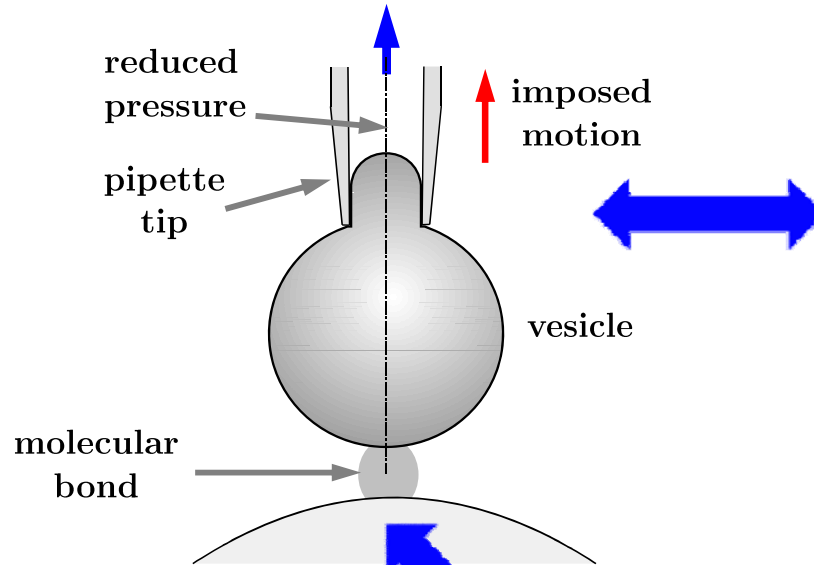




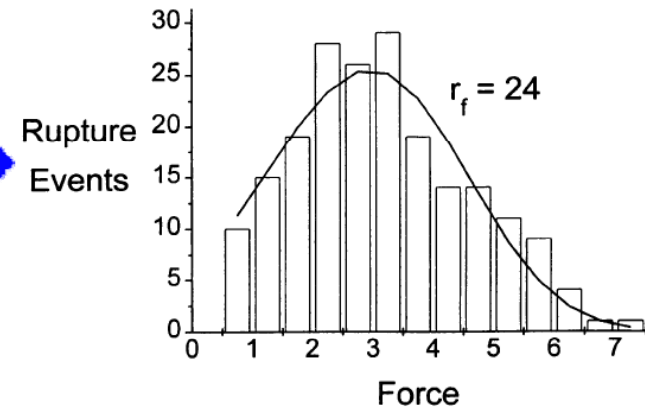
# Molecular bond-well characteristics from force history observations

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Biomembrane Force Probe  
(Evans and Ritchie, Biophys. Jnl. 1997)



Measured probability distribution of rupture force at a fixed loading rate



Theoretical work in the Brown MRSEC program has led to a method for extracting molecular bond characteristics (well depth  $c_b$ , stiffness  $a/c_b$ , and dissipation rate) from laboratory experiments on single-bond rupture experiments.

