

On-going projects 2020

<i>Cost CA 18216</i> <i>Prof.univ. dr. Adrian Constantin Covic</i>	Network for Research in Vascular Ageing
<i>PN-III-P1-1.1-PD-2016-1027</i> <i>Dr. Mirela Fernanda Zaltariov</i>	New scaffolds for extension of structure-activity relationship studies of metal-based anticancer drugs (METDRUG)
<i>COST CA 18103</i> <i>CS III Dr. bioing. Gianina Dodi</i>	Innovation with Glycans: new frontiers from synthesis to new biological targets
<i>COST CA18122</i> <i>Prof.univ. dr. Vasile Drug</i>	European Cholangiocarcinoma Network
<i>COST CA17104</i> <i>Asist. univ. dr. Teodora ALEXA-STRATULAT</i>	New diagnostic and therapeutic tools against multidrug resistant tumors
<i>World Bank Research Valorization Program</i> <i>CS III Dr. bioing. Gianina Dod</i>	Polymeric based lidocaine nano-formulation for pain therapy
<i>World Bank Research Valorization Program</i> <i>Sef. lucr. Dr. Andrei Nastuta</i>	Portable atmospheric pressure plasma device for surface processing
<i>World Bank Research Valorization Program</i> <i>PI Prof.univ. dr. Lenuta Profire</i>	Innovative formulations for chronic wounds management
<i>World Bank Research Valorization Program</i> <i>PI Prof. univ. dr. Liliana Verestiuc</i>	Biocompatible composites based on biopolymers calcium phosphates and SPIONs for bone tissue engineering
<i>PN-III-P1-1.2-PCCDI-2017-0797</i> <i>PI Prof. univ. Dr. Viorel Scripcariu</i>	Mecanisme patogenice si tratamentul personalizat in cancerul de pancreas utilizand tehnologii multi-omice
<i>Grant intern UMF Iasi</i> <i>PI CS III dr. MIHAI Cosmin-Teodor</i>	Evaluation of cold atmospheric plasma as an associative agent for the improvement of breast cancer chemotherapy effectiveness
<i>Grant intern UMF Iasi</i> <i>PI CS III dr. ȘTEFĂNESCU Raluca</i>	Development of mass spectrometric and enzyme methods for the investigation of the molecular interaction between neurotoxic amyloid-beta peptide and six selected organic molecules
<i>PN-III-P1-1.2-PCCDI-2017-0697</i> <i>PI Acad. Dr. Maya Simionescu</i>	Terapii inteligente pentru boli non-comunicabile bazate pe eliberarea controlata de compusi farmacologici din celule încapsulate după manipulare genetică sau bionanoparticule vectorizate (INTERA)

