RESEARCH CENTER FOR PHARMACOTOXICOLOGICAL EVALUATIONS (FARMTOX) /ADVANCED RESEARCH CENTER

I. INFRASTRUCTURE OF THE RESEARCH LABORATORIES WITHIN THE FARMTOX CENTER

!!! *An important part of the infrastructure described below can also be found on the Eertis platform by accessing the following link:* **https://eertis.eu/erlb-2200-000k-0270**

I.1. LABORATORIES FOR *IN VITRO* BIOLOGICAL STUDIES

I.1.1. *IN VITRO* STUDIES LAB I

***Location (building/floor/room number)**:*

- **Faculty of Pharmacy, new building, FARMTOX center, ground floor, room 2**

***Short description (maximum 10 keywords)**:*

- pharmaco-toxicological studies, cell cultures, cytotoxicity, immunofluorescence studies, RT-PCR

Total area (m^2): 50

Equipment with an acquisition price of over 5000 euros (25000 lei) that you consider essential for the activity of your research center (purchased in the last 10 years)

Equipment name (link to the manufacturer's webpage - if applicable):

Equipment name	Specifications	Purpose
		Research
CO2 cell culture incubator - CB 170, Binder	Cell culture incubator https://www.binder-world.com/int-en/products/incubators/co2-incubators/product/cb-170	Yes
IncuSafe Incubator O2/CO2 MCO-5M, Sanyo	Cell culture incubator	Yes
Microflow ABS Class II Cabinet ABS 1500 CLS2-MK2, Bioquell	Microbiological safety cabinet for cell cultures	Yes
Microbiological safety cabinet for cell cultures - HR1200-II A2-X, Haier Biomedical	Microbiological safety cabinet for cell cultures https://www.haiermedical.com/biosa	Yes

	fety-cabinet	
Olympus IX73P2F Microscope, Olympus	Microscope configured with brightfield, phase contrast, and fluorescence functions. Olympus U-RFL-T - power supply for 100W mercury lamp (HG) Olympus TH4-100 - Halogen power supply, 100-120V	Yes
Biotek Cytation 1 Cell imaging multi-mode reader, Biotek, Agilent	BioTek Cytation 1 multimodal cell imaging reader combines fluorescence and high-contrast brightfield imaging with conventional multi-mode detection https://www.agilent.com/en/	Yes
Biotek Cytation 5 multimode reader, Biotek, Agilent	A multimodal reader configured with the following detection modes: UV-Vis absorbance, fluorescence intensity, luminescence, fluorescence polarization, time-resolved fluorescence, Alpha. https://www.agilent.com/cs/library/Support/Documents/Sales/Agilent_BioTek_Cytation_5_brochure-final.pdf?srsltid=AfmBOopBXwrb9bau8lGRK1J6MEg6eLYEO5U9S0fmNmdfb-_JJhARClAh	Yes
Real-Time PCR QuantStudio 5 system, ThermoFisher Scientific	qRT-PCR https://www.thermofisher.com/	Yes
DeNovix Nanodrop Spectrophotometer DS-11, DeNovix	A spectrophotometer for rapid quantification of nucleic acids and proteins. https://www.denovix.com/products/ds-11-fx-spectrophotometer-fluorometer/	Yes
Thermal Cycler Biometra Product line TADVANCED, Analytic Jena	https://www.analytik-jena.com/products/life-science/pcr-qpcr-thermal-cycler/thermal-cycler-pcr/biometra-tadvanced-series/	Yes
BioTek LogPhase 600	A reader for measuring microbial	Yes

