

Editorial

The search and incorporation of new technologies in medical processes is one of the objectives of the area of medical physics, this has a positive impact in various areas of medicine, ranging from the improvement of medical diagnoses, modeling processes and simulation of data, measurements of biological variables, as well as the organization, classification and interpretation of large volumes of diverse information or even images. This search also includes the development of medical procedures that are less invasive and with better benefits than existing procedures. Therefore, in this improvement process, knowledge of biomedical engineering, metrology, electronics, and communications, among others, are combined to provide jointly solutions to the needs that exist in the medical area. Seeking as results more reliable, faster, accessible, and efficient processes that positively affect both end users and service providers through the implementation of better prediction models for a better understanding of biological systems and allow development in turn of devices that allow us a better intervention in the medical area using these new technologies and even allow improving the teaching-learning processes for students who are in training in these areas.

This volume of the journal *Research in Computing Science (RCS)* presents a selection of works on applications of physical engineering in biomedicine. These contributions were carefully evaluated by scientific peers, all of them members of Technical Committee experts in the field of Medical Physics and Biomedical Engineering.

A special thanks to the Universidad de Guanajuato and the trade union association ASPAAUG for the support obtained. We also thank the authors for their submitted contributions. We hope that the contributions in this volume will be of use to the reader interested in Medical Physics and Biomedical Engineering and their applications and related areas.

Francisco Miguel Vargas Luna
Teodoro Córdova Fraga
Rafael Guzmán Cabrera
Guest Editors

January 2020