

Biological Sequence Analysis

Lecture 26, Statistics 246

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Synopsis

Some biological background

A progression of models

Acknowledgements

References

The objects of our study

DNA, RNA and proteins: macromolecules which are unbranched polymers built up from smaller units.

DNA: units are the nucleotide residues A, C, G and T

RNA: units are the nucleotide residues A, C, G and U

Proteins: units are the amino acid residues A, C, D, E, F, G, H, I, K, L, M, N, P, Q, R, S, T, V, W and Y.

To a considerable extent, the chemical properties of DNA, RNA and protein molecules are encoded in the **linear sequence** of these basic units: their primary structure.