

Pediatric Research

LIST OF IRP FACILITIES

ANNEX A

- BL2 Cell Culture Rooms
- Flow Cytometry and Sorting Facility: two cytometers, a FC500 and a Cytoflex; and three cell sorters, MoFlo XDP, FACS Aria III and FACS Celesta;
- Next generation sequencing: Ion Proton System (ThermoFisher) and a MiSeq System (Illumina).
- Microscope facility: Aryscan LSM 800 URGB 3ch confocal microscope for nano-resolution image acquisition (ZEISS); Axio Observer 7 Motorised X,Y stage and Z focus microscope with LED technology, equipped with a CO2 thermostatic incubator for live cell imaging experiments (ZEISS); JEM-2100Plus transmission electron microscope; Thunder Imager Model Organism fluorescence stereomicroscope (Leica); spinning disk confocal microscope with laser and LED technology, incubator for temperature, CO2 and O2 control, and software for high content imaging (Evident).
- **3D bioprinter**: Bio X (CellInk) for tissue engineering and regenerative medicine applications.
- Zebrafish Facility: Three rooms equipped with approximately 80 aquariums and capable of housing up to 2,000 zebrafish. Two microinjectors and two stereomicroscopes are available, one of which is fluorescent.
- Mus Musculus Facility: includes cages and equipment for housing mice. Two rooms equipped with laminar flow hoods and chemical hoods are available for conducting experiments. Additional



equipment: X-ray irradiator; gas anaesthesia system; VIS LUMINA S5 in vivo imaging system; washing room, equipped with a machine for washing and disinfecting cages and a pass-through autoclave for sterilising/inactivating material.

 Other High-Tech Instruments: Optima XE90 ultracentrifuge with 4 different rotors (Beckman Coulter); Spark plate reader (Tecan); iBright FL1500 imaging system (ThermoFisher Scientific); LI5 DI-GIT RS232 freeze dryer; Isolation and analysis of single cells with the Rhapsody system (BD); Tapestation4150 for DNA or RNA QC (Agilent Technologies); Qubit4 for nucleic acid and protein quantification (ThermoFisher Scientific); Cryostat (Leica); NS300 nanoparticle analyser (Alfatest); Realtime QuantStudio 5 thermocycler (ThermoFisher Scientific).