

A16: Biomedical Informatics

Biomedical informatics tries to analyse problems in medical practice from the viewpoint of information management (medical and biological) and find the best solutions by using computers. Therefore, the emphasis is on the handling of data, information and knowledge, and not on the techniques and methods used. Many of the current problems of biomedicine have their root cause in the defects of analysing and managing information, which might have better solutions with proper systems from medical informatics.

Technologies are not the ultimate goal of biomedical informatics; however, it is indeed important to use methods that would not only allow building the best applications, but also sharing and reusing skills and knowledge by encouraging collaboration between research groups. These joint efforts are stimulated by the growth of the Internet and new techniques of Artificial Intelligence, database, programming and Software Engineering, which facilitate communication between applications and groups. The use of new technology-based systems (e.g. the Semantic Web or Grid) is contributing to a breakthrough in biomedical informatics.