List of scientific equipment

Cluster number	Name and utility of the equipment	To which university does it belong to?
1	Clinical Recovery Hospital Baile Felix	UO
	Pharmaceutical research laboratory	
	Equipment within the SmartProSys Research Cluster Max Planck Institute for Dynamics of Complex Technical System, Helmholtz Center for Environmental Research, Fraunhofer Institute for Factory Operation and Automation IFF	OVGU
	SMEs in Sweden as models for self-sufficiency in circular energy systems, e.g., biogas production from farm biowaste for production energy and fertilisers	
	Lentivect: platform of vectorization in gene transfer.	UA
	PACEM (Cellular and Molecular Analysis Platform): infectiology sequencing.	
	- SCIAM: Imagery and Microscopy analysis devices.	
	Elemental and molecular analysis service (SAEM)	UEx
	Animal facility and animal experimentation service	
	Imaging diagnosis service in veterinary sciences and biomedicine and preparation of sexed seminal doses for equine reproduction	
	Radiological protection service techniques applied to bioscience service (STAB)	
2	Dryers (freeze-dryer, vacuum dryer, spray dryer, etc.) : food production in powdered form	UPWr
	HPLC: determination of selected bioactives	
	Milk analysis lab: Milk characterisation and cheese making	UNIPR, Department of Veterinary Science
	Feed analysis lab: Feed chemical and nutritional characterisation	
	Food analysis lab: Food chemical and nutritional characterisation	UNIPR, Department of Food and Drug
	Internet of Things (IoT) Lab: Design and implementation of IoT systems for agricultural applications	UNIPR, Department of Engineering and Architecture
	Law library and online legal database	UNIPR, Department of Law, Politics and International Studies
	Labs for characterisation of microorganisms : Study the diversity and functions of microbiomes in agroecosystems	UNIPR, Dept. Chemistry, Life Science and Environmental Sustainability
	Labs for soil and water analysis (micro and macro nutrient/contaminants) and GHG exchange: Study all	

	parameters of relevance in the environmental matrices	
	Labs for “omic” characterisation of crop plants: Study the modifications of plant genomes, transcriptome, proteome, metabolome	
	UV reactor: Microbiological reduction	CIPACK - UNIPR
	Bioinformatics lab: Genomic tools for genetic improvement of livestock	UNIPR, Department of Veterinary Science
	Infectious Diseases lab : Generation of new animal disease prevention strategies based on innovative vaccines development	
	Histology lab : Evaluation of nutritional strategy on animal digestive traits morphology	
	Infectious Diseases lab: Development and study of alternatives to antimicrobials	
	Agricultural management and accounting and rural appraisal lab : Economic-financial assessments in the agricultural, livestock and industrial fields	
	Anaerobic Digester	ATU Donegal Research Facility
3	**Water channel - 12 m long, 1.2 m width, 1 m^3/s : Research on hydraulic and tidal turbines, fish passage and compatibility**	OVGU
	Wind tunnel incl. rain simulation (--> experiments for soil erosion with wind + rain) : Research on rain formation in clouds, rain impact on devices and structures	
	Multi reactor system - 6-x 90ml Parr high pressure	
	Reactor system - 300ml Parr with dosing system	
	Reactor system HITEC - homogeneous catalysis (fully automatized)	
	Reactions calorimeter RC1 MettlerToledo with dosing system	
	Reactions calorimeter Optimax and EasyMax with dosing system	
	C80 Calvet Calorimeter Multiple glas reactors - Batch, Semi batch, CSTR (with dosing systems)	
	Kinetic fixed-bed reactor (fully automatized)	
	Berty-Reaktor - CSTR heterogeneous catalysis	
	Analytics: GC, GC-MS (Agilent), HPLC (VWR, LaChrome), FTIR- (Si- and Diamant,, *operando* or *in situ*, Mettler Toledo), Raman (Kaiser), Benchtop-NMR (^{1}H, ^{19}F, ^{31}P; 43MHz), UV/VIS	
	Membrane reactors (1-/Multi-channel), Adsorptive reactors	

