

Lista lucrări științifice

Titlul cercetării de postdoctorat:

„Studiul efectelor protective ale flavonoidului crisina asupra fibrozei hepatice indusă experimental la șoarece”

Mentor: Prof. Univ. Dr. Ardelean Aurel

Titlul tezei de doctorat:

„Cercetări privind efectul unor aditivi furajeri asupra unor parametrii sangvini și bioproductivi la tineretul cunicul”

Conducător: Prof. Univ. Dr. Falcă Constantin

Cărți publicate în calitate de coeditor:

1. Oana-Maria Boldura, **Cornel Balta**, Electrophoresis – Life Sciences Applications. Ed. IntechOpen, London, United Kingdom, 2018. 143 pagini, ISBN 978-1-78923-552-4.
2. Madan L. Nagpal, Oana-Maria Boldura, **Cornel Balta**, Shymaa Enany, Synthetic Biology - New Interdisciplinary Science, 2020, Ed. IntechOpen, ISBN 978-1-78984-089-6.
3. Oana Maria Boldura, **Cornel Balta**, Nasser Sayed Awward, Biochemical Analysis Tools - Methods of Bio-molecules studies, 2020, Ed. IntechOpen, ISBN 978-1-78984-856-4.

Capitole de cărți publicate în calitate de autor corespondent:

1. Oana Maria Boldura, Cristina Petrine, Alin Mihiu, **Cornel Balta**, 2020, Biochemical Analysis Tools - Methods of Bio-molecules studies, chapter: Latest implications of Next Gen Sequencing in diagnosis of acute and chronic myeloid leukemia, Ed. IntechOpen, ISBN 978-1-78984-857-1.

Articole/studii in extenso, publicate în reviste cotate ISI cu factor de impact în calitate de autor principal, autor cu drepturi egale, ultim autor sau autor corespondent:

1. **Balta C**, Herman H, Boldura OM, Gasca I, Rosu M, Ardelean A, Hermenean A. Chrysin attenuates liver fibrosis and hepatic stellate cell activation through TGF- β /Smad signaling pathway. Chem Biol Interact. 2015 Oct 5;240:94-101. doi: 10.1016/j.cbi.2015.08.013. IF=3.14
2. **Balta C**, Herman H, Rosu M, Cotoraci CA, Ivan A, Folk A, Duka R, Dinescu S, Costache M, Petre A. Homeostasis of blood parameters and inflammatory markers analysis during bone defect healing after scaffolds implantation in mice calvaria defects, Romanian Biotechnological Letters, 2016, 22(6): 12018-12025. IF=0.404
3. Folk A, **Balta C**, Herman H, Ivan A, Boldura OM, Paiusan L, Ardelean A, Hermenean A. Flucytosine and Amphotericin B Coadministration Induces Dose-Related Renal Injury. Dose Response. 2017 Jun 5;15(2):1559325817703461. doi: 10.1177/1559325817703461. IF=2.435
4. **Balta C**, Ciceu A, Herman H, Rosu M, Boldura OM, Hermenean A. Dose-Dependent Antifibrotic Effect of Chrysin on Regression of Liver Fibrosis: The Role in Extracellular Matrix Remodeling. Dose Response. 2018 Aug 8;16(3):1559325818789835. doi: 10.1177/1559325818789835. IF=2.451
5. Codreanu A, **Balta C**, Herman H, Cotoraci C, Mihali CV, Zurbau N, Zaharia C, Rapa M, Stanescu P, Radu IC, Vasile E, Lupu G, Galateanu B, Hermenean A. Bacterial Cellulose-Modified Polyhydroxyalkanoates Scaffolds Promotes Bone Formation in Critical Size Calvarial Defects in Mice. Materials (Basel). 2020 Mar 21;13(6):1433. doi: 10.3390/ma13061433. IF=3.057
6. Vicas SI, Laslo V, Timar AV, **Balta C**, Herman H, Ciceu A, Gharbia S, Rosu M, Mladin B, Chiana L, Prokisch J, Puschita M, Miutescu E, Cavalu S, Cotoraci C, Hermenean A. Nano Selenium-Enriched Probiotics as Functional Food Products against Cadmium Liver Toxicity. Materials (Basel). 2021 Apr 27;14(9):2257. doi: 10.3390/ma14092257. IF=3.057 (2020)
7. Vicas SI, Laslo V, Timar AV, **Balta C**, Herman H, Ciceu A, Gharbia SA, Rosu M, Mladin B, Fritea L, Cavalu S, Cotoraci CA, Prokisch J, Puschită M, Pop C, Miutescu E, Hermenean AO. Functional Food Product Based on Nanoselenium-Enriched Lactobacillus casei against Cadmium Kidney Toxicity. Applied Sciences, 2021, 11, 4220. doi: 10.3390/APP11094220. IF=2.679 (2020)

