

MOC – MultiOmics Centre for Food and Health

Equipment & Instruments Catalogue

Group	Equipment/Instrument	Possible Applications
LRC - Molecular Biology	ProteoAnalyzer (Agilent)	Protein separation and quantification
LRC - Molecular Biology	Äkta Go System (Cytiva)	Protein purification, protein-protein interaction
LRC - Molecular Biology	OpenSPR (Nicoya)	Protein-protein interaction
LRC - Molecular Biology	Mini-PROTEAN Tetra Vertical Electrophoresis Cell (Bio-Rad)	SDS-PAGE, Western blotting
LRC - Molecular Biology	Trans-Blot® Turbo™ Transfer System (Bio-Rad)	Western blotting
LRC - Molecular Biology	ChemiDoc Imaging System (Bio-Rad)	DNA, RNA & protein visualization
LRC - Molecular Biology	DeNovix DS, 11 FX + Spectrophotometer/Fluorometer (DeNovix)	DNA, RNA & protein quantification
LRC - Molecular Biology	5200 Fragment Analyzer (Agilent)	DNA & RNA quality control
LRC - Molecular Biology	T100 Thermal Cycler (Bio-Rad)	End-point PCR
LRC - Molecular Biology	CFX96 C1000 Touch Real-Time PCR Detection System (Bio-Rad)	qPCR/Real-Time PCR
LRC - Molecular Biology	CFX Opus 384 Real-Time PCR System (Bio-Rad)	qPCR/Real-Time PCR
LRC - Molecular Biology	QIAcube Connect (Qiagen)	Automated DNA/RNA/protein extraction
LRC - Molecular Biology	TissueLyser II (Qiagen)	Tissue disruption
LRC - Molecular Biology	Varioskan LUX Multimode Microplate Reader (Thermo Fisher Scientific)	Flow cytometry
LRC - Molecular Biology	Axio Zoom.V16 Stereomicroscope	Microscopy
LRC - Molecular Biology	Confocal Laser Scanning Microscope LSM 800 (Zeiss)	Protein-protein interaction, protein overexpression
LRC - Molecular Biology	Plant Growth Chamber (CLF)	Plant growth (<i>Arabidopsis thaliana</i> , <i>Nicotiana benthamiana</i> , <i>N. occidentalis</i> seeds available)

LRC - Molecular Biology	Shaking Incubator – Multitron Standard (Infors)	Incubation, cloning, recombinant protein overexpression
LRC - Molecular Biology	Speed Vac Concentrator 5301 (Eppendorf)	Concentration of samples
LRC - Molecular Biology	Osmometer Type 16 (Löser)	Measurement of osmotic concentrations in a solution
LRC - Molecular Biology	Sorvall Legend XTR Centrifuge (Thermo Fisher Scientific)	Centrifugation
LRC - Molecular Biology	Centrifuge 5417R (Eppendorf)	Centrifugation
LRC - Molecular Biology	UP100H ultrasonic processor (Hielscher Ultrasound Technology)	Ultrasonic homogenization
LRC - Molecular Biology	Tecan Freedom Evo Liquid Handler	Liquid handling
LRC - MultiOmics Data Science	ONT MinION*	Long-read sequencing
LRC - MultiOmics Data Science	Qubit Fluorometer*	DNA, RNA & protein quantification
LRC - Laboratory of NMR-Spectroscopy	JEOL NMR 400 MHz equipped with HFX probe	qNMR, profiling of small molecules
LRC - Laboratory of NMR-Spectroscopy	JEOL NMR 600 MHz equipped with HFX and HCN probe	qNMR, profiling of small and macromolecules
LRC - Laboratory for Flavours and Metabolites	UV-VIS Spectrometer	Total antioxidants, total polyphenols, total chlorophylls
LRC - Laboratory for Flavours and Metabolites	Near Infra Red Spectrometer (NIRS)	Non destructive analysis
LRC - Laboratory for Flavours and Metabolites	Ion Chromatography (IC)	Sugars, anions, small-RNA
LRC - Laboratory for Flavours and Metabolites	Gas chromatograph with flame ionization detector (GC-FID)	Fatty acids
LRC - Laboratory for Flavours and Metabolites	Gas chromatograph with mass spectrometer (GC-MS)	Volatiles (VOC)
LRC - Laboratory for Flavours and Metabolites	Liquid chromatograph with RI/FLD/DAD (HPLC)	Single compounds
LRC - Laboratory for Flavours and Metabolites	Liquid chromatograph coupled to an Orbitrap high-resolution mass spectrometer (LC-MS Orbitrap)	Targeted and untargeted metabolomics
Eurac - Institute for Biomedicine	Bioinformatics Computing Cluster	High-performance data infrastructure designed specifically for processing, backup and storage of large-scale datasets

*Available from January 2027

LRC = Laimburg Research Centre