
Biomedical Laboratory

INSTRUMENTATION FOR BIOMEDICAL RESEARCH

Cell culture laboratory: For normal and tumor cell lines, co cultures and spheroid maintenance: sterile laminar flows, inverse microscope, refrigerators and freezers (ultra-freezer), micro- and high capacity ultra- centrifuge, incubator and thermostat.

Analytical instruments: 2 analytical balance; pH meter; **Lambda35 (Perkin Elmer) double-beam UV/VIS spectrophotometer, with variable bandwidth (190-1100nm)** for measurements in absorbance range up to 3.2A. , with nanodrop adapter.

Molecular analysis instruments: **EnSight Multimode plate reader** for high-throughput screening, fluorescence imaging, AlphaLISA/AlphaScreen, time-resolved fluorescence and intensity detection, filter- and optional monochromator-based absorbance, ultra-sensitive luminescence for low signals, temperature control etc. **qT-PCR machine (Roche Lightcycler 480) and PCR machine.**

Histological laboratory instruments: automatic tissue processor, paraffin embedding station with cold plate, heatable forceps, automated slide stainer, semi-motorized rotary microtome and water bath.

RADIOBIOLOGY INSTRUMENTATION

Irradiator self-contained cell and small animal x-ray irradiator, with 300kV voltage and max. 30mA current x-ray tube. Dosimetry instruments including reference class dosimeter, Farmer type ionization chamber, micro diamond detector and soft x-ray ionization chamber, phantoms and film dosimetry scanner.

Zebrafish laboratory instruments: **The ZebTec Multilink system** gives the opportunity to improve the zebrafish welfare and research quality.

Viewpoint Zebrabox (revolution for high throughput monitoring of larvae) and the ZebraTower (for fish monitoring) is at our disposal.

Microscopes: Axio Observer Z1 Inverted fluorescence microscope. Apochromatic Stereo Microscope (Zeiss Stemi 508).

Pico Injector (Harvard Apparatus Model PLI-100A)