Preface

This book contains the written contributions to the International Symposium on Medical Simulation (ISMS 2004) held in Cambridge, Massachusetts, USA on June 17–18, 2004.

The manuscripts are organized around five thematic sections relating to the multidisciplinary field of medical simulation: soft tissue properties and modeling, haptic rendering, real-time deformable models, anatomical modeling, and development frameworks.

The objectives of the symposium were to gather researchers to present their most recent, and promising work, to highlight research trends, and to foster dialogue and debates among participants. Live demonstrations were also included at the meeting, but could not be included in this volume. Finally, to address questions about areas for improvement and future directions of the field, we organized a panel of experts, including technical, medical and educational representatives.

This event followed the successful symposium organized by Hervé Delingette and Nicholas Ayache in France in June 2003. At that meeting we agreed that it would be beneficial for the community to have an annual gathering for the medical simulation community where researchers could exchange ideas and share their work in this emerging field. ISMS 2004 was co-organized by CIMIT/Harvard Medical School and Rutgers University.

We received 50 submissions from 14 different countries. Each was evaluated by three members of the scientific committee. We selected 16 manuscripts for oral presentation and 16 for poster presentation. All accepted manuscripts were allowed a written contribution of equal length. These published contributions are from research institutes, universities or companies from our diverse research community, including: Germany, Russia, Netherlands, France, Switzerland, Belgium, Spain, United Kingdom, Italy, Japan, Korea, Israel, Canada and the United States of America.

The quality of the selected contributions implies that the conference will be an important milestone in the development of this new, but rapidly growing field at the convergence of several disciplines with key applications for the future of health care. We hope all the participants enjoyed this intense and stimulating scientific event.

April 7, 2004

Stéphane Cotin, Dimitris Metaxas