Finished projects

<i>Grant intern UMF Iași - IDEI Echipe PI Șef. lucr. dr. Dimofte Daniel Vasile</i>	Adipose tissue biomarkers in short-term remission of metabolic syndrome after bariatric surgery
<i>Grant intern UMF Iași - IDEI Echipe PI Șef. lucr. dr. Guțu Mihai</i>	18F FDG PET/MRI prognostic markers in cardiorenal syndrome (CRS)
<i>Grant intern UMF Iași PI Șef. lucr. dr. Vasincu Ioana Mirela</i>	Development and characterization of new nanosystems based on nonsteroidal antiinflammatory drugs and symptomatic slow acting drugs
<i>Grant intern UMF Iași Sef. lucr. dr. Constantin Sandra Madalina</i>	Development of new pioglitazone-curcumin loaded chitosan nanoparticles with potential application in type 2 diabetes mellitus therapy
<i>SNGN ROMGAZ SA Asist. Univ. Dr. Alexa-Stratulat Teodora</i>	Metoda avansată de diagnostic precoce prin imagistică în domeniul THz al neoplaziilor aflate în stadiul incipient
<i>PN-III-P1-1.1-PD-2016-1642 CS III Dr. Dodi Gianina</i>	Dezvoltarea unui agent multifuncțional de tipul nanoparticulelor magnetice hibride radiomarcate pentru imagistică medicală duală (SPECT și MRI) https://nanoimag.grant.umfiasi.ro
<i>European Society of Contraception and Reproductive Health PI Asist. Univ. Dr. Alexa-Stratulat Teodora</i>	Multidisciplinary approach for improving sexual health in female cancer survivors
<i>PI Drd. Barbu Roxana</i>	Efectul fragmentelor angiotensinice și a substanțelor ce intervin asupra sistemului renină-angiotensină asupra motilității musculaturii netede utero-tubare
<i>PI Drd. Bucă Beatrice</i>	Studii privind efectele farmacodinamice ale unor donori de oxid nitric
<i>PI Drd. Caba Bogdan</i>	Relaxarea endotelio-dependență în teritoriul cutanat la șobolani. Acțiunea factorilor de creștere trombocitari asupra lamboului McFarlane modificat în cazul blocării sintezei de oxid nitric
<i>PI Drd. Caba Bogdan</i>	Studii in vivo/in vitro a relaxării endotelio-dependente în teritoriul cutanat la șobolani. Corelații între oxidul nitric și factori de creștere plasmatici. Implicații în fiziologia lambourilor cutanate
<i>PI Drd. Dragostin Ionuț</i>	Evaluarea experimentală a reducerii toxicității medicamentoase la nivel tisular utilizând metode in vitro de încapsulare

<i>PI drd. Dmour Rashad</i>	Cercetări experimentale privind influența administrării chimioterapicelor antibacteriene asupra mediatorilor inflamației parametrilor apărării imune a organismului și asupra mecanismelor implicate în stressul oxidative
<i>Proiect nr. 324/05.02.2018 PI CS I. Dr. Bogdan Ionel Tamba.</i>	Stabilirea limitelor de expunere bazate pe starea de sănătate pentru utilizarea la identificarea riscului pentru fabricarea medicamentelor diferite unguente, creme, geluri pe același flux de fabricație
<i>H2020- WIDESPREAD-2014-2015, Project no.667387 PI CS I Dr. Pinteală Mariana</i>	SupraChem Lab – Laboratory of Supramolecular Chemistry for adaptive Delivery systems
<i>PPN-III-P2-2.1-PED-2016-1598 PI Prof. Univ. dr. Drug Vasile</i>	Nanoparticle-enabled Terahertz Molecular Imaging as Advanced Early-stage Diagnostic Method of Gastric Neoplasia
<i>PN-III-P4-ID-PCE-2016-0126 PI Prof. Univ. dr. Iliescu Radu</i>	Systemic and renal hemodynamic mechanisms in obesity-related kidney injury
<i>PN-III-P2-2.1-PED-2016-1807 PI Prof. univ. dr. Profire Lenuța</i>	Noi formulari utilizate in tratamentul local al plăgilor cronice
<i>2014 635/12.03.2014, cod SMISCSNR 48880</i>	Advanced research-development center in experimental medicine – CEMEX
<i>Educational IASP Grant PI dr. Leon Maria-Magdalena</i>	IASP initiative for improving education, INnovative Education project for CANcer Pain management in the second largest Oncology hospital in Romania (INECAPOR) 1 an (2013-2014)
<i>PN-II-PT-PCCA-2013-4 CS.I Harabagiu Valeria</i>	Formulari complexe pe baza de lipozomi si ciclodextrina pentru terapia transdermala a durerii (NANODERMA)
<i>2012</i>	Chemo hyperthermal Delivery - Combined chemohyperthermal control of hepatic tumors, based on microwave-activated subendothelial-targeted magnetic nano-assemblies (CheTherDel)
<i>PN-II-ID-PCE-2011-3 PI dr. Catalina Roxana Bohotin</i>	Studii experiementale privind relatia dintre disfunctia mitocondriala si durere; Noi perspective in terapia durerii
<i>2011 MANUNET ERA NET nr. 7- 038/13.05.2011</i>	Development of biosensors by innovative technology of electrocoating the carbon structures with active polymers (CarBioSense)
<i>2010 FP7 AMI4EUROPE</i>	Advanced, CrossDisciplinary & Integrated Medical Imaging for all Europeans through a Network of Regional Clusters and Development Strategies
<i>2008 CNCSIS 2561/2008,</i>	Experimental researches on local therapy of chronic inflammatory pain with analgesics released from hydrogel supports

