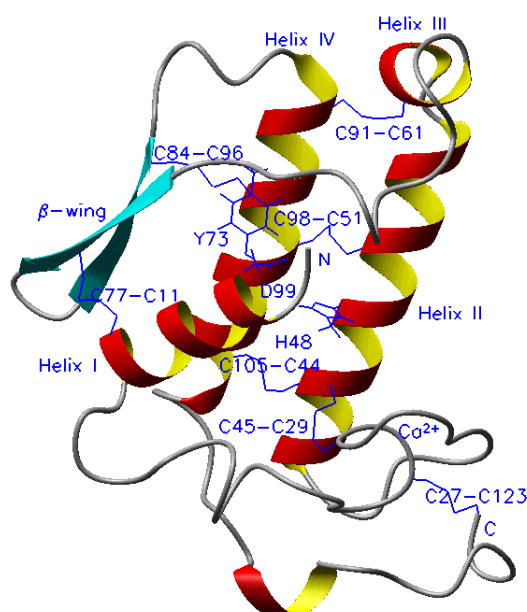


Phospholipase A₂ (PLA₂) (1988-2004). The chiral phospholipid work then led Tsai into another field: phospholipase enzymology. In 1988 his lab cloned and overexpressed the first PLA₂ in *E. coli*, which led to extensive structure-function relationship analyses in the subsequent 12 years. Along with his collaborators (M. Jain in interfacial enzymology, M. Gelb in transition state analogs, M. Sundaralingam in X-ray), Tsai has elucidated the catalytic mechanisms and contributed to the understanding of how these enzymes work at the surface of membranes. Nearly 100 site-specific mutants have been constructed and characterized. The methodologies of stereochemistry and NMR have been fully exploited to the system. The work has been summarized in a comprehensive review in *Chemical Reviews* (#154).



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