

Preface

The fifth international Conference in Medical Image Computing and Computer Assisted Intervention (MICCAI 2002) was held in Tokyo from September 25th to 28th, 2002. This was the first time that the conference was held in Asia since its foundation in 1998. The objective of the conference is to offer clinicians and scientists the opportunity to collaboratively create and explore the new medical field. Specifically, MICCAI offers a forum for the discussion of the state of art in computer-assisted interventions, medical robotics, and image processing among experts from multi-disciplinary professions, including but not limited to clinical doctors, computer scientists, and mechanical and biomedical engineers. The expectations of society are very high; the advancement of medicine will depend on computer and device technology in coming decades, as they did in the last decades.

We received 321 manuscripts, of which 41 were chosen for oral presentation and 143 for poster presentation. Each paper has been included in these proceedings in eight-page full paper format, without any differentiation between oral and poster papers. Adherence to this full paper format, along with the increased number of manuscripts, surpassing all our expectations, has led us to issue two proceedings volumes for the first time in MICCAI's history. Keeping to a single volume by assigning fewer pages to each paper was certainly an option for us considering our budget constraints. However, we decided to increase the volume to offer authors maximum opportunity to argue the state of art in their work and to initiate constructive discussions among the MICCAI audience.

It was our great pleasure to welcome all MICCAI 2002 attendees to Tokyo. Japan, in fall, is known for its beautiful foliage all over the country. The traditional Japanese architectures always catches the eyes of visitors to Japan. We hope that all the MICCAI attendees took the opportunity to enjoy Japan and that they had a scientifically fruitful time at the conference. Those who could not attend the conference should keep the proceedings as a valuable source of information for their academic activities.

We look forward to seeing you at another successful MICCAI in Toronto in 2003.

July 2002

DOHI Takeyoshi and Ron Kikinis

Organizing Committee

Honorary Chair

Kintomo Takakura

Tokyo Women's Medical University, Japan

General Chair

Takeyoshi Dohi

The University of Tokyo, Japan

Terry Peters

University of Western Ontario, Canada

Junichiro Toriwaki

Nagoya University, Japan

Program Chair

Ron Kikinis

Harvard Medical School and Brigham and Women's Hospital, USA

Program Co-chairs

Randy Ellis

Queen's University at Kingston, Canada

Koji Ikuta

Nagoya University, Japan

Gabor Szekely

Swiss Federal Institute of Technology, ETH Zentrum, Switzerland

Tutorial Chair

Yoshinobu Sato

Osaka University, Japan

Industrial Liaison

Masakatsu Fujie

Waseda University, Japan

Makoto Hashizume

Kyushu University, Japan

Hiroshi Iseki

Tokyo Women's Medical University, Japan

Program Review Committee

Alan Colchester	University of Kent at Canterbury, UK
Wei-Qi Wang	Dept. of E., Fudan University, China
Yongmei Wang	The Chinese University of Hong Kong, China
Jocelyne Troccaz	TIMC Laboratory, France
Erwin Keeve	Research Center Caesar, Germany
Frank Tendick	University of California, San Francisco, USA
Sun I. Kim	Hanyang University, Korea
Pierre Hellier	INRIA Rennes, France
Pheng Ann Heng	The Chinese University of Hong Kong, China
Gabor Szekely	Swiss Federal Institute of Technology Zurich, Switzerland
Kirby Vosburgh	CIMIT/MGH/Harvard Medical School, USA
Allison M. Okamura	Johns Hopkins University, USA
James S. Duncan	Yale University, USA
Baba Vemuri	University of Florida, USA
Terry M. Peters	The John P. Robarts Research Institute, Canada
Allen Tannenbaum	Georgia Institute of Technology, USA
Richard A. Robb	Mayo Clinic, USA
Brian Davies	Imperial College London, UK
David Hawkes	King's College London, UK
Carl-Fredrik Westin	Harvard Medical School, USA
Chris Taylor	University of Manchester, UK
Derek Hill	King's College London, UK
Ramin Shahidi	Stanford University, USA
Demetri Terzopoulos	New York University, USA
Shuqian Luo	Capital University of Medical Sciences, USA
Paul Thompson	UCLA School of Medicine, USA
Simon Warfield	Harvard Medical School, USA
Gregory D. Hager	Johns Hopkins University, USA
Kiyoyuki Chinzei	AIST, Japan
Shinichi Tamura	Osaka University, Japan
Jun Toriwaki	Nagoya University, Japan
Yukio Kosugi	Tokyo Institute of Technology, Japan
Jing Bai	Tsinghua University, China
Philippe Cinquin	UJF (University Joseph Fourier), France
Xavier Pennec	INRIA Sophia-Antipolis, France
Frithjof Kruggel	Max-Planck-Institute for Cognitive Neuro- science, Germany