2008 <i>Fiterman Pharma, 43/12.05.2008</i>	Industry research contract
2008 <i>CNCSIS 1734/ 2008</i>	Studies regarding the optimization of analgesic efficiency of opioid peptides and peptidomimetics by coupling with transporting nanoparticles and by investigation of peripheral nociception modulation
2007 <i>CNCSIS TD cod 421/2007.</i>	Neurobiological research on the action of some trace elements in the modulation of nociception at central and peripheral level
2006 <i>CEEX nr. 108/09.10.2006</i>	New nanostructured systems used for the controlled release of pharmacological agents
2006 <i>CNCSIS nr. 68/2006</i>	Pharmacological and clinical physical research platform on mechanisms of non-oncological and oncological pain
2005 <i>CEEX nr 31/2005</i>	Molecular, cellular and integrative mechanisms of pain. Clinical implications (MMD)
2005 <i>CEEX nr 926/2005</i>	New multifunctional nanoparticles based on mesoporous clay, with multidisciplinary applications (Nano-Agmam)
2004 <i>VIASAN nr. 327/2004</i>	Physio-pharmacological research on the influence of radical species and other pharmacological agents on nociceptive sensitivity and analgesia
2004 <i>CNCSIS nr. 1227/2004</i>	Neurobiological research on the action of some pharmacological agents in the modulation of nociception at the specific receptor level
2003 <i>INTERNICHE 2003</i>	Alternative methods to work on laboratory animals
2001 <i>UMF Iasi – SC Hyperion SA</i>	Experimental research on the anti-inflammatory and analgesic action of the pharmacological product indomethacin ointment 4% after topical administration
2000 <i>CNCSIS nr. 40607 / 27.09.2000</i>	Development of a center for study and therapy of pain
1999 <i>CNFIS nr. 41896 / 4.11.1999</i>	Complex program for the implementation of algeziology in Romanian university and postgraduate education

