

	Laboratory	PI	Relevant Equipment
1	Advanced Research Laboratory of Angiology and Cardiology	Mattioli A.V.	N. 1 ecg recorder; N. 1 ECG 24h recorder
2	Applied Biology Lab	Zanocco-Marani T.	The laboratory is well equipped with small instruments such as equipment for protein and nucleic acid gel electrophoresis, PCR machines, vortexes, microcentrifuges, etc.. The lab also possesses other routinely used laboratory equipment such as medium- and low-speed centrifuges, incubators, shakers, speed vacuums, balances.
3	Applied Entomology Lab	Maistrello L.	Stereomicroscope Zeiss (Stemi 2000 N° 110544 NSZ-F10); Climatic chamber (Cavallo 1400 CFLU); Cappa a flusso laminare (Aquaria GP Flow Standard STD H s.n 284/14); Fridge Bosch (E-NR KGN36VL22/12); equipment for protein and nucleic acid gel electrophoresis; Incubator with lights, Intercontinental equipment (DAS 37000L matricola 419MF32153)
4	Applied Microbiology Laboratory and Microbial Genetic Laboratory	Bondi M.	
5	Biocatalysis and Natural Products Chemistry (BiNaP)	Forti L.	GC-MS, rotavap, freeze-drier, orbital shaker
6	Biochemistry and Glycobiology Lab	Volpi N.	Strumentazione di base per un laboratorio Biochimico analitico e preparativo. HPLC equipaggiato con formatore di gradiente, derivatizzatore post-colonna, rivelatore UV/VIS e rivelatore in fluorescenza. HPLC equipaggiato con formatore di gradiente, rivelatore UV/VIS, rivelatore ad indice di rifrazione differenziale e rivelatore in chemiluminescenza. Electrospray Ionization Mass, off-line e on-line con HPLC. Elettroforesi capillare equipaggiato con rivelatore UV/VIS. Elettroforesi capillare equipaggiato con rivelatore LIF. Gas-cromatografo equipaggiato con rivelatore FID. LPLC equipaggiato con formatore di gradiente, rivelatore UV e rivelatore di osmolarità. Liofilizzatori. Celle elettroforetiche per elettroforesi in SDS-PAGE, celle elettroforetiche per elettroforesi in agarosio orizzontale, celle elettroforetiche per elettroforesi in agarosio submarine. Apparecchiatura per elettroforesi di oligosaccaridi (FACE). Apparecchiatura per il trasferimento da SDS-PAGE e per western blot. Lettore di piastre a lunghezza d'onda variabile. Spettrofotometro in UV/VIS.
7	Biochemistry and Molecular Biology in Skeletal Muscle	Molinari S.	laboratory space fully equipped for basic Molecular Biology and Biochemistry experimental procedures: power supplies, gel apparatuses for DNA analysis and protein analysis, 2-D gel electrophoresis apparatus, bench centrifuges, thermal cyclers, gel drier with pump, refrigerated centrifuges, orbital shaker.
8	Bioinformatics Core Lab	Bicciato S.	Computer cluster for High Performance Computing
9	Bioinorganic Chemistry and Bioelectrochemistry Lab	Sola M.	Potentiostat/Galvanostats and Uv-Vis spectrophotometer Orbital Shaker Incubator Refrigerators Thermocycler FPLC(Fast pressure Liquid Chromatography) Microcentrifuge Ultracentrifuge
10	BioPaCT-Biology and Pathology of soft Connective Tissues	Quaglini D.	Thermal cycler BIOMETRA, -80C Freezers, IpgPhor IEF and Ettan Dalt 6 for 2D-IPG, Image Scanner II, Typhoon 9400 and related softwares), Zeiss Axiophot light and fluorescence microscope, 1microtome and 2 ultramicrotomes, 2 centrifuges, 2 chemical hoods
11	Botanic Garden	Dallai D.	Planetary Scanner for the acquisition of digital images of the historical collections (which are to be disseminated on-line)
12	Botany and in vitro cultures	Sgarbi E.	laminar air flow cabinet, autoclave, climatic chambers, dewar and transfer line for liquid N use.