Microbiology Reader, Biotek, Agilent	growth curves https://www.agilent.com/en/	
BioTek 50 TS Washer, Biotek, Agilent	Automatic microplate washer https://www.agilent.com/en/	Yes
Tallasi MA90 Laboratory fume hood (or exhaust hood), Tallasi	https://talassiarredamenti.it/en/ma_90/ma_90	Yes
Microscop - Invitrogen™ EVOS™ XL Core Configured Cell Imager with Mechanical Stage, Invitrogen	Microscope for cell culture https://www.fishersci.com/	Yes
iSeq 100 Sequencing System, Illumina	Genomic sequencing platform https://www.illumina.com/systems/sequencing-platforms/iseq.html	Yes
KingFisher Duo Prime, Thermo Scientific	Compact benchtop instrument for sample preparation, intended for the extraction and purification of DNA, RNA, proteins, and cells. https://www.thermofisher.com/ro/en/home/life-science/dna-rna-purification-analysis/automated-purification-extraction/kingfisher-systems/models/kingfisher-duo-prime.html	Yes
QuantStudio Absolute Q Digital PCR System, Applied Biosystems	qPCR digital system https://www.thermofisher.com/ro/en/home/life-science/pcr/digital-pcr/quantstudio-absolute-q-system.html	Yes
Universal Centrifuge Z 326 K, Hermle	Universal refrigerated centrifuge https://pdf.medicalexpo.com/pdf/hermle-labortechnik/universal-centrifuge-z-326-z-326-k/94381-156039.html	Yes
CellASIC® ONIX2 Microfluidic System, Merck	Microfluidic system for cell culture chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.merckmillipore.com/deepweb/assets/sigmaaldrich/product/documents/338/501/cellasic-	Yes

	onix2-microfluidic-system-mk.pdf	
Radwag AS 82/220.R2 Plus NTEP Analytical Balance	Analytical Balance https://www.walmart.com/ip/Radwag-AS-82-220-R2-Plus-NTEP-Analytical-Balance-82-220g-x-0-001g/2529954957	Yes
THERMOSTATIC WATERBATH, Raypa	Water bath chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.vitaliskft.com/docs/Raypa%20v%C3%ADzf%C3%BCrd%C5%91k,%20ultrahanfgos%20mos%C3%B3k.pdf	Yes
Refrigerator, Whirpool	Refrigerator	Yes
Refrigerator with freezer, ARCTIC	Refrigerator with freezer	Yes
Thermo Scientific BioCane 47 LN2 Liquid Nitrogen Dewar Storage Tank 47L	Liquid nitrogen storage system https://www.labx.com/item/thermo-scientific-biocane-47-ln2-liquid-nitrogen-dewar/DIS-122208-176424533316	Yes
MVE Cryosystem 750 Liquid Nitrogen Tank 47.4L	Liquid nitrogen storage system https://www.indiamart.com/proddetail/liquid-nitrogen-container-mve-cryo-system-750-vial-in-racks-storage-capacity-tanks-2853016519812.html	Yes
Haier Biomedical YDS-145-216Liquid Nitrogen Tank	Liquid nitrogen storage system https://www.sjcryos.com/medium-sized-storage-series-square-racks-product/	Yes
Boeco S-8 centrifuge	Lab centrifuge https://axeb.dk/products/boeco-s-8-bordcentrifuge/	Yes
Grant Instruments™ SUB Aqua Pro Water Bath 12 L	Water bath https://www.fishersci.co.uk/shop/products/sub-aqua-pro-7/15157025	Yes

80 °C - Sanyo MDF-U3386S Ultra-Low freezer	Ultra-Low freezer https://www.manualslib.com/manual/148748/Sanyo-Mdf-U3386s.html	Yes
Freezer, Beko	Freezer https://longeatonappliances.co.uk/beko-ccfm4582s/?msclkid=6cc2a7c77a7d14cbeae4ce22b2da3cc8&utm_source=bing&utm_medium=cpc&utm_campaign=Shopping%20-%20Catch-all&utm_term=4582214727615731&utm_content=All%20SKUs	Yes

Contact persons:

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I.1.2. *IN VITRO* STUDIES LAB II

Location (building/floor/room number):

- **Old Building of Pharmacy/second floor/room 2**

Short description (maximum 10 keywords):

- in vitro assessment, cell cultures, cytotoxicity, Oroboros, Western blot, ELISA

Total area (m^2): 65

Equipment with an acquisition price of over 5000 euros (25000 lei) that you consider essential for the activity of your research center (purchased in the last 10 years)

