
Preface

Nilmini Wickramasinghe

School of Business IT and Logistics,
RMIT University,
GPO Box 2476,
Melbourne, VIC 3001, Australia
E-mail: nilmini.wickramasinghe@rmit.edu.au

Biographical notes: Nilmini Wickramasinghe has an internationally recognised research record in the area of healthcare and technology management. Her expertise is in the strategic application and management of technology for effecting superior healthcare solutions. As of 13th December 2009 she was appointed the Professor of Information Management and Library Science in the School of Business IT and Logistics at RMIT University. She currently has over 200 peer-reviewed scholarly publications and is the author of several books and an Encyclopaedia in Healthcare and Technology. In addition, she is the Editor-in-Chief of two scholarly international peer-reviewed scholarly journals published by Inderscience.

The collection of papers in this special issue represents advancing areas within the ever-growing area of biomedical engineering. More importantly, the papers serve to highlight various aspects of technology use in this field and the importance of technology to bench science and the development of more effective cures and solutions to a myriad of healthcare issues.

Specifically, the first paper by Poland et al., 'Human positioning and tracking in smart environments using colour pattern matching', focuses on the issue of tracking. Superior tracking in so many areas of healthcare is vital. The next paper, 'Real time system dynamics simulation model: a novel system for haemodialysis efficiency monitoring', by Azar, examines an important aspect pertaining to simulation. The third paper, by Srivastava and Prakash, '*In vitro* study of bone condition using acousto-ultrasonic technique', focuses on issues regarding in vitro analysis of bones by acousto-ultrasonic technique. In particular, the paper compares normal bones and fractured bones. The final paper in this collection is by Ayoubi et al. This paper, entitled 'In-silico dissection of tumours and its application in the identification of the tissue of origin of cancers of unknown primary site', examines issues relating to cancers of unknown primary sites. Cancer has become one of the leading causes of death throughout the world. A particularly challenging area in oncology relates to cancers of unknown primary sites thereby making this paper of significance.

This special issue represents only a small window into the fascinating and complex world of biomedical engineering and technology. As can be seen in all these papers, technology plays a vital enabling role. Conversely, without technology, none of these important areas can develop further. This in turn then requires prudent management of these technologies so that successful and far-reaching benefits can be realised

ultimately for the most important person: the patient. It is hoped that readers will not only enjoy this special issue but also be inspired to research further into even more appropriate approaches for managing these technologies, thereby enabling superior healthcare solutions to be realised.