13	Cell Biology	Ferrari S.	N. 2 graphic workstations; N. 1 Nucleofector II amaxa biosystems; N. 1 ABBOTT MOLECULAR Thermobrite StatSpin
14	Cellular and molecular Immunology	Pinti M.	Biorad S3 Cell Sorter, Attune NxT Flow Cytometer, Biorad CFX 96 Real time PCR
15	Cellular and Molecular Neuropharmacology	PUJA G.	electrophysiology set up (upright microscope, amplifier, puller, micro manipulators, antivibration table, A/D converter); Tissue culture equipments(incubators, hoods, inverted microscope)
16	Chemistry Solid State Characterization Lab	Gamberini M.C.	DSC, HPLC, Kofler; Rotavapor, Centrifuge, Heating-stirring module, ultrasonic bath, stove, pH meter, 2 hot plates, vacuum pump, Dubnoff bath
17	CHIMSLAB - Chemometrics, Imaging and Spectroscopy Lab	Ulrici A.	– NIR Hyperspectral Scanner (900-1700 nm) – FT-NIR spectrometer Bruker MPA – Digital RGB images acquisition systems – Chemometric software (Matlab, PLS Toolbox, Modde, Minitab)
18	CMR Cell Therapy Laboratory	Pellegrini G.	5 fully equipped BL2 cell culture rooms, confocal microscope, time-laps microscope, X-ray cell irradiator, cytofluorimeter, real-time PCR, laser microdissector, microtome.
19	CMR Gene Therapy Laboratory	De Luca M.	5 fully equipped BL2 cell culture rooms, confocal microscope, time-laps microscope, X-ray cell irradiator, cytofluorimeter, real-time PCR, laser microdissector, microtome.
20	Computational Structural Biology	Fanelli F.	N. 8 graphic workstations; High Performance Computing Cluster: N. 1 Xeon Cluster (22x8 and 8x12 CPUs), N. 1 x Dual Xeon /GPU (2x10 CPUs and 2 x NVIDIA Tesla K40M).
21	Crop Production	Francia E.	Fluidigm EP1 Genotyping Platform, ABI Prism 310 Sequencer, Binder KBW 720 Climatic chamber, SPAD Chlorophyll Meter
22	Developmental and comparative immunology and neuro-endocrinology	Ottaviani E.	Stereomicroscope Stemi 2000-C (Zeiss) rotative microtome, HM 310 Microm and 2045 Leica Ovens for histology (Bio Optica) Cytospin 2 (Shandon) Scale balances, pHmeters Cryostat CM 1510 S (Leica) Light microscopes (Olympus, Zeiss) Digital camera "Nikon" mod. DS-5M and "Sony" CCD-IRIS mod. DXX-107A Luminometer "Luminoskan Ascent®" (Thermo Electron Corporation, Vantaa) Gaussmeter "FW Bell" mod. DG 7010 (probe: 0,1 mGauss) Electric field generator "California Instruments" mod. 801 RP-F
23	Drug delivery and targeting	Iannuccelli V. Leo E.	1. Spray-drying, 2. Freeze-drying, 3. Microscope Leica, 4. Centrifuge, 5. Dissotest, 6.Spectrophotometer (Perkin-Elmer), 7. Rotavapor

24	Drug discovery of enzyme inhibitors	Costi M. P.	Synthetic chemistry lab: 1. In parallel synthesizer (Buchi), 2. Biotage (Isolera); Enzymology: 1. Akta Prime, 2. Semba (protein purification), 3. Spectramax 190 (Multiplate reader), 4. Genios Pro (Tecan) (multiplate reader), 5. Beckman 640, 6. Isothermal Titration Calorimeter (Microcal), 7. Beckman centrifuge; Computational Chemistry: 2 workstations; Microscopio: motic smz168
25	Ecology and conservation of aquatic ecosystems	Prevedelli D.	Thermostatic chambers; aquaria; computer-controlled recirculating; stereomicroscopes; transmitted-light microscopes; computer-controlled recirculating ethylene glycol bath
26	ELASTYC	Fonda S.	-Workstations, oscilloscopes, signal generators -Instrumentation for human electrophysiology -Instrumentation for NIRS signal recording -Lock-in amplifiers for biological signals - Eye gaze tracking instrumentation - Eda wireless sensor
27	Evolutionary Zoology	Rebecchi L.	5 stereo-microscopes equipped with digital camera; 2 compound microscopes equipped with DIC, phase contrast and digital camera; 2 climatic chambers with controlled temperature and light; 2 climatic chambers with controlled temperature, light and humidity; 1 PCR thermocycler; 1 horizontal electrophoresis; 1 vertical electrophoresis apparatus and blotting apparatus apparatus; 1 LED Transilluminator; 1 microcentrifuge, 1 centrifuge; 2 thermal blocks; 1 laminar flow hood; 2 freezers at -80°C; 2 freezers at -20°C; refrigerators
28	Experimental Onco-Hematology	Grande A.	
29	Fluorescence spectroscopy	Ponterini G.	Horiba Jobin-Yvon FluoroMax3 and FluoroMax4 spectrofluorometers and TCSPC. ns laser flash photolysis.