	Membrane filtration (MF, UF, NF) with Polymeric-/Ceramic modules (plate, tube, Multi-channel, spiral wounding modules)	
	Simulated Moving Bed plant - Thermo Gravimetry/ Differential Scanning Calorimetry Netzsch	
	Fermentation system Sartorius (1l und 5 l)	
	Bi-plane 3D-Angiographiesystem Siemens ARTIS icono	
	Interventionelles CT - Siemens SOMATOM X.cite	
	3 Tesla Magnetresonanztomograph - Siemens Magnetom Skyra	
	Lightweight construction Roboter for medical use - KUKA iwa	
	Miniature MRI 0.55T - Fa. PURE DEVICES	
	Miniature X-ray system 50kV - Fa. MOXTEK	
	Flextronik-Labor mit COS Laserschneidanlage CS6090	
	3D Drucker Stratasys Fortus 380mc	
	LPKF ProtoLaser U4	
	Living lab "Advanced cooling technology for development of advanced metals"	
	Excellence in heat treatment processes to design sustainable advanced metal products in a complete environment for researching and developing the most creative and innovative technological solutions. The living lab has been equipped with advanced physical test facilities for heat treatment of long and flat steel products, resources for computer simulation, as well as resources for material testing.	HiG
	https://www.hig.se/Ext/Sv/Organisation/Akademier/Akademin-for-teknik-och-miljo/Forskning-vid-akademin/Advanced-Metals-Living-Lab.html	
	Robotics	
	Wind tunnel	
	Fundamental studies of natural ventilation, Ventilation of Compact cities, wind turbines, etc	
	Laboratory of building energy and indoor environment measurement	
	o Thermal comfort loggers	
	o Temperature & humidity loggers	
	o Heat flux meters (thermopiles)	
	o Ventilation and air infiltration measurement equipment	
	Tracer gas equipment	
	• Ventilation rate & effectiveness	
	• Tracking of airborne contaminants	

	• Passive equipment for large scale (field survey) measurements	
	Wind pressure on building structures (e.g. air infiltration appl.)	
	IR thermography	
	Building aerodynamic wind tunnel, model tests of:	
	• wind conditions around buildings, incl. detailed turbulence	
	• wind pressure on structures	
	• air infiltration assessment	
	Ventilation duct air flow meters	
	o Air speed and air flow pattern	
	Omnidirectional thermistor anemometers (several)	
	Sonic anemometers (speed + direction)	
	PIV and LDA (speed + direction; detailed turbulence mapping)	
	Visualization techniques (particle tracking etc.)	
	Tracer gas equipment	
	o Air quality measurements	
	CO2 loggers	
	Airborne particulate matter (particle counters & filter collection)	
	GC-MS for air chemical composition	
	Radon	
	• Outdoor climate measurement equipment (portable):	
	o Wind speed (sonic anemometers)	
	o Solar radiation (diffuse + direct)	
	o Precipitation	
	o Temperature	
	o Humidity	
	Laboratory of Environmental Acoustics and Soundscape	
	1. microphones	UPWr
	- binaural ("ears"),	
	- binaural - in-ear,	
	- ambisonic, four-way,	
	- ultrasonic,	
	- electret,	
	- directional, open, condenser "shotgun" type.	
	2. Acoustic array camera (164 directional microphones) with "Noise Inspector" software.	
	3. programmable microcontrollers with Enviro pHAT sensors.	