Ewert Bengtsson	Uppsala University, Finland
Ève Coste Manière	INRIA Sophia Antipolis, France
Milan Sonka	University of Iowa, USA
Branislav Jaramaz	West Penn Hospital, USA
Dimitris Metaxas	Rutgers University, USA
Tianzi Jiang	Chinese Academy of Sciences, China
Tian-ge Zhuang	Shanghai Jiao tong University, China
Masakatsu G. Fujie	Waseda University, Japan
Takehide Asano	Chiba University, Japan
Ichiro Sakuma	The University of Tokyo, Japan
Alison Noble	University of Oxford, UK
Heinz U. Lemke	Technical University Berlin, Germany
Robert Howe	Harvard University, USA
Michael I Miga	Vanderbilt University, USA
Hervé Delingette	INRIA Sophia Antipolis, France
D. Louis Collins	Montreal Neurological Institute, McGill University, Canada
Kunio Doi	University of Chicago, USA
Scott Delp	Stanford University, USA
Louis L. Whitcomb	Johns Hopkins University, USA
Michael W. Vannier	University of Iowa, USA
Jin-Ho Cho	Kyungpook National University, Korea
Yukio Yamada	University of Electro-Communications, Japan
Yuji Ohta	Ochanomizu University, Japan
Karol Miller	The University of Western Australia
William (Sandy) Wells	Harvard Medical School, Brigham and Women's Hosp., USA
Kevin Montgomery	National Biocomputation Center/Stanford University, USA
Kiyoshi Naemura	Tokyo Women's Medical University, Japan
Yoshihiko Nakamura	The University of Tokyo, Japan
Toshio Nakagohri	National Cancer Center Hospital East, Japan
Yasushi Yamauchi	AIST, Japan
Masaki Kitajima	Keio University, Japan
Hiroshi Iseki	Tokyo Women's Medical University, Japan
Yoshinobu Sato	Osaka University, Japan
Amami Kato	Osaka University School of Medicine, Japan
Eiju Watanabe	Tokyo Metropolitan Police Hospital, Japan
Miguel Angel Gonzalez Ballester	INRIA Sophia Antipolis, France
Yoshihiro Muragaki	Tokyo Women's Medical University, Japan

Makoto Hashizume	Kyushu University, Japan
Paul Suetens	K.U. Leuven, Medical Image Computing, Belgium
Michael D. Sherar	Ontario Cancer Institute/University of Toronto, Canada
Kyojiro Nambu	Medical Systems Company, Toshiba Corpora- tion, Japan
Naoki Suzuki	Institute for High Dimensional Medical Imag- ing, Jikei University School of Medicine, Japan
Nobuhiko Sugano	Osaka University, Japan
Etsuko Kobayashi	The University of Tokyo, Japan
Grégoire Malandain	INRIA Sophia Antipolis, France
Russell H. Taylor	Johns Hopkins University, USA
Maryellen Giger	University of Chicago, USA
Hideaki Koizumi	Advanced Research Laboratory, Hitachi, Ltd., Japan
Rjan Smedby	Linköping University, Sweden
Karl Heinz Hoene	University of Hamburg, Germany
Sherif Makram-Ebeid	Philips Research France
Stéphane Lavallée	PRAXIM, France
Josien Pluim	University Medical Center Utrecht, The Netherlands
Darwin G. Caldwell	University of Salford, England
Vaillant Regis	GEMS, Switzerland
Nassir Navab	Siemens Corporate Research, USA
Eric Grimson	MIT AI Lab, USA
Wiro Niessen	University Medical Center Utrecht, The Netherlands
Richard Satava	Yale University School of Medicine, USA
Takeyoshi Dohi	The University of Tokyo, Japan
Guido Gerig	UNC Chapel Hill, Department of Computer Science, USA
Ferenc Jolesz	Brigham and Womens Hospital Harvard Medi- cal School, USA
Leo Joskowicz	The Hebrew University of Jerusalem, ISRAEL
Antonio Bicchi	University of Pisa, Italy
Wolfgang Schlegel	DKFZ, Germany
Richard Bucholz	Saint Louis University School of Medicine, USA
Robert Galloway	Vanderbilt University, USA
Juan Ruiz-Alzola	University of Las Palmas de Gran Canaria, Spain

