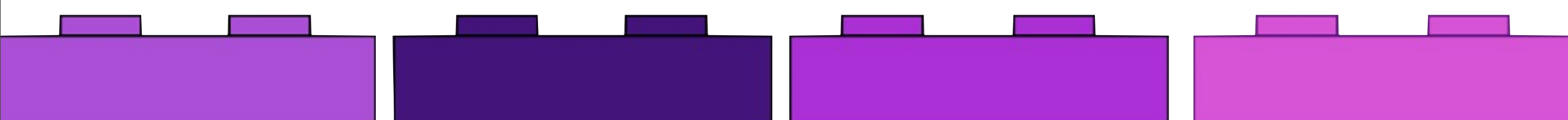


Molecular Machines

Synthetic Biology combines biology and engineering to 'construct' new cells to perform a function not already found in nature, such as 'biological factories' producing valuable substances.

This can be done through design and construction of new biological components and systems, or the redesign of existing systems already found in nature.



Our Project: Compete in the international iGEM competition by producing a synthetic alternative to palm oil

What Is Palm Oil?

- A vegetable oil used in many industries, from chocolate to beauty products
- Can be used as a replacement for trans-fat

The Problem Of Palm Oil

- Palm oil comes from palm plantations
- Forests the size of 300 football fields per day are destroyed to make room for the plantations, meaning orang-utans are losing their natural habitat!



Our Solution

- Use *E. coli* to make palm oil to save the orang-utan
- We will construct BioBricks™ to refine the bacteria's natural processes!



What Are BioBricks?

BioBricks are the backbone of synthetic biology. BioBricks are standardised pieces of DNA which can be inserted into biological cells, in order to complete a specific task. A bit of tinkering can produce amazing things!

The Registry of Standard Biological Parts was created alongside the iGEM competition. Using the registry is as simple as sending a request for a part, waiting for it to be delivered to your workspace, and putting it into your organism of choice!

