

Labs & Equipment

Processing lab:

Quartz crystal microbalance Q-sense, Biolin Scientific.

Plasma Cleaner, Harrick Plasma.

Thermostated Electrospinning Unit.

Microtome Leica.

Analytical balances and Shakers, UV lamp.

Spin coater 200 i

Physical characterization lab:

ZETASIZER NANO ZSP system.

Differential Scanning Calorimeter (DSC), Mettler.

Spectroscopic Ellipsometer range 210-880 nm, UVISEL.

Spectrophotometer UV-Visible Varian Cary 100 with refrigerated cell.

Light Scattering with thermostatic cell, Brookhaven.

Rheometer, TA Instruments (mod. ARES-G2).

Refractometer RE50 Mettler.

Titration, T50 Mettler.

Infrared spectrometer, Bruker Tensor 27.

Video-measurement automatic system OCA of the contact angle, 15 plus NEURTEK.

Nikon Eclipse 80i Triocular Microscope with polarization chamber and digital photo camera. Optiscan III control system: motorised focus drive, joystick

Computer equipment, analytical balances, ultrasonic baths, compressor and others.

Electroforce 5500 series

Chemistry lab:

Extractor hoods, WALDNER and BURDINOLA.

Rotary evaporators with vacuum pumps.

UV Cabinet Camag.

Ultrasonic bath.

Centrifuges Thermo Scientific ST16R, Eppendorf, J. P. Selecta.

Ovens, SELECTA and MEMERT.

Analytical balances, thermostated baths and shakers.

Cell culture room:

Biological safety cabinets, Telstar BIO II A.

Nikon Eclipse Ti E reverse fluorescence microscope with video camera, filter motorization, condenser, shutter, camera lens and XYZ axis.

CO₂ Incubator, Thermo Forma Model371 Steri-Cycle

N₂ Container Thermo Forma.

Refrigerated centrifuge Eppendorf Model 5810R with fixed and movable rotors.

Molecular biology lab:

PCR thermal cycler Eppendorf and Simplicamp.

qPCR 7500 Fast Real Time PCR System.

DNA concentrator, DNA-120 SpeedVac Thermo Scientific.

Automated nucleic acid and proteins purification system.

Incubators, MaxQ Mini 4000 Thermofisher and Certomat R.

Thermomixer incubators, Eppendorf, Pierce and Eppendorf.



Microcentrifuges Eppendorf and Thermo Scientific.

Spectrophotometers Nanodrop 2000C Thermo Scientific, SpectraMax M2e, SpectraMax L.

Column chromatography with collector and pump.

Electrophoresis units with chamber and power supply.

Western Blot transfer unit.

Multimode plate reader (absorbance, fluorescence and luminescence) with injectors.

Camera Kodak Gel Logic 100 with UV transilluminator and negatoscope.

Image acquisition system Gel Doc Ez Imager BIO RAD.

Asymmetrical agitators, Heidolph.

Laminar flow cabinets Cruma

Oven Memmert.

Thermostated Shakers, Freezers -80°C, pHmeter Crison, magnetic shakers, colony counter.

Biotechnology lab:

Water purification systems Milli-Q A-10 Synthesis and Elix 10 Millipore, 200L tank.

2 automated fermentation reactors, 15L Fermenter from Applikon and a 100L Fermenter from Bioprocess.

Incubator shaker C25 New Brunswick Scientific.

Tangential flow filtration system from Millipore with Cole Parmer peristaltic pump.

Ultrasonic equipment: Misonix 750W.

2 Constant system cell disruptors, TS Series 0,75KW and GEA Panda 2000.
Soundproof compressor without oil, SOLID 100 DE 8Bar.

Cold room of 6m².

Refrigerated centrifuges, GEA, Thermo Scientific, Sorvall and Beckman.

Centrifuge Eppendorf.



2 Autoclaves: 140L from Cruma and 75L from Selecta.

3 Lyophilizer Labconco, 1L, 6L and 25L.

Thin-layer chromatography UV display.

Laminar flow cabinet CRUMA.

Thermostated water baths, sterilization stoves Selecta, thermostated shakers, analytical balance and others.

Min Bioreactor 500

Other:

Together with the material equipment, and as a result of the work carried out in the recent years regarding the fields of regenerative medicine and drug controlled release, the group has:

Bank / synthetic gene library containing more than 250 genes and 30 “building blocks”. The latter can be combined quickly to generate new late genes for the design of materials with different applications. All of them, both final and “building blocks” of high interest in biomedical applications.

Bank of transgenic bacterial strains able of producing more than 40 protein polymers designed for various applications.

Equipment of the LUCIA building managed by the BIOFORGE group

2 laminar flow cabinets

3 cell incubators

Nanodrop 2000c spectrophotometer, Thermo Scientific.

7500 Fast Real-Time PCR system, Applied Biosystems

PCR chambers

MagPurix system

Rotary evaporator

Thermal disinfectant system

Lyophilizer, Telstar

Autoclave

Centrifuge