

ADAPTATION GENOMICS

Summary

Adaptation genomics is a multidisciplinary research program, which aims at detecting genomic patterns resulting from the process of adaptation. Studies in this field can be divided into 3 groups: laboratory experiments that model evolutionary processes, studies on convergence and parallelism and genome wide association studies. Results from particular scientific approaches should be interpreted in different ways. The three approaches accompa-

nied by examples are discussed in detail and then I try to draw some generalizations, which indicate that adaptation is a complex process, also at the molecular level . Repeatability of adaptation is evident at the level of metabolic pathways and large number of genes in genome evolve under positive selection. Unfortunately other problems remain unresolved. Basic terminology related to the field of adaptation genomics is introduced.