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## **IMPORTANT DATES**

January 22, 2010 Workshops /Symposia Proposal

April 1, 2010 Four Page Paper Submission

June 1, 2010 Notification of Acceptance

June 19, 2010 Author Final Submission

June 25, 2010 Exhibition Booth/Table Reservation

July 28, 2010 Early Registration/Hotel Reservation

## IEEE EMBC<sup>10</sup> August 31 – September 4, 2010

Buenos Aires, Argentina



## "Merging Medical Humanism and Technology"

The 32<sup>nd</sup> Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC<sup>10</sup>) will be held from August 31 to September 4, 2010 at the Sheraton Buenos Aires Hotel and Convention Center in Buenos Aires, Argentina.

The general theme of EMBC'10 is "Merging Medical Humanism and Technology," covering a broad spectrum of topics from biomedical and clinical engineering and physics to medical and clinical applications. The conference program will consist of invited plenary lectures, symposia, workshops, invited sessions, oral and poster sessions of unsolicited contributions. All papers will be peer reviewed and accepted papers of up to 4 pages will appear in the Conference Proceedings and be indexed by PubMed and Medline. Proposals for organized sessions and submissions are invited in the following themes.

- 1. Biomedical Signal Processing
- 2. Biomedical Image and Image Processing
- 3. Bioinstrumentation: Sensors, Micro, Nano and Wearable Technologies
- 4. Bioinformatics and Computational Biology; Systems Biology, Modeling Methodologies
- 5. Cardiovascular and Respiratory Systems Engineering
- 6. Neural Engineering, Neuromuscular Systems and Rehabilitation Engineering
- 7. Molecular and Cellular Biomechanics, Tissue Engineering, Biomaterials
- 8. Bio-Robotics, Surgical Planning and Orthopedics Biomechanics
- 9. Therapeutics and Diagnostic Systems, Devices and Technologies, Clinical Engineering
- 10. Healthcare Information Systems, Telemedicine
- 11. Technology Commercialization, Education, Industry and Society

For more details, visit the EMBC 10 Website: <u>http://embc2010.embs.org/</u>





### **General Chair**

Wiro Niessen Erasmus Medical Center & Delft University of Technology The Netherlands

### **Program Chair**

Erik Meijering Erasmus Medical Center The Netherlands

## Plenaries

Zhi-Pei Liang University of Illinois at Urbana-Champaign USA

## Tutorials

Jelena Kovačević Carnegie Mellon University USA

Special Sessions Boudewijn Lelieveldt Leiden University Medical Center The Netherlands

### **Publications and Publicity**

Daniel Rueckert Imperial College London United Kingdom

## **Industrial Liaison**

Max Viergever University Medical Center Utrecht The Netherlands

### American Liaison

Atam Dhawan New Jersey Institute of Technology USA

> Local Arrangements Désirée de Jong & Petra 't Hart-Assems Erasmus Medical Center The Netherlands

The **IEEE International Symposium on Biomedical Imaging** (ISBI) is the premier forum for the presentation of technological advances in theoretical and applied biomedical imaging. ISBI 2010 will be the seventh meeting in this series. The previous meetings have played a leading role in facilitating interaction between researchers in medical and biological imaging. The 2010 meeting will continue this tradition of fostering crossfertilization among different imaging communities and contributing to an integrative approach to biomedical imaging across all scales of observation.

ISBI is a joint initiative of the **IEEE Engineering in Medicine and Biology Society** (EMBS) and the **IEEE Signal Processing Society** (SPS). The 2010 meeting will feature an opening morning of tutorials, followed by a scientific program of plenary talks, special sessions, and oral and poster presentations of peer-reviewed contributed papers.

### **Confirmed plenaries**

- Richard Ehman (Mayo Clinic, USA) on new clinical imaging technologies
- Clemens Löwik (LUMC, The Netherlands) on molecular imaging and applications
- Jason Swedlow (University of Dundee, UK) on challenges in bioimage informatics
- Milan Sonka (University of Iowa, USA) on challenges in biomedical image analysis

High-quality papers are solicited containing original contributions to the mathematical, algorithmic, and computational aspects of biomedical imaging, from nano- to macroscale. Topics of interest include image formation and reconstruction, computational and statistical image processing and analysis, dynamic imaging, visualization, image quality assessment, and physical, biological, and statistical modeling. Papers on molecular, cellular, anatomical, and functional imaging modalities and applications are welcomed. All accepted papers will be published in the proceedings of the symposium and will be available online through the **IEEE Xplore** database.