Publications

Stefanescu, R. et al.	<i>Secondary Metabolites from Plants Possessing Inhibitory Properties against Beta-Amyloid Aggregation as Revealed by Thioflavin-T Assay and Correlations with Investigations on Transgenic Mouse Models of Alzheimer's Disease</i>	Biomolecules 2020, 10, 870 DOI: 10.3390/biom10060870
Tamba B.I. et al.	<i>Challenges and opportunities in preclinical research of synthetic cannabinoids for pain therapy</i>	Medicina 2020, 56, 24 DOI: 10.3390/medicina56010024
Stanciu G.D. et al.	<i>Alzheimer's disease pharmacotherapy in relation to cholinergic system involvement</i>	Biomolecules 2020, 10, 40. DOI: 10.3390/biom10010040
Cojocaru F.D. et al.	<i>Nanomaterials designed for antiviral drug delivery transport across biological barrier</i>	Pharmaceutics 2020, 12(2), 171. https://doi.org/10.3390/pharmaceutics12020171
Lupusoru, R.V. et al.	<i>Effect of TAT-DOX-PEG irradiated gold nanoparticles conjugates on human osteosarcoma cells</i>	Sci. Rep. 2020, 10, 6591 DOI:10.1038/s41598-020-63245-8
Voicu, G. et al.	<i>Delivery of Runx2-shRNA plasmids by nano-polyplexes down-regulates the expression of proteins involved in osteodifferentiation of human valvular interstitial cells in diabetic and pro-osteogenic conditions, Pharmaceutics, 2020</i>	Pharmaceutics 2020, 12, 507 DOI:10.3390/pharmaceutics12060507
Milosevic, V. et al.	<i>Wnt/IL-1 beta/IL-8 autocrine circuitries control chemoresistance in mesothelioma initiating cells by inducing ABCB5</i>	Int J Cancer 2020. 146(1) 192-207 DOI: 10.1002/ijc.32419
Tamba, B.I. et al.	<i>Challenges and Opportunities in Preclinical Research of Synthetic Cannabinoids for Pain Therapy</i>	Medicina 2020, 56, 24 doi:10.3390/medicina56010024
Ancuceanu R. et al.	<i>Use of QSAR Global Models and Molecular Docking for Developing New Inhibitors of c-src Tyrosine Kinase</i>	Int J Mol Sci 2020, 21(1), 19 https://doi.org/10.3390/ijms21010019
Luca A. et al.	<i>In vivo safety and efficacy evaluation of a novel polymeric based lidocaine formulation for topic analgesia</i>	Farmacia 2019; 67(1): 117-125 DOI: 10.31925/farmacia.2019.1.16
Leon-Constantin M.M. et al.	<i>The morphofunctional impact of topical Lidocaine formulation in inflammatory pain – experimental study</i>	Rom J Morphol Embryol 2019, 60(3):869-74
Vasincu A. et al.	<i>Effects of aqueous extract of Vernonia kotschyana sch. bip. ex walp roots on experimental gastric ulcer in mice</i>	Farmacia 2019, Vol. 67, 5 DOI: 10.31925/farmacia.2019.5.12
Stanciu G.D. et al.	<i>Intracerebroventricular co-administration of protoxin-II and trace elements in rats enhances the analgesic effect of the 1.7 voltage-gate sodium channel blocker</i>	BioMed Research International, 2019, 8057803 DOI: 10.1155/2019/8057803
Alexa-Stratulat T. et al.	<i>What sustains the multidrug resistance phenotype beyond ABC efflux transporters? Looking beyond the tip of the iceberg</i>	Drug Resist Update 2019, 100643 https://doi.org/10.1016/j.drug.2019.100643
Stanciu G.D. et al.	<i>Relevance of surface neuronal protein autoantibodies as biomarkers in seizure-associated disorders</i>	Int J Mol Sci

		2019, 20(18), 4529 https://doi.org/10.3390/ijms20184529
Balan V. et al.	<i>Vibrational spectroscopy fingerprinting in medicine: from molecular to clinical practice</i>	Materials 2019, 12(18), 2884 https://doi.org/10.3390/ma12182884
L.M. Trandafir et. al.	<i>Current Practices and Potential Nanotechnology Perspectives for Pain Related to Cystic Fibrosis</i>	J Clin Med 2019, 8(7), 1023 https://doi.org/10.3390/jcm8071023
Luca A. et al.	<i>In-vivo safety and efficacy evaluation of a novel polymeric based lidocaine formulation for topical analgesia</i>	Farmacia, 2019, 67(1) https://doi.org/10.31925/farmacia.2019.1.16
Vochita G. et al.	<i>Graphene oxide effects in early ontogenetic stages of Triticum aestivum L. seedlings</i>	Ecotoxicol Environ Saf 2019;181:345-352. https://doi.org/10.1016/j.ecoenv.2019.06.026
Aprotosoiaie A.C. et al.	<i>Essential oils of Moldavian Thymus species: Chemical composition, antioxidant, anti-Aspergillus and antigenotoxic activities</i>	Flavour Frag J 2019: 34(3):175-186 https://doi.org/10.1002/ffj.3490
Roşu C.M. et al.	<i>Performances of Pichia kudriavzevii in decolorization, biodegradation, and detoxification of C.I. Basic Blue 41 under optimized cultural conditions</i>	Environ Sci Pollut Res 2019 26:431 https://doi.org/10.1007/s11356-018-3651-1
Luca S.V. et al.	<i>HPLC-DAD-ESI-Q-TOF-MS/MS profiling of Verbascum ovalifolium Donn ex Sims and evaluation of its antioxidant and cytogenotoxic activities</i>	Phytochem Anal 2019;30:34–45. https://doi.org/10.1002/pca.2788
Rezus E. et al.	<i>The Link Between Inflammaging and Degenerative Joint Diseases</i>	Int J Mol Sci 2019, 20(3), 614 https://doi.org/10.3390/ijms20030614
Danciu M. et al.	<i>Terahertz Spectroscopy and Imaging: A Cutting-Edge Method for Diagnosing Digestive Cancers</i>	Materials 2019, 12(9), 1519 https://doi.org/10.3390/ma12091519
Stefanescu R. et al.	<i>Contributions of Mass Spectrometry to the Identification of Low Molecular Weight Molecules Able to Reduce the Toxicity of Amyloid- Peptide to Cell Cultures and Transgenic Mouse Models of Alzheimer's Disease</i>	Molecules 2019, 24(6), 1167 https://doi.org/10.3390/molecules24061167
Codreanu C. et al.	<i>Reference interval and upper decision limit for serum uric acid – an evidence-based approach on Romanian population using an a posteriori method</i>	Rev Romana Med Lab 2019. 27(2)147-58 https://doi.org/10.2478/rrlm-2019-0019
Caba B. et al.	<i>Clinical and echographic evaluation of the effects of epinephrine and platelet-rich plasma solution on modified McFarlane skin flap in rats</i>	Rev Med Chir Soc Med Nat 2019, 123(2), 319 – 327 http://bit.do/fofQx
lordache M.L. et al.	<i>Magnetic chitosan grafted (alkyl acrylate) composite particles: Synthesis, characterization and evaluation as adsorbents</i>	Arab J Chem 2018, 11(7), 1032-1043 https://doi.org/10.1016/j.arabjc.2015.12.010
Petrovici A.R. et al.	<i>Biosynthesis of exopolysaccharides by Weissella confusa in a new culture medium</i>	Rom Biotech Lett