30	Food analysis	Avallone R.	HPLC
31	Food Chemical and Technology Lab	Antonelli A.	Gas chromatography, HPLC, GC-MS
32	Food chemistry and nutraceutical science lab	Plessi M.	The laboratory is equipped with all the equipment for basic analysis of samples and for their preparation, for advanced analysis instruments and laboratories of CIGS are being used.
33	Food production, processing and shelf life	Lo Fiego D.P.	Gas Chromatograph FID and GC/MS Ultra-Fast Gas Chromatograph Testing system for texture analysis and packaging testing CM-600d Konica Minolta Spectrophotometer CR-400 Konica Minolta Colorimeter E-40 Flir thermo Camera Electronic nose Permeabilimeter
34	Fruit Crops and Viticulture	Bignami C.	PCR, tissue lyzer, stereomicroscope with camera, digital refractometers, penetrometers, titration
35	Gene expression	Zappavigna V.	RT-PCR, Centrifuges, -80C, incubator
36	Gene Transfer and Gene Therapy	Mavilio F.	
37	Genome Medicine	Tagliafico E.	Affymetrix GeneChip System Affymetrix GeneAtlas System N.2 2 Agilent 2100 Bioanalyzers Applied Biosystems 7900HT Real Time PCR System Roche LightCycle 480 Real Time PCR System Hamilton Microlab STARlet Liquid Handling Workstation Roche 454 Genome Sequencer FLX Life Technologies Ion PGM System Sequenziatore ABI PRISM 3100-XL GENETIC ANALYZER a 16 capillari N.2 PACKARD MULTIPROBE IIEX ROBOTIC LIQUID HANDLING SYSTEMS
38	Genomic and transcriptomic lab for Regenerative Medicine	Manfredini R.	1. n° 2 Affymetrix Platforms (GeneChip 3000, Affymetrix Fluidics Station 450, Affymetrix hybridization Oven 645 and GeneAtlas™ Personal Microarray System Affymetrix), Bioanalyzer 2100 (Agilent) "Lab-on-a-chip" platform, Roche (454) Genome Sequencer FLX titanium System, Ion Torrent PGM Sequencer (Life Technologies) 2. Nucleofector 4D device (Amaxa). 3. FACS Canto II (BD) flow-cytometer (3 lasers). 4. Glomax 96 Microplate Luminometer (Promega) and High-Throughput RT-PCR systems (7900HT Fast Real Time PCR System and QuantStudio 12K Flex Real-Time PCR System and OpenArray AccuFill System, Applied Biosystems). 5. 6 workstations equipped with Linux, Windows or Macintosh operating systems and packages open-source for data analysis.
39	Histocytological and molecular pathology	Losi L.	Automated IHC/ISH slide staining system Ventana Roche Benchmark XT; multiple microscope; microtome; cryostat; hoods; automatic tissue processor; unit of inclusion; ventilated ovens
40	Insect Genetics and Biosciences	Mandrioli M. Manicardi G.C.	Major equipments include DNA fluorometer, epifluorescence microscope, 3 power supplies, 3 gel apparatuses, pHmeter, -80 freezer, -20 and +4 refrigerators, bench centrifuges, PCR machines. A cell culture room, fully equipped with hood and incubator for invertebrate cells, centrifuges and microscopes is present.
41	Laboratorio di Elettronica Organica (LEO)	Biscarini F.	Chemistry Lab: soft chemistry. Chemical hood (120 cm), spin-coating, ultra-sound bath, two ovens, nitrogen line. Microscopy Lab: SPM Liquid SMENA (NT-MDT) for cell imaging, SPM SMENA (NT-MDT); fluorescence microscopes: epi-illuminated Nikon and inverted Olympus 70i both with high resolution CCD camera. Prototyping Lab: Laser Scan Marker ScribaR (Scriba Nanotechnology). All these instruments belong to CNR Bologna and are seconded via the convention with DSV. Electrical Measurements Lab: two probe station with SMU Agilent for liquid-gated transistors. Sample Preparation: lapping, videomicroscopy. Cell Lab: fully equipped, several secondary lines including NE4C and SHSY5Y.
