The Status of BME Programs in Latin America

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Abstract— The aim of this paper is to present the status of the Biomedical Engineering and Bioengineering programs in Latin America. According with Andrés Fernández *et al* in their report called “e-Health in Latin America and the Caribbean: progress and challenges” published in 2011, due to the greater population ageing and the increase in the prevalence of chronic illnesses in Latin America, new technologies in healthcare emerged and showed to be more effective supporting the national health services. In addition, during the 1980s major reforms were made by the governments in the health systems in the regions, to improve access to health care which lead to the use of new technologies such as ICTs to improve the data storage, aggregate and analyze data, clinical and health information, to increase efficiency and to support decision making in any health organization [1]. In order to accomplish these improvements it was necessary to have properly medical and technical trained professionals, facilities and medical devices with the required standards; as a result new biomedical engineering and bioengineering programs emerged and curriculums were updated to fit the needs of each region.

Nowadays, Latin America has 60 Biomedical Engineering and Bioengineering programs established [2][3][4]. Regarding the accreditation, each government has an accreditation program for their universities. This programs were built in order to guarantee a high educational system standard. For international accreditation the most implemented system is ABET (Accreditation Board for Engineering and Technology). In conclusion, Biomedical Engineering is a fast growing and innovative career in Latin America, and contributes to developing new medical solutions to improve the quality of life in our region.

Keywords— biomedical engineering, bioengineering, education, health care, ICT, accreditation.

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