		2018, 23(3), 13637 http://bit.do/fofR4
Gavrilovici C. et al.	<i>How nephrotoxic is the cancer therapy in children?</i>	Farmacia 2018, 66(2), 197-208 http://bit.do/fofSD
Rusu-Zota G. et al.	<i>The imidazoline Receptor Antagonists Idazoxan and Efaroxan Improve the Spatial and Reference Memory in Rats</i>	Rev. Chim (Bucharest) 2018, 69(12), 3577-3580 http://bit.do/fofTd
Rusu R.N. et al.	<i>Demonstrating the antinociceptive action of renin-angiotensin systems modulators in mice</i>	Veterinary Drug 2018, 12(2), 31-37 http://bit.do/fofTy
Uritu C.M. et al.	<i>Medicinal Plants of the Family Lamiaceae in Pain Therapy: A Review</i>	Pain Res Manag 2018, 7801543 https://doi.org/10.1155/2018/7801543
Tamba B.I. et al.	<i>Tailored surface silica nanoparticles for blood-brain barrier penetration: Preparation and in vivo investigation</i>	Arab J Chem 2018, 11(6), 981-990 https://doi.org/10.1016/j.arabjc.2018.03.019
Brinkman D.J. et al.	<i>Essential competencies in prescribing: A first european cross-sectional study among 895 final-year medical students</i>	Clin Pharmacol Ther 2017, 101(2), 281–289 https://doi.org/10.1002/cpt.521
Brinkman D.J. et al.	<i>Pharmacology and Therapeutics Education in the European Union Needs Harmonization and Modernization: A Cross-sectional Survey Among 185 Medical Schools in 27 Countries</i>	Clin Pharmacol Ther 2017, 102(5), 815–822, https://doi.org/10.1002/cpt.682
Dascalu A. I. et al.	<i>Transfection-capable polycationic nanovectors which include PEGylated-cyclodextrin structural units: a new synthesis pathway</i>	J Mater Chem B 2017, 5, 164-7174 https://doi.org/10.1039/c7tb01722g
Aprotosoiaie A.C. et al.	<i>Antioxidant and antigenotoxic potential of Ramaria largentii Marr & D. E. Stuntz, a wild edible mushroom collected from Northeast Romania</i>	Food Chem Toxicol 2017, 108, 429-437 https://doi.org/10.1016/j.fct.2017.02.006
Stanciu G.D. et al.	<i>Clinical reasoning in feline epilepsy: Which combination of clinical information is useful?</i>	The Veterinary Journal 2017, 225, 9–12, https://doi.org/10.1016/j.tvjl.2017.04.001
Bild V. et al.	<i>Isobolar analysis of the binary fixed-ratio combination of acetylsalicylic acid-acetaminophen</i>	Farmacia 2017, (65)4, 563–566 http://bit.do/fofYN
Ababei D.C. et al.	<i>Synergistic effects of the doxepin-candesartan combination on the thermoalgesic sensibility in mice</i>	Farmacia 2017, 65(5), 726 – 730 http://bit.do/fof2k
Alexa A.I. et al.	<i>The dynamics of the main oxidative stress chemical markers in the serum of rats stressed by various behavioural tasks</i>	Rev Chim (Bucharest) 2017, 68(2), 350-353 http://bit.do/fof27
Alexa AI et al.	<i>Local silver nanoparticles administration promotes inflammation and hyperalgesia in rats</i>	Rev. Chim

