

FACILITIES E STRUMENTAZIONI ACCESSIBILI PRESSO IL CENTRO
A DIRETTA GESTIONE DELLA STRUTTURA

“FACILITIES & EQUIPMENTS”

1) LABORATORIES FOR CELL CULTURE AND CELL-BASED ASSAYS

Contact persons:

Dr Carlotta Alias, e-mail: carlotta.alias@studenti.unipr.it, Tel. (+39) 0521-906003

Dr Serena Galati, e-mail: serenagalati@gmail.com, Tel. (+39) 0521-905608

Dr Elisa Tamburini, e-mail: elisa.tamburini@unipr.it, Tel. (+39) 0521-906003

Standard fees

35 Euro/hour – 155 Euro/day for *Internal users*

75 Euro/hour – 350 Euro/day for *External users*

COMT offers the possibility to use its laboratories to culture cells provided by the customer or available at COMT. Along with the Cell Culture Laboratories, the Centre offers access to a variety of primary cell cultures, mammalian cell lines and hybridomas. All cell lines used in the Centre's Cell Culture Laboratories are assured to be free of virus and bacteria. Investigators may cultivate their own cell lines and, in this case, a “Certificate of Analysis” to confirm the absence of contamination is needed.

Available equipment:

- Biosafety Cabinet
- CO₂ incubators
- Water bath with temperature control system
- Inverted microscope
- Bench centrifuge
- Vortex
- Pipettes and pipette tips and consumables

Other specific equipment:

- Magnetic beads system for cell isolation and cell separation
- Electroporators
- Cell shape and vitality analysis systems
- Bench-size bioreactors

Laboratories for *Cell Culture and Cell-Based Assays* are generally equipped with different optical microscopes and instruments for live-cell monitoring and for cell-based assays.

Dedicated equipment:

- Inverted and epi-illuminated fluorescence microscopes equipped with image analysis softwares
- JuLI Smart Fluorescent Microscope for live video or time-lapse registration under sterile conditions
- Fluorescence and luminescence microplate readers

- Fluorescence/phase contrast multichannel system for cell adhesion assays under flow conditions (BioFlux)
- Cell-cell and cell-substratum analysis system based upon impedance (xCELLigence)
- Flow cytometers (BD Biosciences, Beckman-Coulter)

The use of some of the above, more sophisticated equipment may imply additional costs.

Capabilities of long-term storage of sensitive materials and cells are guaranteed with -80°C freezers and liquid nitrogen dewars for cryopreservation.

2) LABORATORIES FOR BIOCHEMISTRY AND PROTEOMICS

Contact persons:

Dr Federica Rizzi, e-mail: federicamariaangel.rizzi@unipr.it, Tel. (+39) 0521-903816

Dr Elena Garusi, e-mail: elena.garusi@studenti.unipr.it, Tel. (+39) 0521-906003

Standard Fees

45 Euro/hour – 165 Euro/day for *Internal users*

90 Euro/hour – 370 Euro/day for *External users*

Laboratories for *Biochemistry and Proteomics* provide a full range of facilities and equipments for cDNA cloning, expression in suitable host organisms and purification of recombinant proteins. The extraction and purification of proteins from different tissues and cell lines can also be carried out alongside a wide spectrum of immunochemical and protein-protein interaction assays.

Available equipment:

- Chemical fume hood (class 1)
- Chemical fume hood (class 3)
- Laminar flow hood for bacteria cultures
- Shaker/incubators for bacteria cultures
- AlphaImager[®] HP gel documentation system
- Microplate readers
- Water baths
- Bench centrifuges
- Concentrator system
- Vortex
- Bio-Photometer
- Thermoblock
- Magnetic stirrers
- pH meter
- Precision balance
- Analytical balance
- Orbital Shaker
- Transilluminator
- Manual and automated SDS-PAGE and Western blotting systems
- Nucleic acid electrophoresis system
- Water bi-distillator system
- Microwave oven
- Conventional and nano-scale spectrophotometers
- Optima TM L-100XP ultracentrifuge

3) LABORATORIES FOR MOLECULAR BIOLOGY

Contact persons:

Dr Silvia Rossi, e-mail: silvia.rossi1@unipr.it, Tel. (+39) 0521-905655

Dr Nicoletta Bertani, e-mail: nicoletta.bertani@unipr.it, Tel. (+39) 0521-906003

Standard Fees

55 Euro/hour – 215 Euro/day for *Internal users*

110 Euro/hour – 450 Euro/day for *External users*

Laboratories for **Molecular Biology** provide a full range of services for DNA and RNA extraction, purification and analysis by qualitative and quantitative Real-Time PCR. Global gene expression analyses are offered in the form of DNA microarrays.

