

# Fibrous Proteins

**1° structure** amino acid sequence

**2° structure**  $\alpha$ -helix } H-bonding between  
 $\beta$ -sheet } C=O and N-H of backbone  
 $\delta^-$   $\delta^+$

some proteins only have **1°** and **2°** structure:

fibroin (silk)	$\beta$ -sheet	} insoluble in H <sub>2</sub> O non-polar residues
keratin hair	$\alpha$ -helix	
collagen skin		