Supervisor: Prof. Marco Moracci Tutor: Dr. Giuseppe Perugino

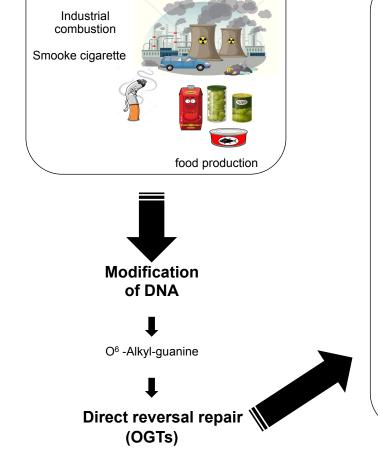
Where are alkylating agents?

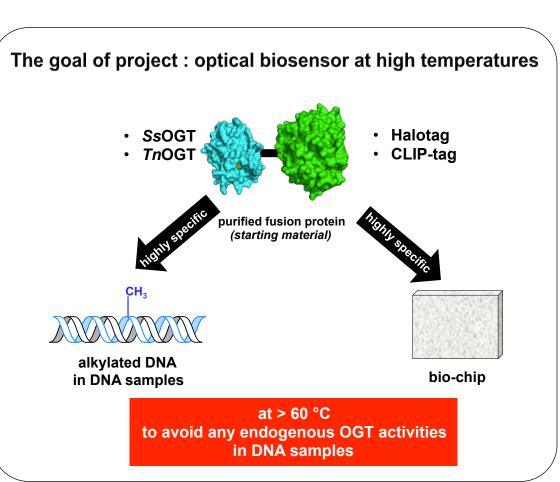




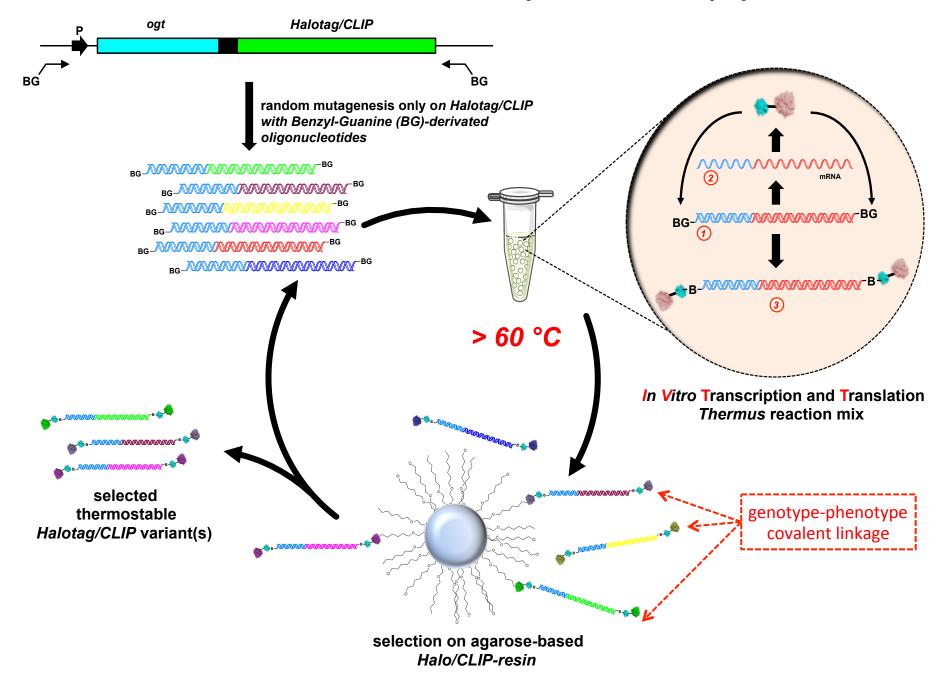
Development of a new enzyme-based biosensor for detection of damaged DNA by using the thermo SNAP-display technology

PhD in Biotechnology, XXXIII cycle

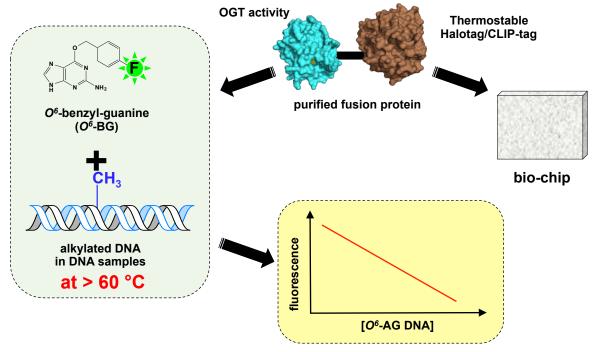




Selection of a thermostable variant of the chimera by a Thermo SNAP-display



The production of a Bio-chip based on a chimera



Expect results

The project is expected to provide the following results:

- Obtain a thermostable recombinant chimera;
- characterization enzymatic of SsOGT-Halotag protein.
- Expression SsOGT-Halotag/CLIP-tag in Thermus thermophilus HB27;
- obtain a library of SsOGT-Halotag/CLIP-tag mutants;
- selection of thermostable variants with thermo SNAP-display.
- Bio-chip construction and development;
- testing the thermostable variant of chimera with alkylated DNA samples.