

## **Abstract**

This research covers a broad survey of bioinformatics resources and data mining tools available on the web. Bioinformatics is the field of science in which biology, computer science, and information technology merge to form a single discipline. The three main public domain bioinformatics resources covered here includes NCBI (National Center for Biotechnology Information), EBI (European Bioinformatics Institute) and Genome Net (Japanese Bioinformatics Servers). The technology now has enabled researchers to gain global access to these databases and software. These databases and tools will provide the research community with a wealth of information and computing tools followed with the vast data generated by the Human Genome Project (HGP). A popular web-based data mining tool called 'BLAST' is explained in this study and its use demonstrated. An analysis of the output results by using 'BLAST' is obtained from the samples query sequences. An overview of the concept of molecular biology is also explained to enable non-biology researchers to better understand the significant of these results. The knowledge obtained will have implications on the understanding of the role played by biology and medicine in the field of new drug discovery. Ethical issues and the future direction of Bioinformatics are then discussed.