Functional Genomics Area Gene Perturbation



The **Gene Perturbation** platform is equipped with the necessary equipment for the transformation and culture of embryos of marine organisms.

The area is equipped with: a puller to prepare microinjection needles, an electroporator and n. 3 microinjection setups necessary for the transformation of zygotes.

There are also n. 3 refrigerated incubators and a thermostatic chamber (walk-in) for the growth of embryos at the required temperature (typically 15, 18 and 20°C).

Bookable Instruments	Description	
Electroporator BioRad Gene Pulser II	It is a modular system to transform any type of eukaryotic cell thanks to an electrical impulse transmitted to the cells through a special electroporation chamber.	
Puller Sutter P-97	It is a specific tool for making micropipettes and microinjection needles that combines a precise mechanical system with a programmable microprocessor, which allows to obtain a wide range of needles suitable for various needs, ensuring reproducibility.	
Microinjection setup 1	<u>Under construction</u>	
Microinjection setup 2	Under construction	
Microinjection setup 3	Under construction	

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Refrigerated incubator <i>Panasonic</i>	Suitable for a wide range of applications that require a temperature range of 10/60°C. The control unit allows you to set 10 programs of different temperature/time cycles. Equipped with internal fluorescent lighting lamp.		
Refrigerated incubator <i>Memmert</i>	It is particularly suitable for air thermostating below room temperature. Thanks to the forced air circulation, a series of digital control devices and an internal data logger, the system allows constant monitoring of temperature.		
Refrigerated incubator <i>VELP Scientifica</i>	It keeps the internal temperature constantly controlled thanks to a dedicated software that continuously compares the current value to the set temperature value and aligns them by means of a rapid and precise system.		
Walk-in	The chamber, usually at a temperature of 18°C, with a programmable light cycle, is equipped with: stereomicroscope, tilting agitator and thermostated bath.		