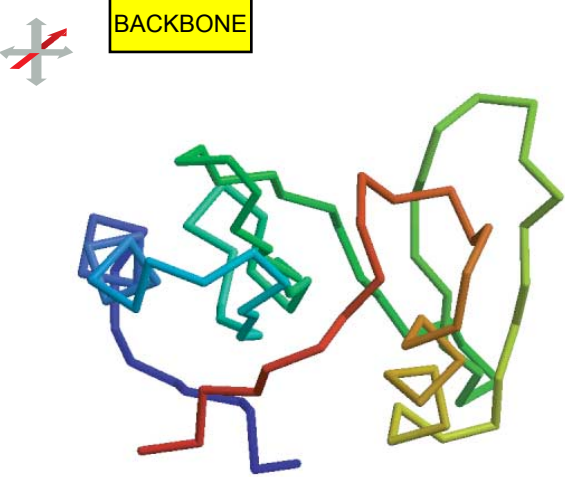
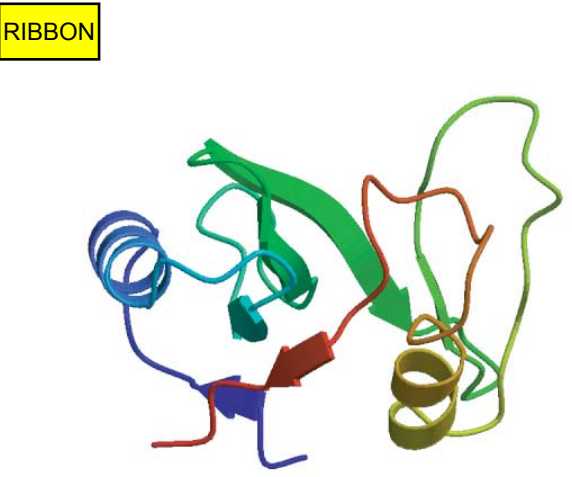
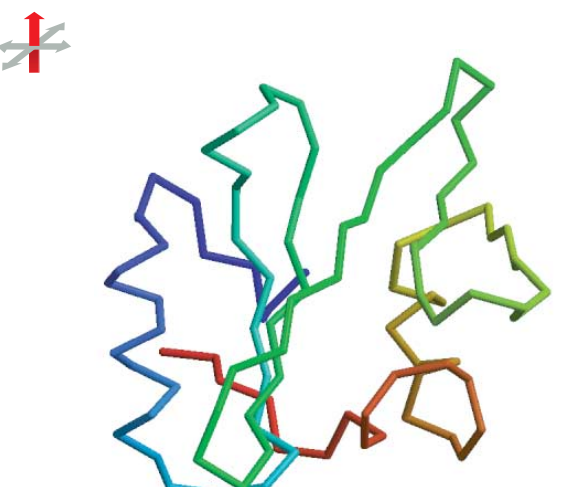
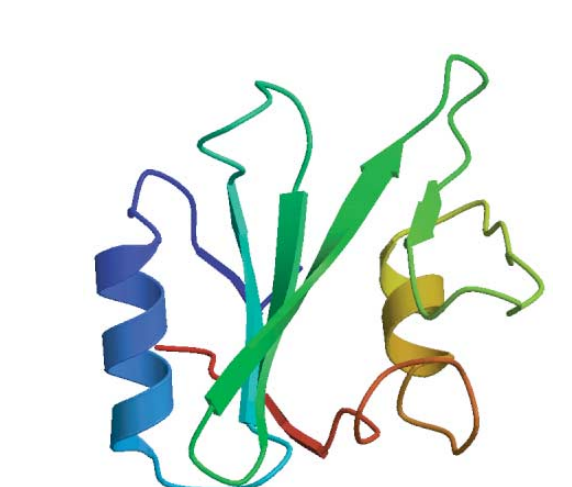
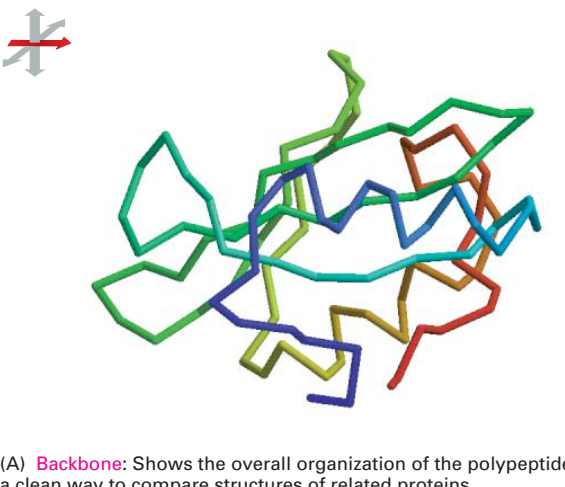
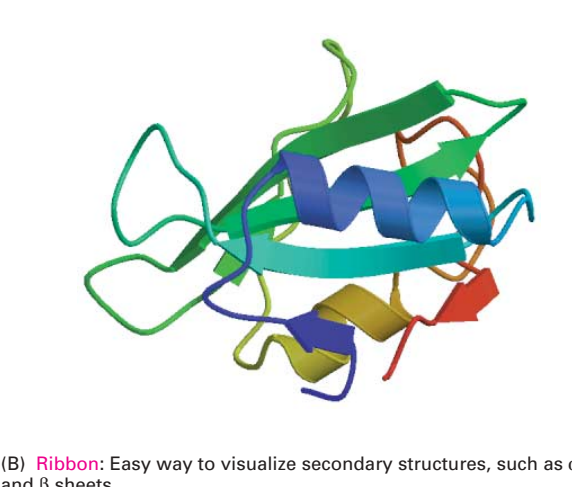
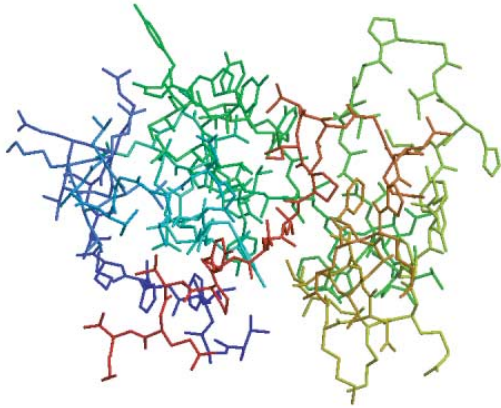


