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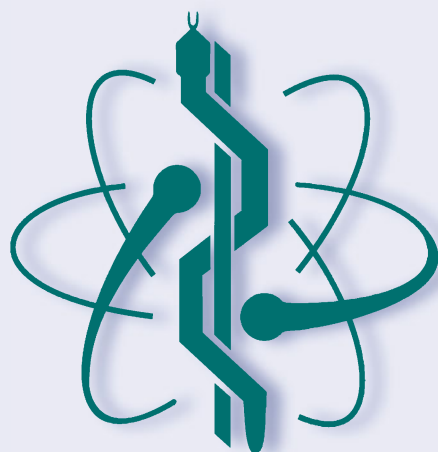
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Volume 75

VIII Latin American Conference on Biomedical Engineering and XLII National Conference on Biomedical Engineering

Proceedings of CLAIB-CNIB 2019,
October 2–5, 2019, Cancún, México

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Preface

The VIII Latin American Conference on Biomedical Engineering and the XLII National Conference on Biomedical Engineering (CLAIB-CNIB 2019) were carried out together by the Regional Council of Biomedical Engineering for Latin America (CORAL) and the Mexican Biomedical Engineering Society (SOMIB) in October 2–5, 2019, in Cancún, México. We are proud to present in this book a selection of papers from all over the world, reporting on the latest findings and technological outcomes in the biomedical engineering field. The content is organized into fifteen parts to reflect outstanding scientific research lines in biomedical engineering. Innovative topics tissue and molecular engineering, as well as bioimpedance sensors and micro-nano devices are discussed in this book. Content innovation and academic quality have been warranted by a careful peer-reviewing, which was coordinated by an expert Scientific Committee and involved academic reviewers from all continents. With a final acceptance rate of 50%, this book is the result of a great effort involving more than 1000 scientists, both professors and students, participating as authors, reviewers, and scientific committee members. We are sure that the contributions presented in this book will give you a deep overview of the leading edge in your expertise and other areas. On behalf of Scientific and Organizing Committees, we thank authors, academic reviewers as well as sponsoring societies such as CORAL, SOMIB, and the National Council for Science and Technology (CONACYT), México, for their contribution. Moreover, we encourage readers to enjoy this amazing piece of scientific literature as a breadth of knowledge in the biomedical engineering field.

Christian Chapa González
Co-chair Program CLAIB-CNIB 2019

César A. González Díaz
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Distinguished Lecturer Message

It is my great pleasure and honor to welcome you all in reading the IFMBE proceedings of CLAIB-CNIB 2019. This international conference that was held in Cancun, Mexico, gave a unique occasion for us, to host all our colleagues from all over the world with an outstanding spectrum of over 200 research papers from 25 countries, to focus on the challenges of developing future technologies in medicine and biology. The real purpose of conferences like this is the chance to socialize with those share your interest and expertise, and the chance to pick up new ideas or share the trending ideas on some critical aspects of health care. This is a great opportunity that this conference represents a chance for you to not only keep abreast of your own area of expertise, but also to find out what is the leading edge in other areas. May be your specialty is other than medical and biological engineering, but this compilation of works just might provide you with some nugget of information that transforms your approach to a bigger challenge. I hope that all of you had enjoyed the larger opportunity we had during CLAIB-CNIB 2019—a tremendous experience and expertise throughout the length and breadth of wide range of fields under one roof—generating a wave of motivation and diversity spreading across the Americas to the world.

Ricardo L. Armentano
Distinguished Lecturer CLAIB-CNIB 2019

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