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## FOREWORD

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### Special Section on Information and Communication Technology for Healthcare and Medical Applications in Conjunction with Main Topics of ISMICT2015

Technical Committee on Healthcare and Medical ICT has been developing global relationships among worldwide universities and institutions to enhance efficient and collaborative developments of healthcare and medical ICT (MICT). One such activity is our technical support for ISMICT (International Symposium on Medical ICT). For almost 10 years, ISMICT has continued attracting researchers from many countries and has been a most suitable forum to cultivate researches on MICT. Another activity is our continued publication of Special Sections related to MICT. These two activities collectively enhance the recognition of the importance of Japan-initiated and IEICE-supported MICT all over the world.

Our efforts should continue until MICT really and drastically improves healthcare and medicine, in a sustainable manner. These include remarkable prolongation of healthy lifespans, improvement of cost-effectiveness of medical maneuvers, support for remote rural areas, rational justification and advancing efficiency of clinical studies with big data, the right regulation for MICT-related medical devices, etc.

In this Special Section, we gathered original articles related to various topics of MICT, which are also covered in discussion of ISMICT. We had a total of 9 submissions for full papers. These include 3 submissions from abroad. By the thorough and unprejudiced peer-reviews with the final judgement of the Guest Editors, we finally accepted 6 articles (full papers) to be published. This figure includes 2 invited papers. These invited papers also went through the full review process. These invited papers cover previous achievements, current states and prospect directions of MICT and related device developments, which direct us to the ultimate aim of MICT.

We hope this Special Section would convince readers of the importance of MICT.

#### Special Section Editorial Committee Members

Guest Editors: Kohei Ohno (Meiji Univ.), Keisuke Shima (Yokohama National Univ.)

Guest Associate Editors: Ichiro Ida (Fujitsu Lab.), Soichi Watanabe (NICT), Tetsushi Ikegami (Meiji Univ.), Minseok Kim (Niigata Univ.), Eisuke Hanada (Saga Univ.)

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Masaru Sugimachi, Guest Editor-in-Chief

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**Masaru Sugimachi** (Member) received his M.D. and Ph.D. (biomedical engineering) from Kyushu University in 1984, 1992, respectively. From 1992, he moved to the Department of Cardiovascular Dynamics, National Cardiovascular Center, Osaka. Since 2004, he has chaired the Department. He has been Vice Chairman of IEICE Technical Group on Medical ICT (2010–2011, 2014–2015).

