

The bacterial protein toxins endowed with the ability to translocate across the plasmatic membrane are often crucial virulence factors of pathogenic bacteria invading eucaryotic organisms. These toxins translocate either their own protein domains carrying toxic activity or can form pores transferring other substances like small ions, DNA, RNA or proteins. By observing the translocation of these molecules together with others artificially prepared agents on synthetic membranes allows detailed understanding of mode of action of individual pore-forming toxins. Some of the toxins were actually described in such a detail, that can serve as investigation tools for characterization of new translocated molecules. One of such example is the transfer of nucleotides or whole nucleic acid molecules across the membrane pore of  $\alpha$ -hemolysine of *S. aureus*. This applications is in recent days commercially used for DNA sequencing.