	4. software: Ableton, Kaleidoscope Pro.	
	5. VR goggles Oculus Quest and HTC Vive Pro.	
	6. 10-channel sampler and mixer.	
	7. microcontrollers: Raspberry Pi B+, A, and 2.	
	8. drone with multispectral camera	
	9. mobile eye-tracker Pupil Invisible	
	Laboratory of Environmental Research	
	1. Chlorofluorocarbon (AOX) analyser	
	2. Total organic carbon (TOC) analyser for liquids and suspensions	
	3. Distillation apparatus	
	4. Batometer	
	5. Gas chromatograph (GC) + gas analyser (tedlar bags)	
	6. Gas chromatograph (GC/MS) + headspace (HS)	
	7. Ion chromatograph Dionex 3000	
	8. Extractor	
	9. Photometer for cuvette-based assays	
	10. Calorimeter	
	11. Conductivity meters	
	12. Plate luminometer	
	13. Sound level meter	
	14. Multi-parameter meter	
	15. Microwave sample digester	
	16. Fluorescence microscope	
	17. Confocal microscope	
	18. DELTA inverted microscope	
	19. BIOLAR trinocular microscope	
	20. COD mineraliser	
	21. FTIR spectrophotometer with microscope	
	22. FTIR spectrometer	
	23. Inductively coupled plasma optical emission spectrometer ICP OES	
	24. UV-VIS spectrometer (SPECTROLAB)	
	25. Heating and cooling equipment (incubators, refrigerators, dryers)	
	26. Centrifuges MPW-260	
	27. Automatic particle image analysis kit	
	28. Membrane filtration kit	
	29. Kit for collection, measurement and determination of physico-chemical parameters of groundwater	
	1 computing station cluster	
	1 continuous wave laser at 532 nm	

	1 Nd:YAG laser at 1064 nm (doubled, tripled) with short pulses 17 ps	UA
	1 tunable parametric oscillator OPO 1 µm to 2 µm	
	1 Nd:YAG laser at 1064 nm (doubled, tripled) short pulse 9 ns, 10 Hz	
	1 dye pumped laser at 532 nm	
	1 short-pulse 1064 nm Nd:YAG laser (doubled, tripled) 40 ps (not operational)	
	1 cooled germanium camera	
	3 Er:Yb doped fiber power amplifiers	
	1 13 GHz real-time oscilloscope	
	2 optical spectrum analyzers	
	2 optical autocorrelators	
	1 microwave spectrum analyzer	
	1 THR 1500 spectrometer with 0.1 nm resolution	
	1 LCOS spatial light modulator (reflection) 1920x1080 pixels	
	1 cooled monochrome camera14 bits 2750x2200 pixels	
	1 ocean optics 2000+ spectro	
	1 FLIR monochrome camera	
	1 FLIR portable infrared camera	
	1 ellipsometer UVISEL,	
	1 LEICA microscope,	
	1 Dektac profilometer	
	1 Bruker Avance III HD 500 MHz NMR spectrometer	
	1 Bruker Avance III 300 MHz NMR spectrometer	
	1 NMR Spectrometer JEOL 400 MHz	
	1 spectromètre RMN Bruker 600MHz (to come in 2023)	
	1 Mass spectrometer, high resolution Jeol JMS 700, sources EI, CI, FAB, ESI, APCI.	
	1 Bruker Esquire 3000+ ion trap, ESI, APCI ionization sources coupled with a Waters Alliance HT 2795 HPLC separation module, Waters 2487 UV detector	
	1 GC-MS Shimadzu (IE source)	
	1 Spiral-TOF mass spectrometer with TOF/TOF option JEOL JMS-S3000	
	1 Mass Spectrometer Waters Xevo QTOF G2-XS, source ESI avec UPLC	
	1 Thermo Electron elemental analyzer (Flash 2000) with two furnaces (CHNS and O)	
	1 M-Braun dry glove box with 6 gloves incorporating 1 Boc Edwards evaporation rack	
	1 Keithley 2036	
	2 Keithley source meters	
	1 Solar simulator AM1.5 / KHS	

