Welcome Message from IEEE EMBS President

Dear Colleagues,

It is my great pleasure to welcome you to the 33rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBS). Our Annual Conference (known as EMBC) is a premier international conference in biomedical engineering, and has been strategically held in different locations around the world, for example, in Buenos Aires (Argentina), Minneapolis (USA), Vancouver (Canada), Lyon (France), New York City (USA), and Shanghai (China) over the last 6 years.

This year's meeting is being held in the beautiful city of Boston, Massachusetts. Under the able leadership of Dr. Paolo Bonato (Conference Chair), Dr. Colin Brenan (Conference Co-chair), Dr. Andrew Laine (Program Chair) and Dr. Metin Akay (Program Co-chair), the organizing committee has developed an exciting inter-disciplinary program. This Program includes tutorial courses offering continuing medical education credits to clinicians; panel sessions discussing important biomedical engineering issues with academic researchers, clinicians, and research and development engineers; and lunchtime sessions to promote students' interest in biomedical engineering. The organizers have also successfully recruited an all-star roster of keynote speakers, including Dr. Subra Suresh (NSF Director), Dr. J. Craig Venter (Founder and President of the J. Craig Venter Institute, best known for its role in sequencing the human genome), and inventor Dr. Dean Kamen (Founder of Deka Research and Development Corporation).

The continued growth of our meeting is an indication of its high quality and impact. This year, we received a record number of over 2,900 submissions. All the submitted papers were subject to peer review by the EMBS Conference Editorial Board (CEB), consisting of an international panel of experts in all areas of biomedical engineering. Special thanks go to, Nigel Lovell, Editor-in-Chief of the CEB, all the editors and reviewers of the CEB, and all the staff of the EMBS Executive Office (Laura Wolf, Laura Herrera, Angela Martin, and Dana Bernstein) for their outstanding service and contributions toward making this meeting possible.

EMBS continues to strive to provide a unique, effective platform for biomedical engineers to publish, to present, to network, and to advance their careers. If you are not an EMBS member yet, please consider joining this dynamic society, and join us for future EMBS Conferences. The next three EMBS Annual Conferences will be held in San Diego, California, USA (2012), Osaka, Japan (2013), and Chicago, Illinois, USA (2014).

Again, welcome to EMBC'11. I appreciate your participation and hope you will find this meeting stimulating and rewarding.

Sincerely,

Zhi-Pei Liang
2011-2012 EMBS President
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Dear Colleagues,

On behalf of the EMB'11 Organizing Committee, it is our pleasure to welcome you to the 33rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society. The setting for this year's conference is the vibrant, intellectual city of Boston, MA, USA. The theme is "Integrating Technology and Medicine for a Healthier Tomorrow." We feel Boston to be a particularly appropriate setting for discussions of the future of biomedical engineering, as the city continues to have a profound impact on the training and preparation of many young biomedical engineers. Several of the world's top universities are located here, as are many established biomedical companies and entrepreneurial start-ups. Over the decades, an exciting and extremely fruitful collaboration has developed between academia and industry yielding continual advances in biomedical engineering and healthcare technology. We hope EMBC'11 will build upon these existing synergies in this singularly rich and stimulating context.

Our scientific program this year includes an outstanding spectrum of more than 2,200 research papers from 52 countries, in the subjects of physics, chemistry, biology, electrical engineering, mechanical engineering, chemical engineering, computational sciences, nanotechnology, and more. This year's conference, in fact, promises to be the largest and most comprehensive EMBC conference held to date. It will differ from past conferences in several respects. For one, continuing medical education credits will be available to clinicians as part of a pilot experiment. Panel discussions bringing together academic researchers, clinicians and R&D engineers will focus on how technology can address clinical challenges. Also new this year is an "Unconference" dedicated to wearable technology. In this new format, conference participants can propose topics involving wearable technology using a conference blog and Twitter. This will be the first time this format has been used in a conference of biomedical engineers.

The conference opens Tuesday August 30 with a luncheon address delivered by John Glaser, CEO of Siemens Healthcare-Healthcare Services. This opening lunch will be followed by a plenary address delivered by J. Craig Venter of the J.Craig Venter Institute. On Wednesday, a keynote plenary address will be delivered by David Balaban, Vice President of Research & Development Informatics at Amgen followed by an afternoon address by Angela Belcher, W.M. Keck Professor of Energy at MIT. A Welcome Dinner will be held on Wednesday evening.

On Thursday morning the plenary address will be delivered by Roni Zeiger, Chief Health Strategist at Google. A luncheon session will be delivered by Mara Aspinall, CEO of On-Q-ity, Inc.. The Thursday afternoon keynote address with be delivered by Kamil Ugurbil, McKnight Presidential Endowed Chair of Radiology at the University of Minnesota. On Friday, the plenary keynote morning address will be delivered by Dean Kamen, Founder of DEKA Research, the luncheon session will be delivered by Dale Wiggins, Vice President of Technology for Philips Healthcare Patient Care and Clinical Informatics. The Friday afternoon keynote will be delivered by Emilio Bizzi, Institute Professor, Department of Brain and Cognitive Sciences at MIT. On Saturday, a morning session will include Dr. Subra Suresh, Director of the National Science Foundation, Dirk Beernaert, Head of Unit G1 –Nano-electronics and Photonics in the European Commission, Directorate General for Information Society and Media. The closing afternoon session will be delivered by John Parrish, CEO of the Center for Integration of Medicine & Innovative Technology.

Although the scientific program promises to be a compelling and provocative one, we hope that you will find time to explore the beautiful and historic city of Boston.

Welcome to Boston and welcome to EMBC 2011.

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