## Genetic engineering – transgenic microorganisms

**Engineering** 



Transgenic microorganisms are crosses between two animals or agrarianism. Scientists cross breed them. Most commonly used are genetic fruit flies to study the effects of genetic changes on development. Flies are preferred over other other animals because their vertebrae are simpler than other organisms. Modified bacteria are used to produce the protein insulin, to treat genetic diseases like diabetes, hemophilia, and dwarfism. Transgenic animals have had their genes altered. A majority of these animals are mice. Scientists can now produce these animals thanks to Crick and Watson discoveries.

A transgenic plant; however, has genes that eave been inserted in them rather than through pollination. Benefits oftenest plants are that they can fight droughts, as well as insect resistance. Less pesticide would be used. An example Of a transgenic plant is the rape plant, which pollinates weeds. According to Google. Com, DNA fingerprinting is the analysis from samples of body tissues or fluids in order to identify individuals. It is very unlikely two people would have the same fingerprint. DNA fingerprinting is beneficial in many ways including paternity tests, crime investigation and identify organisms causing a diseases.

The testing can be done voluntarily by providing a sample of blood or a swab of the cheeks inside a person's mouth . The Human Genome Project was completed in April 2013 and it was a computerized system where you donate your DNA to be scanned into a computer base worldwide. They match your DNA with people all over the world. You paid to have your DNA sent in and all our genes sent together are known as a 'genome.' The project is beneficial

because they can track diseases and help prevent them. Gene therapy is a technique that helps prevent or treat disease by using genes.

Gene therapy is not unethical, it old prevent diseases from passing down through generations. Feel this way because it could help cure diseases that we never had the privilege to cure before. If were to create my own transgenic organism it would be a mix between contractible that captures light from the sun and a cow. Transgenic cow, can provide food and sunlight received from the bacteria. It does not take up farmland all it has to do is stand in the sun. It can get all the protein and nutrients needed. Cows give us milk and meat, which could be healthier without all the pesticides. I would call the animal cannot.