Available equipment:

- qPCR Workstations
- GeneAmp PCR System 2700
- *StepOne* Real-Time PCR System
- *DNA Engine OPTICON* Real-Time PCR system
- Centrifuges
- DNA microarrays equipment:
 - Nano-scale spectrophotometers (*NanoDrop 2000* and *BioSpectrometer*)
 - RNA/DNA Bioanalyzer *TapeStation 2200*
 - Hybridization oven
- Incubators
- Electrophoresis units
- Gel documentation systems

4) LABORATORY FOR CELL IMAGING

Contact persons:

Dr Mirca Lazzaretti, e-mail: mirca.lazzaretti@unipr.it, Tel. (+39) 0521-905608

Dr Carlotta Alias, e-mail: carlotta.alias@studenti.unipr.it, Tel. (+39) 0521-906003

Standard Fees

55 Euro/hour – 215 Euro/day for *Internal users*

110 Euro/hour – 450 Euro/day for *External users*

The laboratory for **Cell Imaging** is a complementary laboratory to the ones dedicated to cell-based assays and is equipped for fluorescent and real-time analyses of single cells *in vitro* and *in vivo*. Single-cell analysis *in vitro* span from qualitative and quantitative measurements of cell proliferation and apoptosis to complex analysis of cell movement in 2D and 3D settings. *In vivo* analysis of cell behaviour are based upon the chick embryo chorioallantoic membrane (CAM)-assay.

Available equipment

- Motorized and automated inverted fluorescence microscope equipped for video time-lapse and image analysis
- Stereomicroscope equipped for fluorescence cell monitoring, image analysis and microinjection
- Epi-illuminated fluorescence microscope equipped with high-resolution video camera and dedicated softwares for image acquisition and analysis

5) LABORATORIES FOR HISTOLOGY AND IMMUNOHISTOCHEMISTRY

Contact persons:

Dr Mirca Lazzaretti, e-mail: mirca.lazzaretti@unipr.it, Tel. (+39) 0521-905608

Dr Nicoletta Campanini, e-mail: nicoletta.campanini@unipr.it, Tel. (+39) 0521-702628

Standard Fees

25 Euro/hour – 55 Euro/day for *Internal users*

55 Euro/hour – 120 Euro/day for *External users*

Laboratories for ***Histology and Immunohistochemistry*** are dedicated to paraffin- or OCT-embedding processing and sectioning of tissue specimens. Slices of fresh, frozen or paraffin-embedded samples can be stained by single or multiple immunohistochemical or immunoenzymatic methods, both by colorimetric or fluorescence techniques.

Available equipment:

- Cryostats
- Microtomes
- Chemical fume hoods
- Dry incubators
- Light and Fluorescence microscopes
- Incubator with temperature control system
- Tissue MicroArrayer 3DH TMA MASTER-A
- Centrifuges

NOTE In the price listing, "***Internal price***" and "***External price***" refer to the price charged to *Internal or External users* respectively, as defined by the Centre's dedicated Regulations.

STRUMENTAZIONI E FACILITIES

DISPONIBILI PRESSO PARTNER DI ALTRE STRUTTURE

Il COMT accede tramite consorzi intra-universitari dell'Ateneo di Parma a:

Un microscopio laser confocale (Zeiss Instruments)

Presso il Dipartimento di Scienze Biomediche, Biotecnologiche e Traslazionali- S.Bi.Bi.T. Via Gramsci, 14 -43126- Parma .

Referente: Prof.ssa Rita Gatti

Un lettore laser per vetrini di DNA microarray (Agilent Technologies)

Presso il Dipartimento di Medicina Clinica e Sperimentale, Via Gramsci, 14 - 43126- Parma.

Referente: Prof. Tauro Maria Neri e Prof.ssa Ivana Zavaroni