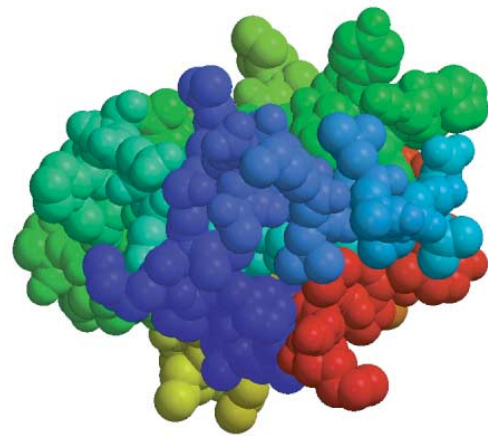
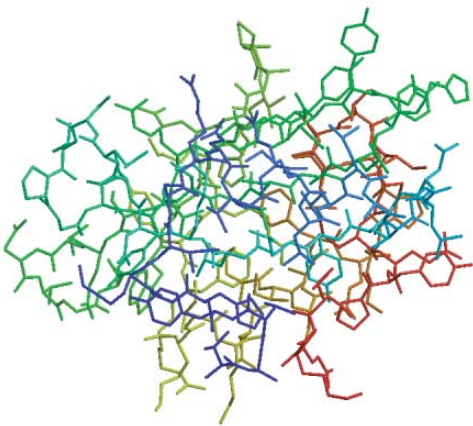
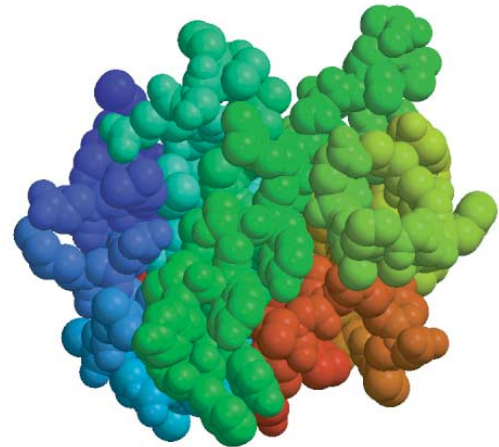
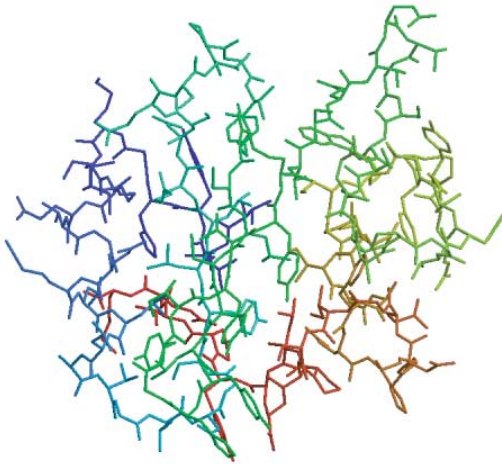
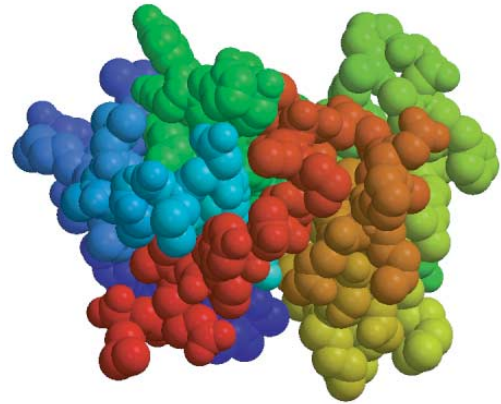
Panel 4-2 Four different ways of depicting a small protein

