

Abstract

Relations between several events running in bacterial cell during cell cycle were the subject of many studies during last years. More advanced techniques showed, that bacterial cell life has much more variable factors, than we supposed before. Relatively recent researches managed to reveal function and in few events molecular principle of several mechanisms coordinating those events such as progression of replication and its initiation, segregation of newly replicated chromosomes and after all synchronization of complex cell division machinery. Furthermore it showed variability of those events during changing living conditions of the cell.

Keywords: *Cell cycle, regulation, initiation, replication, segregation of chromosome, cytokinesis, Bacillus subtilis*