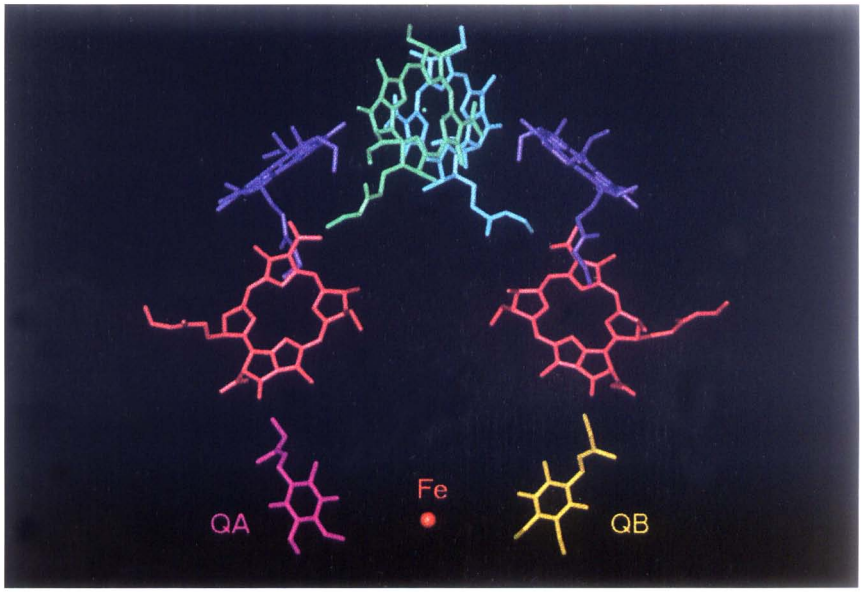

Figure 2. Arrangement of the electron transfer cofactors in the photosynthetic reaction center protein from the bacterium *Rhodobacter sphaeroides*. The figure shows the special pair of bacteriochlorophylls (top, in green and light blue), two accessory bacteriochlorophyll molecules (dark blue), two bacteriopheophytins (red), the primary quinone (Q_A), the secondary quinone (Q_B), and the non-heme iron.

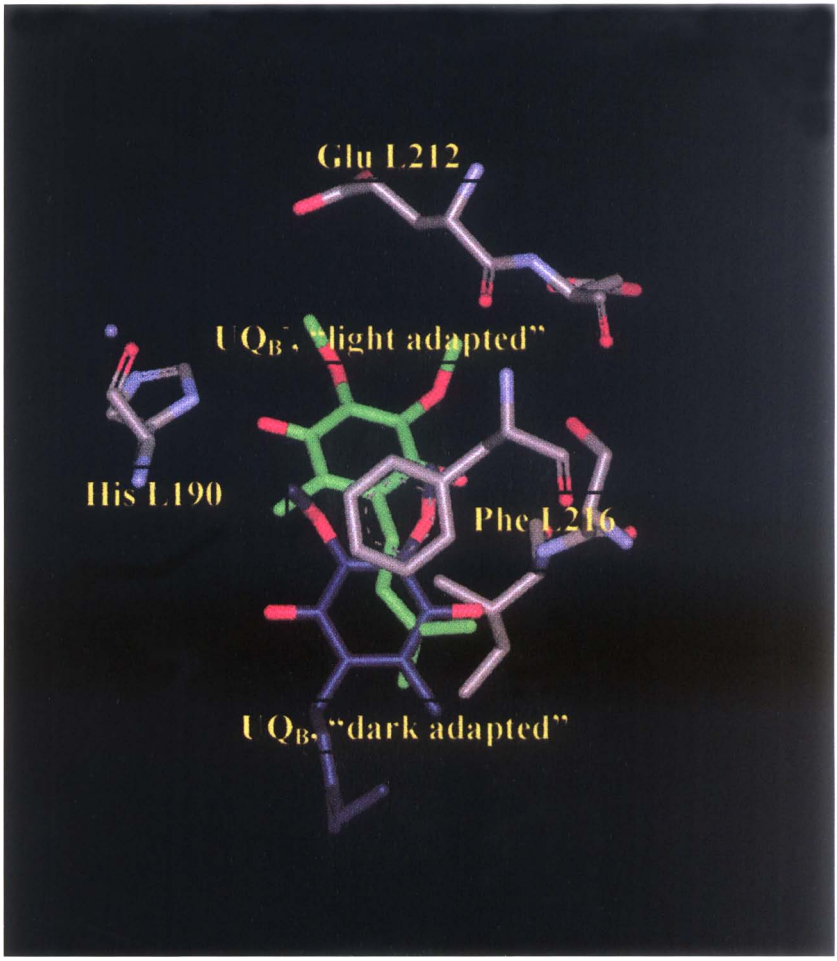

Figure 6. Amino acid side chains near the secondary ubiquinone binding site in the light adapted structure (green) of the Rb. sphaeroides RC. One oxygen of ubiquinone is within hydrogen bonding distance of the His L190 side chain and the Glu L212 side chain is oriented further away. Also shown is the binding site of UQ_B in the dark adapted structure (blue) and the Phe L216 side chain (Created from coordinates reported in reference 14. Isoprenyl chains of the ubiquinones have been truncated for clarity).