### Important dates

Deadline for submission of 4-page paper: Notification of acceptance/rejection: Submission of final accepted 4-page paper: Deadline for author registration: Deadline for early registration: November 2, 2009 January 15, 2010 February 15, 2010 February 15, 2010 March 1, 2010

## Venue

Congress Center **"De Doelen"** Rotterdam The Netherlands





Further information is available at http://www.biomedicalimaging.org/2010/



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Taner Akkin Biomedical Optics and Imaging



**David Odde** Mitosis, Cell Growth, Microtubule Dynamics



**Shai Ashkenazi** Bioimaging, Instrumentation



Victor Barocas Computational Biomechanics and Biotransport



Wei Shen Biomaterials, Tissue Engineering



**John Bischof** Bioheat and Mass Transfer, Thermophysics and Biophysics



**Bin He** Biomedical Imaging, Neuroengineering



**Hugh Lim** Neural Prostheses, Auditory Neuroscience



**Tay Netoff** Neuroscience, Epilepsy Research



**Ronald Siegel** Drug Delivery, Hydrogels, MEMS

Alena Talkachova Cardiac Electrophysiology



**Bob Tranquillo** Cardiovascular and Neural Tissue Engineering

**Chun Wang** Biomaterials, Drug and Gene Delivery



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**Jonathan Sachs** Cell Membrane Biophysics

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## University of Minnesota

## Translational Neuroscience Scholars Program Faculty Positions in Neuroengineering

The Institute for Translational Neuroscience (ITN) at the University of Minnesota, is seeking to fill multiple tenuretrack or tenured positions to enhance its research strengths in neuroengineering. The Institute is interested in the study of mechanisms of neural systems using engineering methods, with these studies translating into potential clinical applications. Areas of specific interest include, but are not limited to, neural sensing and interfacing, neural stimulation and modulation, neural prostheses, neural imaging, neural modeling, and neural devices.

Successful candidates will be affiliated with the Center for Neuroengineering, and will have their tenure home in an academic department, such as the Department of Biomedical Engineering, Department of Electrical and Computer Engineering, etc. Such candidates are expected to establish a vigorous, externally-funded research program, have a genuine commitment to undergraduate and graduate education, and to collaborative program development.

The requirements for these positions include an earned doctorate in an appropriate discipline at the time of the appointment and outstanding academic and research records. Rank and salary will be commensurate with the qualifications and experience of the candidate.

Candidates with strong engineering background and demonstrated research expertise in neuroengineering are encouraged to apply. Submit applications, including curriculum vitae, detailed statement of research and teaching interests, and names of three references to ITN Neuroengineering Faculty Search Committee at *cne@umn.edu*.

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## **Design of Medical Devices Conference** April 13-15, 2010

The University of Minnesota's Institute for Engineering in Medicine's Medical Devices Center, the Institute of Technology, and the Academic Health Center present the 9th annual Design of Medical Devices Conference. The conference will be held April 13-15, 2010 at the Radisson University Hotel in Minneapolis, Minnesota, adjacent to the University of Minnesota campus.

The three-day conference consists of multiple scientific poster sessions and three days of technical/scientific sessions with topics such as:

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- Live Surgery
- Cardiovascular Engineering
- Neuroengineering
- Nano/MEMS Devices
- Medical Electronics
- Technology Assessment
- Human Factors
- Orthopedics
- **Computational Modeling of** Anatomy/Devices

- **Surgical Simulators**
- **Health Informatics**
- **Surgical Tools**
- **Government Funding**
- Legal/Regulatory Issues
- Innovation and Design
- **Tissue Engineering**
- Medical Product Design

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## **Call for Abstracts**

The Design of Medical Devices Conference seeks original papers that demonstrate new technologies and applications in the field of medical device design. The paper should present an unbiased description of an experiment, product or business method related to medical devices. Highly rated papers will be published in the ASME Journal of Medical Devices (http://www.asme.org/)

Submission information and author instructions are on the Call for Abstracts section of the conference web site (www.dmd.umn.edu)

## **Sponsorship Opportunities are Available**

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Contact Jenny Holden (holden@me.umn.edu) for details.



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DEADLINE: January 25, 2010

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