Tim Salcudean	University of British Columbia, Canada
Stephen Pizer	University of North Carolina, USA
J. Michael Fitzpatrick	Vanderbilt University, USA
Gabor Fichtinger	Johns Hopkins University, USA
Koji Ikuta	Nagoya University, Japan
Jean Louis Coatrieux	University of Rennes-INSERM, France
Jaydev P. Desai	Drexel University, USA
Chris Johnson	Scientific Computing and Imaging Institute, USA
Luc Soler	IRCAD, France
Wieslaw L. Nowinski	Biomedical Imaging Lab, Singapore
Andreas Pommert	University Hospital Hamburg-Eppendorf, Germany
Heinz-Otto Peitgen	MeVis, Germany
Rudolf Fahlbusch	Neurochirurgische Klinik, Germany
Simon Wildermuth	University Hospital Zurich, Inst. Diagnostic Radiology, Switzerland
Chuck Meyer	University of Michigan, USA
Johan Van Cleynenbreugel	Medical Image Computing, ESAT-Radiologie, K.U. Leuven, Belgium
Dirk Vandermeulen	K.U. Leuven, Belgium
Karl Rohr	International University in Germany, Germany
Martin Styner	Duke Image Analysis Lab, UNC Neuro Image Analysis Lab, Germany
Catherina R. Burghart	University of Karlsruhe, Germany
Fernando Bello	Imperial College of Science, Technology and Medicine, UK
Colin Studholme	University of California, San Francisco, USA
Dinesh Pai	University of British Columbia, Canada
Paul Milgram	University of Toronto, Canada
Michael Bronskill	University of Toronto/Sunnybrook Hospital, Canada
Nobuhiko Hata	The University of Tokyo, Japan
Ron Kikinis	Brigham and Women's Hospital and Harvard Medical School, USA
Lutz Nolte	University of Bern, Germany
Ralph Mosges	IMSIE Univ. of Cologne, Germany
Bart M. ter Haar Romeny	Eindhoven University of Technology, The Netherlands
Steven Haker	Brigham and Women's Hospital and Harvard Medical School, USA

Local Organizing Committee

Ichiro Sakuma	The University of Tokyo, Japan
Mitsuo Shimada	Kyushu University, Japan
Nobuhiko Hata	The University of Tokyo, Japan
Etsuko Kobayashi	The University of Tokyo, Japan

MICCAI Board

Alan C.F. Colchester (General Chair)	University of Kent at Canterbury, UK
Nicholas Ayache	INRIA Sophia Antipolis, France
Anthony M. DiGioia	UPMC Shadyside Hospital, Pittsburgh, USA
Takeyoshi Dohi	University of Tokyo, Japan
James Duncan	Yale University, New Haven, USA
Karl Heinz Höhne	University of Hamburg, Germany
Ron Kikinis	Harvard Medical School , Boston, USA
Stephen M. Pizer	University of North Carolina, Chapel Hill, USA
Richard A. Robb	Mayo Clinic, Rochester, USA
Russell H. Taylor	Johns Hopkins University, Baltimore, USA
Jocelyne Troccaz	University of Grenoble, France
Max A. Viergever	University Medical Center Utrecht, The Netherlands

Medical Image Computing and Computer-Assisted
Intervention - MICCAI 2002

5th International Conference, Tokyo, Japan, September
25-28, 2002, Proceedings, Part II

Dohi, T.; Kikinis, R. (Eds.)

2002, XXIX, 693 p., Softcover

ISBN: 978-3-540-44225-7