**Chew Fight**

**Team: Aix-Marseille**

**Introduction**

**Problems linked to chewing gum**

- A large quantity of water, energy and time are wasted to clean it
- Toxic for wild life and for the environment
- Cities spend millions of dollars per year to clean it
- It takes 5 years to be degraded

**Human practices**

1. **The Market**
   - Thanks to various testimonies (notably CNET, a French cleaning company) we know that an eco-responsible product will find a place in the market.

2. **Product's image**
   - The opinions are globally divided about GMO's utilization. In Europe GMO utilization sounds not so good as in USA. So, it is difficult to introduce our product without a strong communication campaign.

3. **What about patents?**
   - The intellectual property code contains a huge number of laws differently interpreted by the population. To commercialize our product, we should patent it and go beyond national laws transcription problems.

**Results**

**DNA constructions were verified by PCR, digestion and sequencing.**

Proteins were produced in aerobic conditions and purified by affinity chromatography with the His-tag.

**Cytoschrome C**

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**Enzymatic activity**

**Question:** Can the laccase oxidize the cytochrome C?

**Software & Modelling**

- We created a software tool which generates linkers in order to calculate the minimal distance between two proteins. Let's try it!

**Interlab study**

- All the machines except the confocal microscope were calibrated using a standard solution of the dye Atto488. This allows us to compare the measurements on the different instruments.

**Our results:** 1223000 is the strongest combination compared to the negative control P77.