	1 Solar simulator AM 1.5 / Newport	
	1 Spectrophotometer UV-visible-NIR Lambda 950 Perkin-Elmer	
	1 GBX contact angle measurement bench	
	1 PLASSYS ME300 evaporation frame under turbo-molecular vacuum	
	1 Bruker Vertex 70 infrared spectrometer	
	1 Biologic/Roper Scientific/SETI spectroelectrochemical measuring bench	
	1 Atomic force microscope NanoObserver/CSInstrument	
	2 Spectrophotometers UV-visible / Shimadzu	
	1 Spectrofluorometer / Shimadzu	
	1 Spectrofluorometer / JASCO	
	1 Circular Dichroism UV-vis spectrophotometer	
	1 Profilometer / Tencor	
	1 MBraun dry glove box with 8 gloves + 1 MBraun evaporation rack + 1 spin coater	
	1 EQE TFSC	
	1 PYSA HITACHI (Photoemission Yield Spectroscopy in Air)	
	1 Filmetrics F20 reflectometer	
	1 LEICA MSZ12 microscope equipped with a video camera	
	1 Kappa CCD single crystal diffractometer (BRUKER NONIUS) (Mo source) equipped with a low temperature system (N2) (90K-373K)	
	1 Supernova four-circle single crystal diffractometer with Cu microsource (Agilent Technologies) equipped with a low temperature system (N2) (90K-500K)	
	1 D8 ADVANCE powder diffractometer (BRUKER), equipped with a temperature chamber (100K-723K)	
	1 Thermogravimetric analyzer TGA 2050 (TA instruments) (293K-1273K)	
	1 Differential enthalpy analyzer DSC 2010 (TA Instruments) equipped with a low temperature system (N2) (100K-873K)	
	1 LEICA M125 microscope equipped with a video camera	
	1 LEICA DM2500 polarizing microscope equipped with a video camera and a temperature chamber (100K-693K)	
	Laser nano, Spectra Physics, 1064,532, 355 nm + Laser Dye Opton 550 to 700 nm	
	Jobin Yvon spectrometer	
	Stanford SR 430 photon counter	
	Cryostat Optistat DN-V	

	Laser pico Continuum 10Hz (7 mJ @ 1064nm) (532nm and/or 355nm)	
	OPO TOPAS laser, 400 nm-1650nm	
	Synchronous detection Stanford SR 830	
	Continuous laser diodes, Thorlabs, 972 nm, 980 nm	
	Oscilloscope Tektronix TDS6124C	
	1 femtosec. laser TSUNAMI Spectra-Physics coupled to a YAG:Nd MILLENIA 10W	
	Ellipsometer, HORIBA Jobin-Yvon, UVISEL NIR, 75 W lamp, spectral range 245-2100 nm	
	1 CCD camera imaging spectrometer Roper Scientific	
	Hamamatsu photomultiplier	
	1 inverted microscope IX 71 Olympus	
	Spatial light modulator, HOLOEYE, Pluto NIR 1000-1064nm	
	2 photon counting acquisition chains in transmission and reflection HAMAMATSU	
	Green continuous wave laser (532 nm), LASOS (100 mW)	
	Oscilloscope Agilent DSO-X 3054A	
	Femtochrome autocorrelator FR-103XLWS	
	TurboVac SL80 Oerlikon pump	
	CCD camera QImaging, cooled 0°C, Retiga 6000	
	1 inverted microscope IX 83 Olympus	
	Laser diodes	
	1 Diagnosis and material characterization bench of possible defects (delamination, bubbles, cracks, damage ...) in materials (composites, bonded assemblies, ...)	
	1 Robot POODLE: PrOtOtype of LasEr weed control.	
	1 Experimental Platform for the (autonomous) NaviGation of a Symmetrical AgrIcole Robot.	
	1 Bio-inspired humanoid RObot.	
	1 Platform of instrumentation and multimodality imagery dedicated to the phenotyping of plants.	
	1 Virtual reality platform: Platform allowing the immersion of one or several person(s) in virtual environments.	
	1 Eye-tracking systems	
	2 High density electroencephalogram (EEGhd)	
	1 Climatic and vibratory chamber	
	1 HAST (High Accelerated Stress Test) experimental device monitored in humidity and/or temperature.	
	1 Vibration pot	
	Geothermal power plant	
	SCADA Laboratory	
	Geothermal well station	UO

