

# North America DNA Sequencing Market Forecast 2017-2023

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## Abstracts

### KEY FINDINGS

North America has the largest market share of the DNA sequencing market. Factors, which favor growth of DNA sequencing market, are better healthcare infrastructure, awareness about latest technologies, major biotechnology companies being based in this region and government initiatives for increasing research and development. The global DNA sequencing market is poised to grow during the forecast period of 2017-2023. Various reasons for growth of the DNA sequencing market are increase in demand for noninvasive detection, disease diagnosis and personalized treatment, decreasing costs of DNA sequencing and higher research and spending by biotechnology companies.

DNA sequencing is the method of identifying the precise sequence of nucleotides present in the DNA. DNA sequencing can be carried by various technologies, which are basically biochemical methods. The nucleotides in the DNA molecule are adenosine, cytosine, guanine and thymine. A person's DNA sequence contains information about personality traits, genetically determined illness and IQ level. This data can give the individual and physicians a very clear picture about the person's genetic information and help in providing personalized treatment, which will be most effective. This method will have a beneficial impact on other sciences like genetics, anthropology, forensic science, archeology, biotechnology and molecular biology.

DNA sequencing market is segmented on the basis of geography, technology, application and end user. Various technologies for DNA sequencing are Sequencing by Synthesis (SBS); ION Semiconductor Sequencing; Sequencing by Ligation (SBL), Pyrosequencing, Single-Molecule Real-time Sequencing (SMRT) and other

technologies. Classification on the basis of application is drug discovery, diagnosis, biomarker discovery, personalized medicine, agriculture and medical research and others. End user segments are research centers and academic & government institutes; hospitals & clinics; pharmaceutical & biotechnology companies; and, some others like NPO, agri genomics organizations, consumer genomic companies.

## **MARKET INSIGHTS**

Market drivers for DNA sequencing are growth in demand for noninvasive detection, disease diagnosis and personalized treatment, decreasing costs of DNA sequencing and higher research and spending by biotechnology companies.

Highest demand for DNA sequencing is from research and academic institutes. It is expected that this demand will continue in the forecast period and this will be the highest growing segment. Growth will also be fuelled by personalized medicine and biomarker discovery.

Factors that will restrain market growth are faster changes in technology, increase in competition, rising complexity of diseases, issues related to public health and safety and higher research and development costs.

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