		2017;68(3):490-496 DOI: 10.37358/RC.17.3.5485
Pinzariu A.C. et al.	<i>Adipose tissue remodeling by prolonged administration of high dose of vitamin D3 in rats treated to prevent sarcopenia</i>	Rev Chim (Bucharest) 2017, 68(9), 2139-2143 http://bit.do/fof3D
Stefanescu R. et al.	<i>Yeast-based microbiological decontamination of heavy metal contaminated soils of Tarnița</i>	Carpath J Earth Env 2017, 12(1), 153-159 http://bit.do/fogkQ
Draganescu D. et al.	<i>Hydrolysis studies of flaxseed extract by high performance liquid chromatography</i>	Cell Chem Technol 2017, 51 (9-10), 803-811 http://bit.do/fogmc
Petrovici A.R. et al.	<i>Effects of culture medium composition on biosynthesis of exopolysaccharides</i>	Cell Chem Technol 2017, 51(9-10), 821-830 http://bit.do/fogmF
Manole A. et al.	<i>An overview on screening for breast cancer awareness in romanian general population</i>	Rev Med Chir Soc Med Nat 2017, 121(3):600-607 http://bit.do/fogna
Stefanescu R. et al.	<i>Contribution to Casein Determination by UV Spectrophotometry</i>	Acta Chemica Iasi 2017, 25(2), 112-126 https://doi.org/10.1515/achi-2017-0011
Stefanescu R., Bancila S.	<i>MALDI-TOF Mass Spectrometric Analysis of Zeins Extracted from Maize Seeds</i>	Acta Chemica Iasi 2017, 25(1), 75-86 https://doi.org/10.1515/achi-2017-0008
Stanciu G.D.	<i>Poliradiculoneurita acuta idiopatica – diagnostic și tratament</i>	Forum Practica Veterinară 2017, (26)1, 32-36 DOI:10.26416/PV.26.1.2017.571
Tamba BI et al.	<i>Silica nanoparticles: Preparation, characterization and in vitro/in vivo biodistribution studies</i>	Eur. J. Pharm. Sci 2015; 71:46-55 DOI: 10.1016/j.ejps.2015.02.002
Peptu C et al.	<i>Nanotechnology approaches for pain therapy through transdermal drug delivery</i>	Curr. Pharm. Des 2015; 21(42):6125 – 6139 DOI:10.2174/1381612821666151027152752
Tamba BI et al.	<i>Heavy metal trace elements induce antinociception in an experimental mouse model</i>	Rev. Chim 2015; 66(7):976-982
Tamba BI et al.	<i>Common trace elements alleviate pain in an experimental mouse model</i>	J. Neurosci. Res. 2013; 91(4):554–561 DOI: 10.1002/jnr.23191