	Geothermal pumping station	National Centre for Geothermal Research
	Geothermal station for heating and domestic hot water	→ Research in renewable energy
	5-axis CNC Laser machine tool	Prof. Cornel Antal
	Robot performing handling, assembly or processing tasks such as drilling or deburring and the second	cantal@uoradea.ro
	Robot performing MIG welding assembly tasks	UOradea
	The high-speed digital camera	SMART Industries Technology Transfer Center
	The confocal laser scanning microscope for	Technologic and Scientific Park
	IIoT servers, Machine learning servers	→ rapid prototyping, automation, robotics
	5 axis CNC machine	Prof. Vesselenyi Tiberiu
	Additive manufacturing machine	tvesselenyi@yahoo.co.uk
	Mechanical testing machines	
	Fatigue testing machine	
	Construction materials testing	
	Plastic materials testing	
	3D measurement machine	
	3D laser scanners	
	Scanning Electron Microscope	
	AFM5000, Agilent	
	Nanoindenter	UO
	Optical interrogator with fiber Bragg sensors for temperature, strain and acceleration measurements	Nanoscience Research Platform – SMARTMAT
	Portable Digital Vibrometer	→ material characterization
	Acoustic Tube	Prof. Vesselenyi Tiberiu tvesselenyi@yahoo.co.uk
	Thermovision system	UOradea
	Smart Camera	Interdisciplinary Research Infrastructure in Mechatronics and Intelbuild
	Hydraulic equipment set	Prof. Bungau Constantin
	Pneumatic equipments set	bungau@uoradea.ro
	Sensors for pneumatics and hydraulics	
	KNX system for building control	
	Accelerometers	

	Cryogenic probe station with handling arm for non-destructive testing of the materials and equipment in electric/electromagnetic field.	
	Thermal imager for high temperatures	
	Set of research equipment for measuring very low temperatures - 12 probes and field values - Gauss-metre and accessories	UOradea
	Microwave research equipment with measurement and control systems for the study of ceramics susceptor	Interdisciplinary Research Platform for Technologies in Electrical Engineering
	Microwave research system with measurement equipment for oil extraction from grape seeds/floral plant substrate	Prof. Francisc Hathazi
	Microwave field laboratory reactor, used to obtain hybrid materials (conductive polymers, semiconductors, dielectrics) through pyrolysis processes by spray	francisc.hathazi@gmail.com
	NI LabVIEW Robotics Starter Kit	
	Flexible Manufacturing System FMS UO 01	
	E-Laboratory for ABB robots	UOradea
	Autonomous robots	Interdisciplinary Research Infrastructure in Robotics - IRIROB LAB
	Augmented/Virtual Reality Systems	Integrated Sensors and Biosensors Laboratory - ISBL
	Quadcopter Thrust Data Logger	Prof Tarca Radu
	Quadcopter monitoring air polution	rtarca@uoradea.ro
	Hexacopter platform for crop treatment	
	PXI DAQ System with Optical Sensor Interrogator for Fiber Bragg Gratings	
	Fiber Bragg Grating sensors	
	Jaz Modular Spectroscopy Suite	
	SpectraSuite Spectrometer Operating Software	
	UV-VIS Spectrophotometer Specord 210 Plus	
	Optical fiber biosensor	
	LMC-3000, Laboratory Centrifuge	
	High-Performance Computer	
	GIS Etudes Touristiques : Association carried by the University of Angers, for promoting and developing research in tourism, that has 21 universities and institutions of research in France. Label CNRS. 185 researchers, 26 scientific disciplinaries. GIS Etudes touristiques offers two funds to support research	

