

Protein Structure

I. Background

- A. Biological Function
- B. Residue

II. Structure

- 1. Peptide bond
 - a. implications

A. Primary

B. Secondary

- a. α helix
- b. β sheet
- c. β turns
- d. undefined

C. Tertiary

- 1. major groups
 - a. fibrous proteins
 - 1) α -keratin
 - 2) collagen
 - 3) fibroin
 - b. globular proteins

D. Quaternary

- a. oligomeric
 - 1. allosteric controlled enzymes
 - 1) Catalytic subunit
 - 2) Effector subunit
- a. Notes

III. Denaturation

IV. Conjugated proteins

- A. Prosthetic groups

V. Ionization behavior

- 1. pI

VI. Peptides

- A. Oxytocin
- B. Bradykinin
- C. Enkephalin
- D. Amanitin