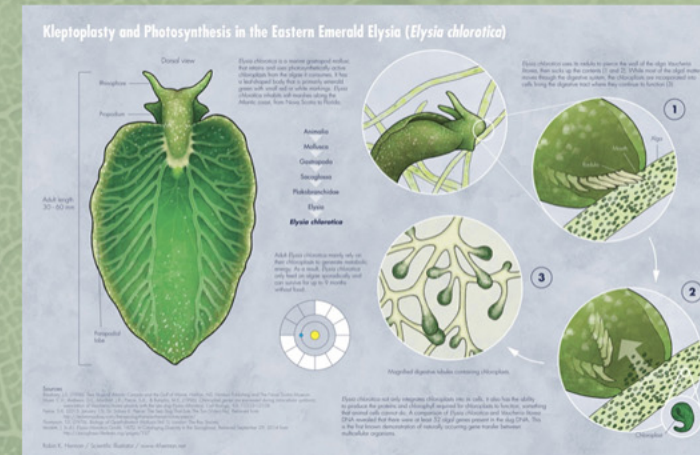
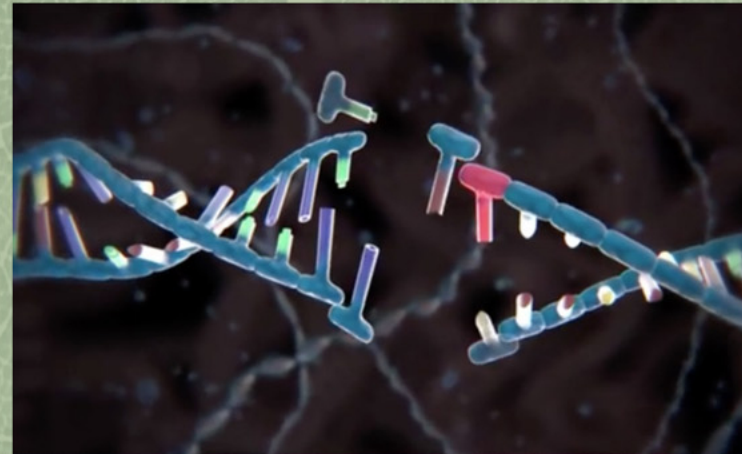


The process by which we can achieve the perfect photosynthetic self-sustenance

Gene can be modified, eliminated or added in any organism, including in humans with more and more precision thank to the innovative technique called CRISPR/Cas9 that allows to perform genome editing. With this technique the human genome can be edited in order to inherit other genes.



Elysia chlorotica is a mollusk in which have been identified some genes, such as psb O, obtained, by horizontal transfer (maybe thanks to a virus?), from Vaucheria litorea algae. This gene allows Elysia to keep the chloroplasts contained in the cells of the same algae it normally feeds on.

The presence of chloroplasts and their genetic heritage allows the mollusk to carry out the photosynthetic process as the algae would do.

Like Elysia chlorotica, Homo sapiens also has the potential to make itself energetically sustainable. Thanks to CRISPR / Cas9 the genes responsible for the synthesis of those proteins necessary for the maintenance of chloroplasts can be inserted in the human genome. These organelles will later be acquired through a diet based on Vaucheria litorea. In this way, humans will finally be able to live and feed in an autotrophic way as photosynthesizing organisms, remaining motionless as leaves under the light.