	project : Tremplin (to help to organise consortium of research); International publication (funds to translate scientific article in English)	
	Tourism Innovation Lab chair : The chair has a mission to help to increase better partnership between tourism researchers, institutions and companies (example : Espaces review ; Accor group; Alpes Compagny, etc.)	ATU Donegal Research Facility
4	Portuguese Platform; CityUMacau Chair in Sustainable Heritage : Aims to develop and promote joint common cultural heritage research projects with the City University of Macau To promote the creation of a Joint Laboratory in Macau involving the City University of Macau and the University of Évora	UA
	UNESCO Chair in Intangible Heritage and Traditional know-how. The aim is to promote an integrated system of research, training, information and documentation on intangible cultural heritage and traditional craftsmanship.	UA
	Marketur_Research group on Tourism marketing and management	UE
	The Annals of the University of Oradea. Economic Sciences: http://anale.steconomiceuoradea.ro/en/	UE
	The Annals of the University of Oradea. Economic Sciences: http://anale.steconomiceuoradea.ro/en/ *Oradea Journal of Business and Economics* (OJBE) Two local scientific journals that can help diffusion of results	UEx
	The Annals of the University of Oradea. Economic Sciences: http://anale.steconomiceuoradea.ro/en/ *Oradea Journal of Business and Economics* (OJBE) Two local scientific journals that can help diffusion of results European and International Research Support Unit	UO
	Scientific Equipment Fund	
	NECSTouR	University of Parma
	STORY	University of Parma
	ATLAS	Atlantic Technological University
	INSTO	Atlantic Technological University

	ArtériaLab laboratory for experimentation, prototyping and transdisciplinary research at the crossroads of art, science and design	Atlantic Technological University
	Hércules Lab is a research infrastructure devoted to the study and valorisation of cultural heritage, focusing on the integration of physical and material sciences methodologies and tools in interdisciplinary approaches.	Atlantic Technological University
5	OBSERVES – CIEP - The Observatório de Escolas do Sul (Observatory of Southern Schools) is an academic and interdisciplinary structure based at CIEP-UE, destined to create inter-institutional synergies involving schools/groupings, HE Institutions , Training Centers and Association of Schools, with the objectives: a) Support schools/groups in self-assessment processes; b) Monitor the implementation of strategic action plans; c) Provide training that responds to the needs of schools/groups; d) Promote the sharing of experiences and resources.	UÉ
	Recirculation Facility: Live rearing of fin fish and shellfish, fish and invertebrate health research	UÉ
	Molecular/proteomics laboratories: genetic sequencing of aquatic organisms, eDNA, immunology studies	UÉ
6	Histology and image analysis suite: Analysis of tissues from aquatic organisms, sclerochronology, microplastics research, immunology	ATU
	Fourier-transform infrared (FTIR) spectroscopy: Marine and freshwater microplastics	ATU
	Bioacoustic monitoring equipment: Acoustic monitoring of aquatic and terrestrial organisms	ATU
	Boats, engines & sampling equipment including water sampling drones: Sampling of aquatic environments	ATU
	Cell culture and microbiology facilities: Immunology of aquatic organisms, host-pathogen interactions, antimicrobial responses	ATU
	Sediment analysis and macroinvertebrate taxonomy: Granulometric analysis and taxonomic identification of marine and freshwater biota	ATU
	Integrated Multitrophic Aquaculture and Seaweed/Bivalve Aquaculture field sites: Collaboration with Marine Institute and Seaweed and Oyster producers for access to licensed sites with possibilities for ecological restoration, biodiversity and environmental monitoring.	ATU
	SCIR mapping:a 3D workstation that including a 3D monitor and 3D glasses.CIR ortho-rectified imagery :	ATU