42	Laboratory of gene transfer and genomics	Recchia A.	citofluorimetro, Taqman PCR, microscopi a fluorescenza, confocale
43	LabPalPal	Mercuri A.M.	a. 5 research light microscopes (Leitz Diaplan) b. 2 stereomicroscopes (LEICA WildM10) c. flotation/sieving apparatus d. two digital cameras x microscopes (LEICA MC120HD, LEICA MC170HD)

44	Marine biotoxins: mechanisms of action and functional assays	Rossini G.P.	Amersham, fraction collector RediFrac; Eppendorf Centrifuge 5417 c; tabletop centrifuge Hettich Mikro 12-24; electrophoretic cell Bio Rad Protean II xi (n. 3); plate reader Bio Rad Ultramark EX; balance Ohaus Navigator (n. 2); water bath Grant; basculating platform Stuart SSL3; rotatine platform (n. 2); Bio Rad Power Supply 1000/500; Invitrogen Power Supply PowerEase 500; Pharmacia Power Supply EPS 300; Bio Rad Power Supply PowerPac 300; Bio Rad Power Supply PowerPac 3000; Bio Rad PowerPac Universal; electrophoretic cell Invitrogen Mini-Cell ZOOM IPGRunner; electrophoretic cell Bio Rad Mini Protean 3; electrophoretic cell Bio Rad Protean IEF; electrophoretic cell Bio Rad Plus DodecaCell; electrophoretic transfer cell Hoefer TE 42; electrophoretic cell Bio Rad Rotaphor; electrophoretic cell SV10 CDC; electrophoretic cell Hoefer HE 33; Ultra-Turrax IKA-Werke T8; conductivity meter CDM 3 (Radiometer Copenhagen); inverted microscope Diavert; PH meter 3505 (Jenway); densitometer Bio Rad GS-800; centrifuge Beckman Coulter Allegra X-22R (includine rotors FX301.5 e F0685); ultracentrifuge Beckman Coulter Optima Max (includine rotors TLA-110 e MLS-50); Eppendorf Concentrator Plus; riciclatore Thermo Haake WKL 26; peristaltic pump Bio Rad; sonifier Microson XL. CO2 incubator RS Biotechnology Galaxy S (n. 2); laminar flow hood Bicasa BSC (in Cell Lab). Fume hood Waldner Secuflow.
45	Medicinal chemistry	Parenti C.	SYNTHESIS LABORATORY-HPLC
46	Medicinal Chemistry Lab	Brasili L.	n.1 Microwave, CEM; n. 1 HPLC SP1, Biotage
47	MeioLab-UNIMORE (Laboratory for the study of meiofauna)	Todaro M.A.	State-of-the-art light microscopes including stereo- and compound microscopes with DIC; Fluorescence and image analysis capabilities; equipment for meiofauna sampling and processing; equipment for DNA estraction and gene amplification;
48	Micological Laboratory	Romagnoli C.	microbiological safety cabinet Agitator for flasks
49	Microbial Biotechnologies and Fermentation technologies	Rossi M.	- Microbiology: anaerobic cabinet, 2 laminar flow cabinets, static and shaking incubators, phase contrast and epifluorescence microscope with image acquisition system - 9 laboratory-scale stirred tank bioreactors - Electrophoresis equipment for nucleic acids and proteins (agarose electrophoresis, PFGE, DGGE, 2DE-MS, densitometer, gel imaging system) - 3 thermocyclers for PCR and qPCR - Analytics: microtiter, UV-VIS, HPLC-RID, HPLC-MS, GC-MS, Akta System - Sample preparation: stomacher, freeze dryer, 2 6-liters centrifuges, 2 benchtop centrifuges, rotovapor
50	Miogenlab	Tupler R.G.	The laboratory is well equipped with both small (e.g., equipment for protein and nucleic acid gel electrophoresis, PCR machines, vortexes, microcentrifuges, etc.) and large equipment items (e.g., a Fuji phosphorimager with software for quantitative analysis; and a BioRad real-time PCR machine with accompanying data acquisition and analysis software). The lab also possesses other routinely used laboratory equipment such as medium- and low-speed centrifuges, incubators, shakers, speed vacuums, balances, pH and conductivity meters, a Beckman liquid scintillation counter, and a spectrophotometer.
