Modern medicine, especially surgery, would not have been possible without general anaesthetics. Although they have been in use for over 160 years, their mechanism of action is still poorly understood.

This talk addresses attempts to elucidate the molecular mechanisms of general anaesthesia. After a brief introduction of the putative anatomical site of action, I shall describe the role of the membrane and the GABA type A receptor in general anaesthetic action, and conclude how future research should be conducted with the help of physical methods.