

**Title: Characterization of the genetic expression during the intestinal regeneration of the sea cucumber *Holothuria glaberrima* through RT-PCR**

Electroporation is a technique used to permeabilize the cell membrane with the purpose of introducing drugs and genetic material into cells using short electric pulses of an intense electric field. Nonetheless, previous research have seen that this process has an effect in cell proliferation of the intestinal tissue explant of the sea cucumber *H. Glaberrima*. So, we gave ourselves the task to determine the efficiency of Lipofectamine as a transfection method in the intestinal tissue. With this, we plan to develop and optimize the technique, so we can introduce double stranded RNA to the explant and characterize the genes involved in the process through Real Time-PCR.