 <p>BACKBONE</p> <p>Diagram showing the protein backbone as a continuous, multi-colored line tracing the path of the polypeptide chain. The color gradient transitions from blue on the left to red and orange in the middle, and green and yellow on the right. A small icon in the top left corner shows a grey cross with a red arrow pointing to the right.</p>	 <p>RIBBON</p> <p>Diagram showing the protein structure using thick, multi-colored ribbons to represent secondary structures. Blue and cyan helices are prominent on the left, while green and yellow sheets are on the right. A small icon in the top left corner shows a grey cross with a red arrow pointing to the right.</p>
 <p>Diagram showing the protein backbone as a continuous, multi-colored line tracing the path of the polypeptide chain. The color gradient transitions from blue on the left to red and orange in the middle, and green and yellow on the right. A small icon in the top left corner shows a grey cross with a red arrow pointing to the right.</p>	 <p>Diagram showing the protein structure using thick, multi-colored ribbons to represent secondary structures. Blue and cyan helices are prominent on the left, while green and yellow sheets are on the right. A small icon in the top left corner shows a grey cross with a red arrow pointing to the right.</p>
 <p>Diagram showing the protein backbone as a continuous, multi-colored line tracing the path of the polypeptide chain. The color gradient transitions from blue on the left to red and orange in the middle, and green and yellow on the right. A small icon in the top left corner shows a grey cross with a red arrow pointing to the right.</p> <p>(A) Backbone: Shows the overall organization of the polypeptide chain; a clean way to compare structures of related proteins.</p>	 <p>Diagram showing the protein structure using thick, multi-colored ribbons to represent secondary structures. Blue and cyan helices are prominent on the left, while green and yellow sheets are on the right. A small icon in the top left corner shows a grey cross with a red arrow pointing to the right.</p> <p>(B) Ribbon: Easy way to visualize secondary structures, such as α helices and β sheets.</p>

WIRE



SPACE FILLING



(C) **Wire:** Highlights side chains and their relative proximities; useful for predicting which amino acids might be involved in a protein's activity, particularly if the protein is an enzyme.

(D) **Space-filling:** Provides contour map of the protein; gives a feel for the shape of the protein and shows which amino acid side chains are exposed on its surface. Shows how the protein might look to a small molecule, such as water, or to another protein.

(Courtesy of David Lawson.)