

CBMS 2006

The 19th IEEE International Symposium
on Computer-Based Medical Systems

IEEE International Symposium on Computer-Based Medical Systems Special Track:

Advances in Medical Simulation
<http://simcen.org/cbms2006>

Call for Papers

[IEEE CBMS 2006](http://simcen.org/cbms2006) (June 22 - 23, Salt Lake City, UT) provides an international forum for discussing the latest research in computational medicine. This special track focuses on issues and the latest findings in medical simulation. Please check our [website](http://simcen.org/cbms2006) (<http://simcen.org/cbms2006>) for the latest updates.

Training for medical skills traditionally relies on cadavers, animals, and patients. These have many limitations. Cadavers do not have the appropriate physiological response. Animals have the wrong anatomy, and their use can raise ethical concerns. Patient safety is also a concern.

Medical Simulation is fast proving to be a safe, effective alternative to traditional teaching methods for both team and individual training. This is a multi-disciplinary field, drawing on expertise from computer science, biomechanical engineering, and the cognitive sciences.

Topics of Interest

This special track aims to investigate recent advances in the field. Papers describing original research are invited (but not limited) to the following key themes as they relate to medical simulation:

- Advanced distributed learning

- Immersive virtual environments
- Visual rendering
- Haptic and tactile rendering
- Real-time modeling of tissue and organ deformation
- Physical models for surgical effects, such as
 - Cutting
 - Suturing
 - Bleeding
- Learning models for medical simulation training
- Validation/efficacy studies of medical simulators

Important Dates

January 31	Deadline for paper summary submissions
March 1	Notification of acceptance for papers
April 5	Final, full-length camera-ready paper due
April 8	Pre-registration deadline

Submission Procedures

Unlike workshops, where position papers and reports on initial and intended work are appropriate, papers selected for a special track should report on significant unpublished work suitable for publication as a conference paper.

Only electronic submission of original technical contributions will be accepted.

Extended Summary Submission

As a minimum, submissions to this Special Track require a 3 page (or approximately 1500 words) extended summary clearly describing background, goals, methods, results and a listing of primary references. Presented material should include sufficient detail to enable the program committee to review the article. In this respect, we strongly encourage full paper submissions not exceeding 6 pages (or approximately 3000 words). A full paper is not required for submission; however, it is encouraged.

The article should be composed on US Letter (8 1/2" x 11") page format and submitted as PDF document. Authors who submit full articles should follow the [IEEE style guidelines](http://pubftp.computer.org/press/outgoing/proceedings/8.5x11-Formatting/files) (ftp://pubftp.computer.org/press/outgoing/proceedings/8.5x11 - Formatting files).

Submit your extended summary or manuscript no later than January 31, 2006. Authors

should clearly indicate the special track title (Advances in Medical Simulation). All submissions should be done electronically via the IEEE CBMS 2006 [web submission system](#) (available soon). Authors will be notified of acceptance by March 1, 2006 after a peer-review process.

Final Manuscript Submission

Accepted submissions must be presented at the conference. Full papers (max 6 pages) in PDF format are required for each accepted submission, and are due April 5, 2006. Each accepted paper will be published in the conference proceedings by IEEE CS Press, conditional upon the author's advance registration. Final manuscript must be in the IEEE Computer Science Press 8.5x11-inch format [updated Dec. 6, 2005]. Formatting instructions, LaTeX macros and MSWord templates are available [here](#) (<ftp://pubftp.computer.org/press/outgoing/proceedings/8.5x11> - Formatting files).

For further questions or inquiries, please contact the track chair at cbmsST15@simcen.org.

Track Chair

- Alan Liu, Ph.D. –The National Capital Area Medical Simulation Center, Uniformed Services University

Track Program Committee

- Frank Tendick, Ph.D. - UCSF Surgical Skills Center, Department of Surgery, University of California, San Francisco
- Gabor Szekely, Ph.D. –Medical Image Analysis and Visualization Group Computer Vision Laboratory, Swiss Federal Institute of Technology
- Cenk Cavusoglu, Ph.D. - Department of Electrical Engineering and Computer Science, Case Western Reserve University
- Thomas Caudell, Ph.D. - Electrical and Computer Engineering Department, The University of New Mexico
- Mark Scerbo, Ph.D. – Department of Psychology, Old Dominion University
- Joseph Rosen, MD – Department of Surgery, Dartmouth-Hitchcock Medical Center

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