Equipment name	Specifications	Purpose
		Research
CO2 cell culture incubator - Steri-Cycle i160, ThermoFisher Scientific	Cell culture incubator https://www.thermofisher.com/order/catalog/product/50163013	Yes
Biosafety class II cabinet – MSC-ADVANTAGE	Biosafety cabinet for cell culture https://www.thermofisher.com/ord	Yes

	er/catalog/product/51025411	
Optika - Optikam Pro Cool 5 and Optika View Microscope	Inverted phase contrast microscope	Yes
Upright phase contrast microscope MF30 MShot	Microscope https://www.m-shot.com/product-category/microscopes/fluorescence-microscope/	Yes
UV microplate spectrophotometer - xMark™, Biorad	UV microplate spectrophotometer with variable wavelength https://www.bio-rad.com/en-ro/product/xmark-microplate-absorbance-spectrophotometer?ID=b3246bc9-f809-4f34-a4ee-93a0fcf24c88	Yes
Organ Bath - 751 Mini Tobs DMT	Organ bath https://www.dmt.dk/uploads/6/5/6/8/65689239/751mt.v.1.spec.pdf	Yes
Oroboros Oxygraph-2k, Oroboros Instruments	High-resolution respirometry oxygraph https://wiki.oroboros.at/images/7/76/MiPNet06.01_O2k-Overview.pdf	Yes
Ultra-low temperature freezer – Forma 88000 Series	Ultra-low temperature freezer	Yes

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I.2 *IN VIVO / IN OVO* BIOLOGICAL STUDIES LABORATORIES

Location (building/floor/room number):

- Faculty of Pharmacy, new building, FARMTOX center, ground floor, room 4

Short description (maximum 10 keywords):

- *in ovo* assessments, chorioallantoic membrane, angiogenesis studies, toxicological studies, irritancy potential, biocompatibility

Total area (m^2): 20

Equipment with an acquisition price of over 5000 euros (25000 lei) that you consider essential for the activity of your research center (purchased in the last 10 years)

Equipment name (link to the manufacturer's webpage - if applicable):

Equipment name	Specifications	Purpose
		Research
Digital bird incubator MX-50D Rcom, Rcom Incubator USA	Egg incubator https://rcom-incubator.com/	Yes
Zeiss Discovery V8 stereo microscope equipped with an Axiocam 105 camera	Microscope for in ovo analysis https://www.zeiss.com/microscopy/en/products/light-microscopes/stereo-and-zoom-microscopes/stereo-discovery-v8.html	Yes

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I.3. NON-INVASIVE SKIN STUDIES LABORATORY

Location:

- **Faculty of Pharmacy, new building, FARMTOX center, ground floor, room 5**

Short description (maximum 10 keywords):

- Non-invasive measurements, tests on human volunteers, dermatological testing, assessment of skin parameters

Total area (m^2): 12

Equipment with an acquisition price of over 5000 euros (25000 lei) that you consider essential for the activity of your research center (purchased in the last 10 years)

Equipment name (link to the manufacturer's webpage - if applicable):

Equipment name	Specifications	Purpose
		Research

Corneometer® CM 825	https://www.courage-khazaka.de/en	Yes
Tewameter® TM 300	https://www.courage-khazaka.de/en	Yes
Skin-Colorimeter CL 400	https://www.courage-khazaka.de/en	Yes
Cutometer® Dual MPA 580	https://www.courage-khazaka.de/en	Yes
Sebumeter® SM 815	https://www.courage-khazaka.de/en	Yes
Mexameter® MX 18	https://www.courage-khazaka.de/en	Yes
Skin pH-Meter PH 905	https://www.courage-khazaka.de/en	Yes
Skin Glossymeter GL 200	https://www.courage-khazaka.de/en	Yes
Skin Thermometer ST 500	https://www.courage-khazaka.de/en	Yes
Frictiometer FR 700	https://www.courage-khazaka.de/en	Yes
Tewameter® Triple TM 330T	https://www.courage-khazaka.de/en	Yes
Ultrascan UC 22	https://www.courage-khazaka.de/en	Yes
DUB® cutis Skin Scanner	https://www.tpm-online.de/	Yes

