

Iosif Vaisman

[illegible]

Hydrophobic

Alanine
Ala
A

Valine
Val
V

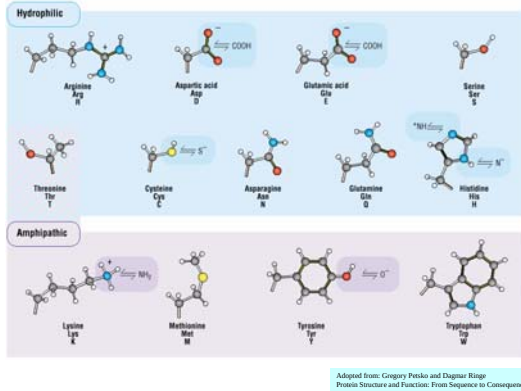
Phenylalanine
Phe
F

Proline
Pro
P

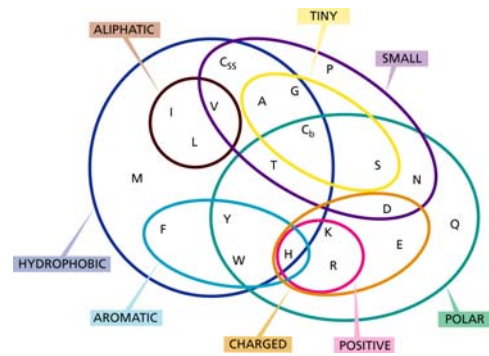
Leucine
Leu
L

Isoleucine
Ile
I

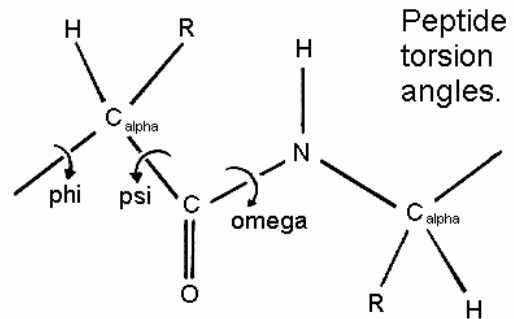
Amino Acids



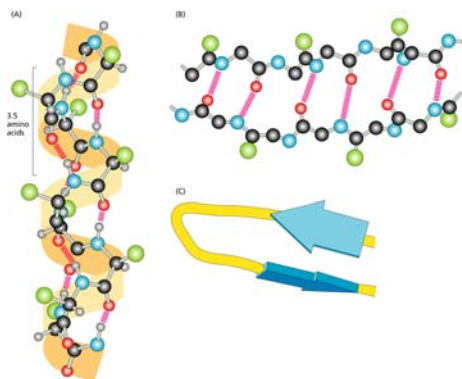
Amino Acid Residue Clustering



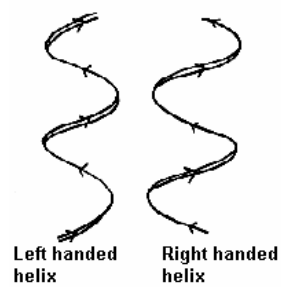
Amino Acid Residue Clustering



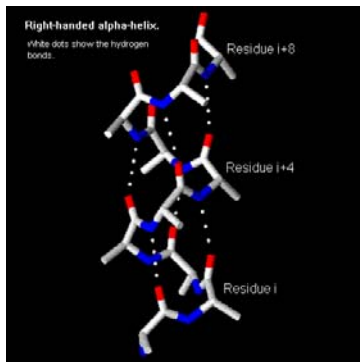
Secondary Structures



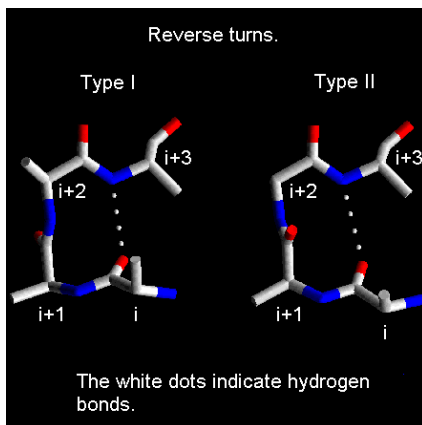
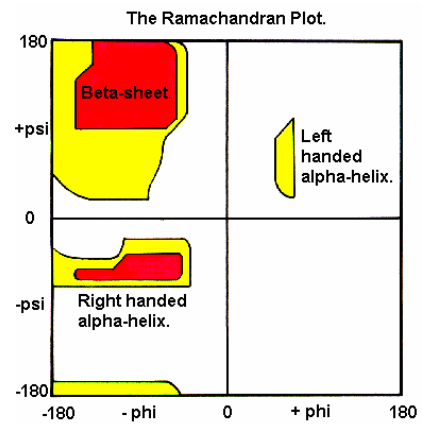
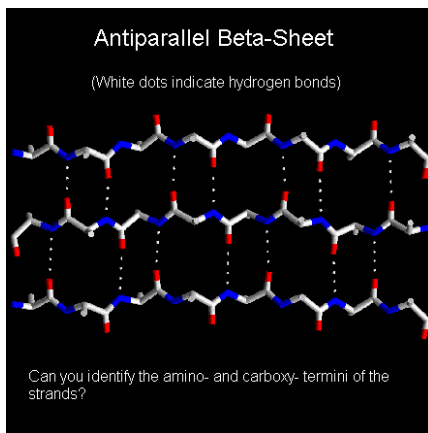
