## **Synthetic Biology**

Is it possible to create artificial life? In 2010 scientists created and presented to the public the first self replication organism with a completely artificial genome. Synthetic genes are designed in the lab. New organisms are designed from the scratch.

Possible applications range from medical purposes and the production of biological weapons to agriculture and energy production. The impact of synthetic genes or organisms cannot be predicted once they are released into the environment. Synthetically derived gene sequences, designed for certain purposes, can cause unintended and adverse effects triggered by interactivity with the environment or with other gene sequences. This is a development that needs to be addressed during the "2010 International Year of Biodiversity" as proclaimed by the United Nations.

Testbiotech demands new international regulations to safeguard the evolutionary integrity of existing biological diversity. The release of synthetically designed organisms into the environment must be prevented.

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