51	Molecular Biology of Retinal Degenerations	Marigo V.	2 PCR thermal cyclers 1 microtome Leica 1 Fluorescence Stereomicroscope Leica MZ16F 1 Stereomicroscope Leica MZ75 1 Stereomicroscope Leica 2 PC
52	Molecular Genetics	Imbriano C.	PCRs, protein and DNA analysis instrumentations, electroporator, benchtop and refrigerated centrifuges, coldbox
53	Molecular Modelling & Drug Design Lab	Rastelli G.	The MMDDLlab is equipped with a large number of computational software and tools for structure-based drug design, including docking, virtual screening, homology modeling, molecular dynamics, quantum mechanics, structure visualization and manipulation and others. The laboratory is fully equipped with several Linux workstations. HPC facilities are available at the Computing Center located at the University Scientific Campus and at CINECA (ISCRA projects).
54	Molecular neuropsychopharmacology	Brunello N.	Bench centrifuges (1.8 ml tubes), Centrifuge, Dry bath, Hybridization oven, Microbiological Incubator, Microplate shaker, Microwave oven, Mini centrifuge, Orbital shaker, PCR, Power supply, UV/visible spectrophotomer, Vacuum Pump, Vortex
55	Molecular pathology of inherited dyslipidemias	Tarugi P.	Typhoon TRIO Workstation and related softwares for image detection (GE Healthcare Europe) Fast Protein Liquid Chromatography (BIORAD) Thermal Cyclers FORMA Orbital shaker TJ-25 Centrifuge Multifuge 3 S-R
56	NMR Spectroscopy	Schenetti L.	
57	Nutritional Biochemistry	Conte A.	Cell culture facilities, spectrofluorimeter, spectrophotometer, electrophoresis and western blot facilities, microplate reader
58	Organic synthesis lab	Prati F.	Polarimeter - 2 Gaschromatographs - 1 HPLC
59	Pharmacology and Toxicology	Corsi L.	Elisa spettrofotometer; Fluorometer
60	PHYTO and MORE	Benvenuti S.	HPLC-UV, HPLC-DAD, HPLC-ESI-MSn (CIGS), HPLC-ESI-MS/MS (CIGS), GC-FID, GC-MS (LADAC), HPTLC
61	Plant Pathology Lab	Stefani E.	Incubators, Sterile hoods, Microcentrifuges, Thermocycler, Hybridation oven, Electrophoresis cells (vertical and horizontal).
62	Plant Physiology Lab (PPL)	Arru L.	Autoclave, centrifuga, termociclatore, FPLC, frigorifero, freezer, frigo da banco, evaporatore rotante, agitatore orbitale, n. 2 incubatori di crescita per piante, contributo all'acquisto qPCR -non situata in questo lab
63	Soil biology and Biocontrol	Sabatini M.A.	seven thermostatic chambers set at different temperatures and photoperiods, light microscope equipped with phase contrast and differential interference contrast (DIC), six stereomicroscopes.
64	TE.FAR.T.I.	Vandelli M.A.	Spectrofotometer UV V-530 (Jasco) DSC: DSC 200 DC (Netzsch) Lyophilizer (Heto LyoLab 300), Zetameter (Malvern Instruments Nano ZS), Fluorescence Microscope (AXIOPHOT, Zeiss, West, Olympus Analyzer), Cryotome CM3000 (Leica Instruments GmbH, Germany), Microtome Jang SM 2000R (Leitz, Wetzlar, German), Spray-drying (Master Flex L/S, Cole Parker), Spray drier (Büchi), Air Circulation System Heater (Nemmert), Ultra-centrifuge RC 28S (Sorvall)

65	UMCC Lab	Giudici P.	Technical platforms of the UMCC group include basic and specialized facilities for microbiology and molecular biotechnology: pilot bioreactor, laboratory fermentors, analytical equipments, bioinformatics softwares (BioloMICS and BIONUMERICS) for data management, sterilization systems (autoclaves and filtration systems), Singer micromanipulator, Biological cabinets (class 2), thermostated incubators, shaking incubators, oximeter, HPLC, sonicator, refrigerated centrifuges, PCR machines, electrophoretic sysems, 2-dimensional electrophoresis machine, PFGE (pulsied field gel electrophoresis), ultrafreezer -80°C, freezer -20°C.
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