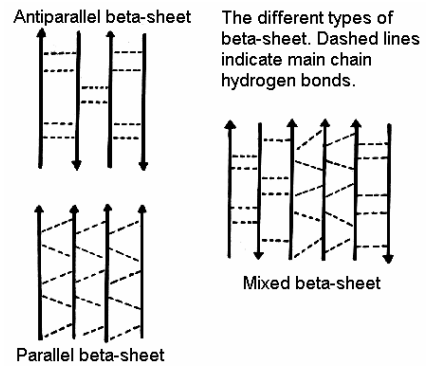
Secondary Structure (Helices)



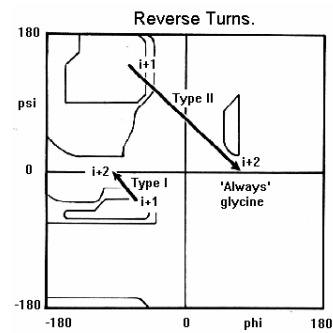
Helix

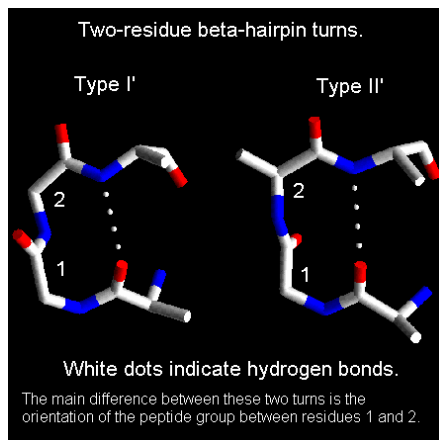


Secondary Structure (Beta-sheets)

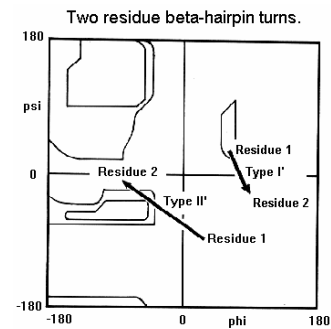


Reverse Turns on a Ramachandran Plot

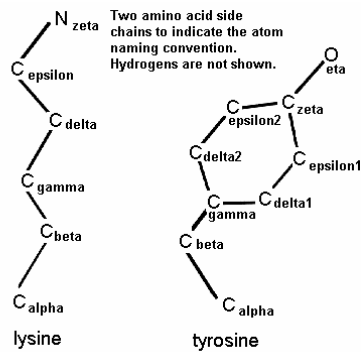




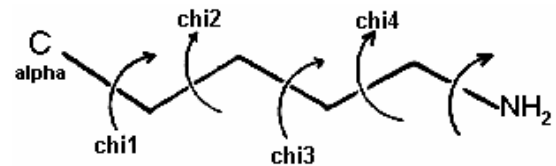
Beta-hairpin Turns on a Ramachandran Plot



Side-Chain Atom Nomenclature



Side-Chain Torsional Angles



Secondary Structure: Computational Problems

Secondary structure characterization

Secondary structure assignment

Secondary structure prediction

Protein structure classification