Preface

Welcome to the proceedings of the second edition of the International Workshop on Computer-Assisted and Robotic Endoscopy (CARE) that was held in conjunction with MICCAI on October 5, 2015, in Munich, Germany.

CARE aims at bringing together researchers, clinicians, and medical companies to advance the scientific research in the field of computer-assisted and robotic endoscopy and thereby improve current endoscopic medical interventions. The next generation of CARE systems promises to integrate multimodal information relative to patient anatomy, the control status of medical endoscopes and surgical tools, and the actions of surgical staffs to guide endoscopic interventions. To this end, technical advances should be introduced in many areas, such as computer vision, graphics, robotics, medical imaging, external tracking systems, medical device controls systems, information processing techniques, as well as endoscopy planning and simulation.

The technical program of this workshop comprised original and high-quality papers that, together with this year's keynote speakers, explored the most recent scientific, technological, and translational advancements and challenges in the next generation of CARE systems. We selected 15 high-quality papers from 12 countries this year. All the selected papers were revised and resubmitted by the authors in accordance with the reviewers' comments and the volume editors' suggestions.

It was also our great honor and pleasure to welcome the keynote speakers, Prof. Guang-Zhong Yang (Imperial College London, UK), Prof. Emanuele Trucco (University of Dundee, UK), Prof. Robert J. Webster III (Vanderbilt University, USA), and Dr. Mahdi Azizian (Intuitive Surgical Inc., USA), who gave fantastic talks on recent advances on robotic endoscopic interventions representing both the academic and industrial fields.

The CARE 2015 Organizing Committee would like to sincerely thank the Advisory Committee members for their suggestions and assistance in selecting the best paper and all the Program Committee members for their great efforts in reviewing all the submissions. We also extend our thanks and appreciation to KUKA Robotics, Germany, for sponsoring the best paper award and Springer for accepting to publish the CARE proceedings in the *Lecture Notes in Computer Science* series. We warmly thank all the authors, researchers, and attendees at CARE 2015 for their scientific contribution, enthusiasm, and support. We look forward to all the continuing support and participation in our next CARE event that will be held in conjunction with MICCAI 2016 in Istanbul, Turkey.

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Xiongbiao Luo
Tobias Reichl
Reiter Austin
Gian-Luca Mariottini

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