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I.4 HPLC-MS STUDIES LAB

Location:

- **Faculty of Pharmacy, new building, FARMTOX center, ground floor, room 7**

Short description (maximum 10 keywords):

- chromatography tests - HPLC, mass spectrometry, extract analysis, compound identification

Total area (m^2): 12

Equipment with an acquisition price of over 5000 euros (25000 lei) that you consider essential for the activity of your research center (purchased in the last 10 years)

Equipment name (link to the manufacturer's webpage - if applicable):

Equipment name	Specifications	Purpose
		Research
HPLC-MS - Liquid Chromatograph Mass Spectrometer, LCMS-8045, Shimadzu	https://www.shimadzu.com/ Equipped with: • tank tray • Shimadzu DGU-20A5R HPLC Prominence Degasser 5 Channel Degassing Unit • LC-30AD Solvent Delivery Unit • SIL-30 AC Autosampler • CBM-20A Prominence system controller • CTO-20AC Column Oven with Cooling • LPGE-UNIT LC-30AD WITH MIXER • LABSOLUTIONS LCMS insight software pack	Yes

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I.5 PHYSICO-CHEMICAL ANALYSIS LAB

Location:

- **Faculty of Pharmacy, new building, FARMTOX center, semi-basement floor**

***Short description (maximum 10 keywords)**:*

- physicochemical analyses, characterization of extracts, nanostructures, and liposomes

Total area (m^2): 12

Equipment with an acquisition price of over 5000 euros (25000 lei) that you consider essential for the activity of your research center (purchased in the last 10 years)

Equipment name (link to the manufacturer's webpage - if applicable):

Equipment name	Specifications	Purpose
		Research
Small laboratory centrifuge EBA 200, Hettich	Minicentrifuge for eppendorfs https://www.hettichlab.com/	Yes
Digital oil bath Nahita QO2/3, Nahita	Digital oil bath	Yes
Magnetic stirrer with heating - Heidoplh MR Hei-Tec	Magnetic stirrer with heating https://heidolph.com/	Yes
Magnetic stirrer with heating – Nahita 690-1	Magnetic stirrer with heating https://www.labcomercial.com/en	Yes
Analytical balance - Kern ABJ 220-4NM/ABS-N, Kern	Analytical balance https://igelmam.kern-sohn.com/media/ywthfwgq/abj-220-4nm-en.pdf	Yes
High-precission laboratory balance - Partner AS 82/220.R2, Radwag	High-precission laboratory balance https://radwag.com/	Yes
WiseTherm Heating Mantle, Wisd Wise T, VWR	Heating Mantle https://www.vwr.com/	Yes
Peak Instruments C-7200S UV-Vis Spectrophotometer	UV-Vis Spectrophotometer	Yes
Portable pH-meter - Hanna HI 8014	pH-meter	Yes
Sonicator Qsonica	Sonicator https://www.sonicator.com/	Yes
Portable Density Meter: DMA 35, Anton Paar	Portable Density Meter https://www.anton-paar.com/	Yes
Stove POL-EKO	Stove https://www.pol-eko.com.pl/en/	Yes
ES-20/60 Orbital Shaker-Incubator, Biosan	Orbital Shaker-Incubator https://biosan.lv/products/es-2060/	Yes
Olympus SZ-61TR 4K Digital Stereo Microscope	Stereomicroscope with stand and Olympus image acquisition system	Yes

Rcom Max 50 DO incubator	Egg incubator with antibacterial humidity control unit https://incomax.pt/lojaonline/gb/automatic-incubators-w-humidity-control/928-rcom-max-50-do.html	Yes
Rocker 400 Free Vacuum Pump	Vacuum pump, equipped with vacuum controller, filter funnel, collection vessel https://www.rocker.com.tw/en	Yes
Witeg HS-30D unit HighSpeed overhead stirrer digital	Digital mechanical stirrer with one 3-blade stainless steel stirring tool and one PTFE-coated 3-blade stainless steel stirring too	Yes

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