Structural Effects of Hydrophobic Surfactant Proteins on Lipid Bilayers

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**Goal:** Determine the structural changes produced by the proteins that allow rapid adsorption

Pulmonary surfactant lowers surface tension in the alveoli of the lungs, preventing alveolar collapse and maintaining bronchial functionality. Two essential hydrophobic proteins, SP-B & SP-C, promote rapid adsorption by the surfactant lipids to the air/water interface.

Small amounts of protein induce lamellar lipids to form curved structures.

Chavarha M., Khoojinian H., Schulwitz L. E. Jr.; et al. BIOPHYSICAL JOURNAL, 98, 8, 1549-1557