



RESEARCH ARTICLE

Comparative Study of Microarray and Next Generation Sequencing Technologies

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Abstract— Huge efforts are being made to develop algorithms and procedures for DNA sequences. The purpose of this study is to expand understanding of how biologists, computational biologists, bioinformaticians, medical practitioners and scientists would benefit from next-generation sequencing and microarray technology in analyzing DNA and protein dataset. Microarrays techniques usage in analyzing biological dataset (gene expression) has grown exponentially for the past two decades. Recently, next generation sequencing technologies are revolutionizing the DNA/RNA sequencing tasks. These highly efficient parallel sequencing methods make it possible to generate billions of bases of sequence per day in a biological laboratory. These methods allow individual human genomes to be sequenced in an instant or one to two days. In this paper, a comparative study of next generation sequencing technology and microarray technology would be presented and the performance of the two techniques would be discussed.

Full Text: <http://www.ijcsmc.com/docs/papers/december2012/V120121205.pdf>