



Figure 3: Shapes of flowing red blood cells in vivo in a capillary, with most cells showing an apparent parachute-like shape. The unique properties of the blood cells along with their small size (of a few μm only) motivates an increased interest in pharmaceutical and bioengineering companies.



Figure 4: RMBB-98, a recently developed drug, is an example of pharmaceutical microemulsions. Understanding the properties of the bulk solution as well as the individual cells will provide important information on the drug action. For example, can we estimate the time it takes for the drug to diffuse through our skin?