8. Nicolescu LC, Nicolescu CM, Miha AG, **Balta C**. The effect of red blood cell transfusion on peripheral tissue oxygen delivery and consumption in septic patients. *Transfus Clin Biol*. 2021 Feb;28(1):5-10. doi: 10.1016/j.traci.2020.12.002. IF=1.406 (2020)
9. Boldura, O.-M.; Marc, S.; Otava, G.; Hutu, I.; **Balta, C.**; Tulcan, C.; Mircu, C. Utilization of Rosmarinic and Ascorbic Acids for Maturation Culture Media in Order to Increase Sow Oocyte Quality Prior to IVF. *Molecules* 2021, 26, 7215. <https://doi.org/10.3390/molecules26237215>. IF=4.411
10. Gesualdo C, **Balta C**, Platania CBM, Trotta MC, Herman H, Gharbia S, Rosu M, Petrillo F, Giunta S, Della Corte A, Grieco P, Bellavita R, Simonelli F, D'Amico M, Hermenean A, Rossi S, Bucolo C. Fingolimod and Diabetic Retinopathy: A Drug Repurposing Study. *Front Pharmacol*. 2021 Sep 17;12:718902. doi: 10.3389/fphar.2021.718902. IF=5.81 (2020)
11. Miha, A.G.; Susan, M.M.; Strauti, C.N.; Mot, M.D.; Muresanu, H.D.; **Balta, C.**; Nesi, A. First Case of *Raoultella planticola* Urinary Tract Infection Reported in Western Romania. *Medicina* 2023, 59, 506. <https://doi.org/10.3390/medicina59030506> IF=2.948
12. **Balta, C.**; Herman, H.; Ciceu, A.; Mladin, B.; Rosu, M.; Sasu, A.; Petcu, V.E.; Voicu, S.N.; Balas, M.; Gherghiceanu, M.; et al. Phytochemical Profiling and Anti-Fibrotic Activities of the Gemmotherapy Bud Extract of *Corylus avellana* in a Model of Liver Fibrosis on Diabetic Mice. *Biomedicines* 2023, 11, 1771. <https://doi.org/10.3390/biomedicines11061771> IF=4,7
13. Trotta MC, Herman H, Ciceu A, Mladin B, Rosu M, Lepre CC, Russo M, Bácskay I, Fenyvesi F, Marfella R, Hermenean A, **Balta C** and D'Amico M (2023), Chrysin-based supramolecular cyclodextrin-lixarene drug delivery system: a novel approach for attenuating cardiac fibrosis in chronic diabetes. *Front. Pharmacol*. 14:1332212. doi: 10.3389/fphar.2023.1332212 IF=5,6

Articole/studii in extenso, publicate în reviste cotate ISI cu factor de impact în calitate de coautor:

1. Gârban G, Silaghi-Dumitrescu R, Ioniță H, Gârban Z, Hădărugă NG, Ghibu GD, **Baltă C**, Simiz FD, Mitar C. Influence of novel gallium complexes on the homeostasis of some biochemical and hematological parameters in rats. *Biol Trace Elem Res*. 2013 Dec;155(3):387-95. doi: 10.1007/s12011-013-9796-3. IF=1.608
2. Gârban Z, Silaghi-Dumitrescu R, Gârban G, Avacovici A, Hădărugă NG, **Balta C**, Ghibu GD, Bischin C, Rada, OA. Metallomics related to gallium compounds: biochemical and xenobiochemical aspects. *Macedonian Journal of Chemistry and Chemical Engineering*, 2014, 33, 39-52. doi:10.20450/MJCCE.2014.131. IF=0.533
3. Sasu A, Herman H, Mariasiu T, Rosu M, **Balta C**, Anghel N, Miutescu E, Cotoraci C, Hermenean A. Protective effects of silymarin on epirubicin-induced mucosal barrier injury of the gastrointestinal tract. *Drug Chem Toxicol*. 2015 Oct;38(4):442-51. doi: 10.3109/01480545.2014.992072. IF=1.653
4. Anghel N, Cotoraci C, Ivan A, Suci M, Herman H, **Balta C**, Nicolescu L, Olariu T, Galajda Z, Ardelean A, Hermenean A. Chrysin attenuates cardiomyocyte apoptosis and loss of intermediate filaments in a mouse model of mitoxantrone cardiotoxicity. *Histol Histopathol*. 2015 Dec;30(12):1465-75. doi: 10.14670/HH-11-641. IF=1.875
5. Folk A, Cotoraci C, **Balta C**, Suci M, Herman H, Boldura OM, Dinescu S, Paiusan L, Ardelean A, Hermenean A. Evaluation of Hepatotoxicity with Treatment Doses of Flucytosine and Amphotericin B for Invasive Fungal Infections. *Biomed Res Int*. 2016;2016:5398730. doi: 10.1155/2016/5398730. IF=2.476
6. Ivan A, Herman H, **Balta C**, Hadaruga DI, Mihali CV, Ardelean A, Hermenean A. Berberis vulgaris extract/ β -cyclodextrin complex increases protection of hepatic cells via suppression of apoptosis and lipogenesis pathways. *Exp Ther Med*. 2017 May;13(5):2143-2150. doi: 10.3892/etm.2017.4240. IF=1.269
7. Savici J, Boldura OM, **Balta C**, Brezovan D, Muselin F, Mircu C, Borza C, Motoc M, Tulcan C. Protective Effect of Hypericum perforatum L. Extract on Hexavalent Chromium Induced Toxicity in Rat Adrenal Gland. *Revista De Chimie*, 2017, 68, 2014-2017. doi: 10.37358/rc.17.9.5813. IF=1.232