	stereographic near-infrared false colour (sCIR) imagery for habitat mapping	
	Environmental Research laboratories: A wide range of monitoring and analytical equipment	ATU
	Biomolecular lab: Lab equipped for biomolecular and toxicology research	ATU
	Protistology : cultivation facilities	ATU
	ATU Mountbellew (education and research farm): Education and research farm; 169ha and associated facilities; 80 Dairy cows; 60 suckler cows and 250 sheep;	ATU
	Long-term Tree-grass ecosystem research site: Experimental site of 500 ha where the effect of N deposition of ecosystem functioning is measured since 2014. The site is equipped with three eddy-covariance towers, lysimiters, phenocams, and other instruments to measure ecosystem functions	ATU
	Elemental and molecular analysis laboratory: Laboratory to analyse soil, plant and water, molecular spectroscopy, food and pollutants	ATU
	Bioscience laboratory: Laboratory that gives support to molecular, cellular, and genetic analysis	UEx
	UNESCO Biosphere Reserve Nedre Dalälven: Finding possibilities for new ways for humans to interact in and with nature and finding new ways for sustainable life and -development	UEx
	UNESCO Biosphere Reserve Voxnadalen: Finding possibilities for new ways for humans to interact in and with nature and finding new ways for sustainable life and -development	UEx
	Gävle city: Co-operation over development of green areas and their biodiversity etc	HiG
	Upplandsstiftelsen: Co-operation over development of natural reserves and other biodiverse areas	HiG
	Harmånger Maskin & Marin AB: A small company making fishing traps, that are seal safe, and by-catch reducing. These pontoon traps are used in the Baltic Sea, Donau Delta, and other seas in Europe	HiG
	University of Gävle culture collection (UGCC): An international collection of microorganisms	HiG
	Molecular biology laboratory: This infrastructure is available for conducting basic experiments in microbial molecular biology for genetic analysis of individual organisms or populations	HiG
	Plant growth chambers, tests for plant pathogenicity: Enables experiments on plants in controlled environments, for example pathogenicity tests of plant pathogens	HiG

	Mobile laboratory for analysing biological quality of waters in Bihor-Bihar macroregion: This infrastructure is a mobile, biomonitoring and environment qualifying laboratory able to examine and evaluate the surface waters in a fast, accurate and relatively cheap way, thus letting the scientific results be economically beneficial following the rules of environment and nature protection. This facility can carry out physico-chemical parameters analysis and monitoring of the aquatic organisms communities from inland surface waters.	HiG
	Plant biotechnology laboratory: The laboratory carries out research activities in the field of in vitro tissues plant culture and implicitly of the plant eco-physiology, anatomy and morphology.	HiG
	Jiului Gorge Natural Park: Cooperation in biodiversity studies, biodiversity conservation.	UO
	Iron Gates National Park: Cooperation in biodiversity studies, biodiversity conservation.	UO
	Mitra Experimental estate: Experimental estate owned by the university of Evora, dedicated to studies in environmental and agrarian sciences - precision agriculture, grazing, cork oak irrigation, rewilding patches, bird monitoring, camera trapping, etc.	UO
	Hwange LTSER: Monitoring of the dynamics of biodiversity, and the coexistence between humans in biodiversity in Hwange National Park and its surroundings (Zimbabwe)	UO
	Plaine et Val de Sevre LTSER: Experiments in agroecology in farmland landscape (France)	UE
	Lake Santo and Lake Scuro LTER aquatic environments: Lakes whose biodiversity has been studied since the 1950's	CNRS, UA
	Guadine – Pradaccio Forest Park: Many trees studied for genetic and ecophysiology traits. About 350 European beech trees of 16 years of age whose parents are known. Useful for genetic assessment end evolutionary potential of ecophysiology traits	CNRS, UA
	Passo Gavia Long Term Monitoring and Experimental Site: Long Term Monitoring and Experimental Site in alpine habitat in which several experimental facilities are installed for the study of the effects of climate change (for example, temperature increase using OTC, precipitation reduction using rain-out shelters, reduction of snow cover, interaction between nutrient deposition and climate drivers) on	UNIPR

	biodiversity and ecosystem processes in high altitude environments.	
	Microbiome Research Hub (Microbiology) (https://www.microbiomeresearchhub.com/): The MRH supports research across a wide spectrum of microbiome-related topics, all aimed to devise methods for improving human and animal health by manipulating microbial populations.	UNIPR