

Chapter 5

Conclusions

IDs pose a severe threat to the human health. Through many centuries, IDs have brought about huge losses of human life. They have created a substantial problem in the developing countries and particularly in children. Additionally, they represent a large financial burden. Among various IDs, IBD, melioidosis and EVD are predominantly associated with high mortality rates and considered as the most identifiable diseases by WHO. These diseases are of public health importance in tropical countries where people do not have access to the modern medical facility. It is necessary to study the genes responsible for causing these diseases which can be helpful for researchers in identifying the immunogens and drug targets. In view of above, SPGDB, HIGDB, MDB and EDB databases are created for *S. pneumoniae*, *H. influenzae*, Melioidosis and EVD respectively. These databases will act as a universal single point access of educative and information archive for these organisms. The databases will provide valuable genomic and proteomic information of the organisms to clinicians, microbiologists, health care workers and bioscience researchers. By giving the dynamic search and browse tools in the databases, the databases aim to act not only as a consolidated resource but also a flexible application platform for the comparative investigation of genomes of these organisms. And also, by combining and categorizing varied disparate datasets, the databases make it possible for medical professionals and researchers to query and investigate the data and to locate the components that add to the perplexing pathogenesis of the disease. The case studies are just an example of how integration of different tools in the databases can lead to new observations when examining the genomes of these organisms. The databases are thoroughly validated by checking their performance in the different web-browsers and in the different platforms. It gives the results of various searches more quickly but it may vary on the user-network speed. The databases will be updated on a periodic basis.