## **Abstract**

The main task of this work is create review today's available methods for gene expression analysis, introduce advantages and disadvantages of this metods and compare them. Nowadays sequencing is one of the most usable molecular methods. Sequencing methods are divided to three groups, a first generation sequencing, a second generation sequencing and a third generation sequencing. The most useful are the second generation sequencing. However, the third generation sequencing have a big potencial too. It is not necessary amplificate samples using PCR thanks them.

Amount of data raises rapidly, thanks decreasing costs and increasing efficiency. Demands on data starage, computers output are growing. And softwares for data analysis are much clever than ever before.