawan, NJIT

Key Dates

Oct 1, 2011 - Jan 15, 2012 — Proposal Submission
Feb 1, 2012 - Mar 15, 2012 — Paper Submission
Jun 1, 2012 — Notification of Acceptance
Jun 15, 2012 — Author Final Submission

For more details, visit the EMBC'12 website:

<http://embc2012.embs.org>

Keynote Speakers:



William R. Brody, MD, PhD
President, Salk Institute



Eric J. Topol, MD
Vice-Chairman,
West Wireless Health Institute



Rebecca Bergman
Vice-President, CRDM
Medtronic, Inc.



BHI 2012
HONG KONG, SHENZHEN
5 – 7 JAN, 2012



IEEE-EMBS International Conference on Biomedical and Health Informatics (BHI 2012)

Theme: "Global Grand Challenge on Health Informatics"

Call for Papers

Building on the success of the EMBS International Conference on Information Technology and Applications in Biomedicine (ITAB), EMBS has launched a new Special Topic Conference titled IEEE-EMBS International Conferences on Biomedical and Health Informatics (BHI), starting from this year. The inaugural meeting, BHI2012, will be held in Hong Kong and Shenzhen, China, January 5-7, 2012.

To be held in conjunction with the 8th International Symposium on Medical Devices and Biosensors and the 7th International Symposium on Biomedical and Health Engineering, the BHI 2012 will be devoted to an inter-disciplinary research area intersecting engineering, information technology and computer science with biology, medicine and health. The conference is to examine enabling technologies of devices and systems that optimize the acquisition, transmission, processing, storage, retrieval (P-STAR) of biomedical and health information as well as to report clinical studies on the novel application of health information systems. The goal of the proposed joint event is to bring together academicians, clinicians, industrial representatives, government and private research agencies and funders to facilitate a dialogue on addressing the theme "Global Grand Challenge on Health Informatics".

Features:

- Special Workshop on "Meet IEEE-EMBS Editors-in-Chief" sponsored by IEEE Engineering in Medicine and Biology Society (EMBS)
- Special Academician & Fellow Forum sponsored by the Key Lab for Health Informatics of Chinese Academy of Sciences (HICAS)
- Special Forum on Imaging Informatics
- Special Panel on "Grand Challenge on Health Informatics"
- Accepted papers will be included in IEEE Xplore
- Extended version of selected papers may be considered for publication in the IEEE Trans. on Information Technology in Biomedicine (SCI, EI, Scopus)

Important Dates:

- **Paper Submission Deadline: 14 Oct 2011**
- **Notification of Acceptance: 11 Nov 2011**
- **Early Registration: 2 Dec 2011**
- **Pre-conference Workshop: 5 Jan 2012**
(in Hong Kong)
- **Conference Dates: 6-7 Jan 2012** (in Shenzhen)

The conference covers a broad spectrum of themes including but not limited to the following topics:

I) P-STAR of Biomedical and Health Information

- Wearable and implantable devices
- Body sensor/area networks (BSN /BAN)
- Diagnostic and therapeutic systems
- Internet and web solutions for healthcare delivery
- Multi-scale modeling and information fusion;
- Ambient assisted living, smart homes;
- Electronic health records, interoperability and connectivity
- Context-aware retrieval
- p-health, m-health, u-health, e-health systems

II) Biologically Inspired Informatics

- Virtual reality in medicine and surgery
- Bio-inspired robotics and biomimics
- Brain-computer interfacing and human-computer interfacing

III) Informatics in Biological Systems

- Neuroinformatics
- Genomics and proteomics
- Bioinformatics, computational biology

IV) Medical Imaging Informatics

- Realtime imaging
- Multimodal imaging
- Molecular imaging

V) Health Informatics Applications

- Cardiovascular informatics
- Applications in the early diagnosis and treatment of cancers

Organized and sponsored by:

- IEEE-Engineering in Medicine and Biology Society (EMBS)
- Key Lab for Health Informatics of Chinese Academy of Sciences (HICAS)
- CAS-SIAT Institute of Biomedical and Health Engineering (IBHE)

Technically co-sponsored by:

- The Chinese University of Hong Kong

Supported by:

- IEEE-EMBS Hong Kong Chapter

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Conference Website:
<http://bhi2012.embs.org>



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Annual Review of Biomedical Engineering

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Editor: **Martin L. Yarmush**, *Rutgers University and
Center for Engineering in Medicine, Massachusetts General Hospital*

The *Annual Review of Biomedical Engineering*, in publication since 1999, covers the significant developments in the broad field of biomedical engineering, including BioMEMS, biomechanics, biomaterials, computational genomics and proteomics, tissue engineering, neural engineering, biomonitoring, health care engineering, drug delivery, rehabilitation engineering, bioelectrical engineering, biochemical engineering, and biomedical imaging.

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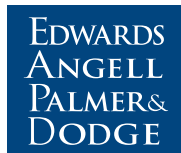
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Second AMA-IEEE Medical Technology Conference on Healthcare

October 16-18, 2011 - Boston

Park Plaza Hotel and Towers



CALL FOR ABSTRACTS

The American Medical Association (AMA) and the IEEE Engineering in Medicine and Biology (EMB) Society are pleased to announce the **Second AMA-IEEE Medical Technology Conference: Health Information Technology - Delivering on the Promise of Cost Effective Quality Healthcare**, in Boston, MA, on **October 16-18, 2011** at the **Boston Park Plaza Hotel and Towers**. The meeting will take place just before the Connected Health Symposium (for more information visit www.connected-health.org).

The 2011 conference will be devoted to Healthcare IT, a discipline at the intersection of information and computer science, engineering, and healthcare. The conference will examine resources, devices and methods required to optimize the acquisition, storage, retrieval, display, and use of information in health and biomedicine including healthcare informatics applications such as clinical decision support.

We invite participation by healthcare providers, engineers, innovators, industrial leaders, government agencies and policy makers. The conference will be inaugurated by a keynote lecture at an evening reception on Sunday, October 16. The following two days will feature plenary and poster presentations focusing on the challenges and solutions involving healthcare informatics and quality patient care.

Please visit <http://ama-ieee.embs.org/> for more information. **Accepted papers may be considered for publication in PULSE or other EMB Transaction Publications.**

Important Dates

June 30, 2011 – Call for 1-page abstracts - Abstract submission open – *please see our website for details*

August 29, 2011 – Abstract deadline

September 15, 2011 - Notification of acceptance; registration deadline for authors

September 23 – Papers loaded on the website

October 7 - Online PPT presentations due

4 Main Themes (*a list of keywords for each theme are located on our website under “themes”*)

- Health IT Adoption and Healthcare Reform
- Workflow (administrative & clinical) and Health IT
- Clinical Decision Support and Individualized Medicine
- Improving the Outcomes and Quality





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