Connecting Clinical Practices with Microbiological and Biochemical Technologies

The word technology refers to the knowledge of techniques, skills, methods or processes used to produce goods, services or to reach specific objectives (research, business, etc.). The concept technology can also be used to make reference to devices, computers and factories. The history of technology is as long as human beings’ history, however great advances in the field of technology have been developed mainly during the last century. In that sense, more than 963000 manuscripts have been published about the design of innovative technologies and their use in almost all fields of knowledge (http://www.ncbi.nlm.nih.gov/pubmed). Search done using “technology” as key word). It is interesting to highlight that many of the mentioned manuscripts are mainly focused on the optimization of technologies used for analytical/clinical purposes (up to 250000 manuscripts described the use of several technologies in medicine, microbiology, molecular biology and biochemistry) [1]. Thus, medical diagnosis and clinical test has significantly improved thanks to the use of specific microbial, molecular biology and biochemical techniques. As a consequence of this fact, bacterial infections at early stage and early diagnosis of cancer are cheaper and quicker thanks to molecular biology techniques [2,3]. On the other hand, genetic analysis would be impossible without specific technology optimized at the end of last century for instance [4,5].

These data clearly state three aspects: i) there is high interest on technology, ii) technology makes us life easier and iii) technology is essential to improve basic and applied science and to address new biology system challenges. From this quick analysis it is possible to conclude that new tools are required to connect professionals with high expertise on technology with professionals demanding these technologies to addresses current basic and applied research related to various aspects of life.

International scientific-technical networks, workshops, scientific meetings or seminars as well as journals are revealed as good and innovative platforms to promote the connection between technology producers and technology demanding areas. Besides, those platforms also support national and international collaborations and knowledge dissemination. The launch of a scientific-technical journal is always a financial and human challenge, a very competitive task nowadays and also an intellectual adventure. In that context, the international technology development and its potential applications in several fields has contributed to the well-being of our society in an unprecedented way. Continuous research and technological innovation in specific areas such as those related to Biosciences will be essential to foster the development with technological advances in the future. This perspective clearly justifies this journal as a platform to improve the knowledge of the use of technology in Biosciences.

This journal welcomes original research papers, short communication, case reports, proceedings, reviews on new research breakthrough and innovative technology, and commentaries with a strong scientific basis to report pure science as well as technological issues and new developments to promote better understanding in Microbiology, Biochemistry, Medicine and related areas. Specific theme-based special issues on an identified topic relevant to this journal from conferences are also strongly encouraged.

References