

# Study of transmembraneous protein using bioinformatics and data mining

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Membrane proteins perform diverse functions in living organisms such as transporters, receptors and channels. The functions of membrane proteins have been investigated with several computational approaches, such as developing databases, analyzing the structure function relationship and establishing algorithms to discriminate different type of membrane proteins. However, compilation of bioinformatics resources for the functions of membrane proteins is not well documented compared with their structural aspects. The purpose of the present work was to assess the study of transmembraneous protein using bioinformatics and data mining. Bioinformatics is the application of information technology to the field of molecular biology. Protein structure prediction is the important application of bioinformatics. Bioinformatics also provide researchers with software's and tools for analyzing the sequence data and deriving biologically meaningful information from a string of letters. By using application of bioinformatics one can predict isoelectric point, molecular weight, transmembrane helix and secondary structure of transmembrane protein.

**Key words :** Membrane proteins, Bioinformatics, Data mining, Transmembrane helix

**How to cite this paper :** Jamal, Shaheen and Sunita (2014). Study of transmembraneous protein using bioinformatics and data mining. *Asian J. Bio. Sci.*, 9 (1) : 71-75.