Global Market Study on Bioinformatics - Asia to Witness Fastest Growth by 2020

Description:

Bioinformatics is the combination of biology and information technology. It is used widely in the management of biological information in the field of medical, research and developments of drugs. It uses computer software tools for database creation, data management, data warehousing, data mining and communication networking. Bioinformatics deals with the recording, annotation, storage, analysis and retrieval of nucleic acid sequence, protein sequence and structural information. It has several applications in the fields of medicine and biology including molecular medicines, preventive medicines, gene therapy, drug developments, biotechnology and forensic analysis of microbes. It is also used in the study of genetics and genomes. Various advantages of bioinformatics include convenient and accurate verification of biological data, and storage and access to large amount of data. It also helps in fast sequence search through algorithm.

Owing to the growing applications of bioinformatics in drug discovery and development process, rising number of personalized medicines and clinical diagnostics also promotes use of bioinformatics. Moreover, growing information technology applications in bioinformatics and bioinformatics support in development of biomarker for safer drugs are some major drivers of the global bioinformatics market. Growth in information technology has resulted in various software innovations such as BLAST, Annotator, and GeneMark. These innovations are used in managing large amount of biological data in various research fields. In addition rising need for integrated bioinformatics system also boosted the growth of bioinformatics market. However, lack of skilled professionals and high costs for implementation of bioinformatics software are restraining the growth of the bioinformatics market. In addition, lack of interoperability among data formats is also restraining the growth of bioinformatics market.

Increasing number of merger and acquisition and new product innovation are some of the latest trend in bioinformatics market. Nanopore sequencing technology is one of the growth opportunities for the bioinformatics market.

In the geographical analysis, the report identifies and analyses market size and forecast of North America, Europe, Asia and Rest of the World (Row). North America is dominating the global bioinformatics market due to growing applications of bioinformatics in drug discovery and development, growing information technology applications in bioinformatics and rising number of R&D activities. Asia is the fastest growing market for bioinformatics due to rising number of R&D activities and rising government fund for research and developments.

This report provides in-depth analysis and estimation of the global bioinformatics market for the period 2014 to 2020, considering 2013 as the base year for calculation. In addition, data pertaining to current market dynamics including market drivers, restraints, trends and strategic developments has been provided in the report. The bioinformatics market is categorized on the basis of sector, application and tools and services. Based on sector the bioinformatics market comprises medical biotechnology, gene therapy, academics, animal biotechnology, agriculture biotechnology, environmental biotechnology and forensic biotechnology. Medical biotechnology is dominating the global bioinformatics market. Based on tools and services, the market comprises bioinformatics content/knowledge management tools, bioinformatics platform and bioinformatics services.

Some of the major companies operating in the global bioinformatics market are Life Technologies, Illumina, Inc., Agilent Technologies and Active Motif, Inc. Other companies include Bio-Rad Laboratories, QIAGEN, Knome, Inc, GE Healthcare and Quest Diagnostics. These market players have been profiled on the basis of attributes such as company overview, recent developments, growth strategies, sustainability and financial overview.

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