8. Hermenean A, Codreanu A, Herman H, **Balta C**, Rosu M, Mihali CV, Ivan A, Dinescu S, Ionita M, Costache M. Chitosan-Graphene Oxide 3D scaffolds as Promising Tools for Bone Regeneration in Critical-Size Mouse Calvarial Defects. *Sci Rep*. 2017 Nov 30;7(1):16641. doi: 10.1038/s41598-017-16599-5. IF=4.122
9. Anghel N, Herman H, **Balta C**, Rosu M, Stan MS, Nita D, Ivan A, Galajda Z, Ardelean A, Dinischiotu A, Hermenean A. Acute cardiotoxicity induced by doxorubicin in right ventricle is associated with increase of oxidative stress and apoptosis in rats. *Histol Histopathol*. 2018 Apr;33(4):365-378. doi: 10.14670/HH-11-932. IF=2.015
10. Gharbia S, **Balta C**, Herman H, Rosu M, Váradi J, Bácskay I, Vecsernyés M, Gyöngyösi S, Fenyvesi F, Voicu SN, Stan MS, Cristian RE, Dinischiotu A, Hermenean A. Enhancement of Silymarin Anti-fibrotic Effects by Complexation With Hydroxypropyl (HPBCD) and Randomly Methylated (RAMEB) β -Cyclodextrins in a Mouse Model of Liver Fibrosis. *Front Pharmacol*. 2018 Aug 13;9:883. doi: 10.3389/fphar.2018.00883. IF=3.8
11. Trotta MC, Maisto R, Guida F, Boccella S, Luongo L, **Balta C**, D'Amico G, Herman H, Hermenean A, Bucolo C, D'Amico M. The activation of retinal HCA2 receptors by systemic beta-hydroxybutyrate inhibits diabetic retinal damage through reduction of endoplasmic reticulum stress and the NLRP3 inflammasome. *PLoS One*. 2019 Jan 18;14(1):e0211005. doi: 10.1371/journal.pone.0211005. IF=2.740
12. Platania CBM, Maisto R, Trotta MC, D'Amico M, Rossi S, Gesualdo C, D'Amico G, **Balta C**, Herman H, Hermenean A, Ferraraccio F, Panarese I, Drago F, Bucolo C. Retinal and circulating miRNA expression patterns in diabetic retinopathy: An in silico and in vivo approach. *Br J Pharmacol*. 2019 Jul;176(13):2179-2194. doi: 10.1111/bph.14665. IF=7.730
13. Grumezescu AM, Stoica AE, Dima-Bălcescu MŞ, Chircov C, Gharbia S, **Baltă C**, Roşu M, Herman H, Holban AM, Ficai A, Vasile BS, Andronescu E, Chifiriu MC, Hermenean A. Electrospun Polyethylene Terephthalate Nanofibers Loaded with Silver Nanoparticles: Novel Approach in Anti-Infective Therapy. *J Clin Med*. 2019 Jul 16;8(7):1039. doi: 10.3390/jcm8071039. IF=5.688
14. Váradi J, Hermenean A, Gesztelyi R, Jeney V, Balogh E, Majoros L, Malanga M, Fenyvesi É, Sente L, Bácskay I, Vecsernyés M, Fehér P, Ujhelyi Z, Vasvári G, Árvai I, Rusznyák Á, **Balta C**, Herman H, Fenyvesi F. Pharmacokinetic Properties of Fluorescently Labelled Hydroxypropyl-Beta-Cyclodextrin. *Biomolecules*. 2019 Sep 20;9(10):509. doi: 10.3390/biom9100509. IF=3.91
15. Stan MS, Voicu SN, Caruntu S, Nica IC, Olah NK, Burtescu R, **Balta C**, Rosu M, Herman H, Hermenean A, Dinischiotu A. Antioxidant and Anti-Inflammatory Properties of a Thuja occidentalis Mother Tincture for the Treatment of Ulcerative Colitis. *Antioxidants (Basel)*. 2019 Sep 19;8(9):416. doi: 10.3390/antiox8090416. IF=5.13
16. Bannuscher A, Hellack B, Bahl A, Laloy J, Herman H, Stan MS, Dinischiotu A, Giusti AM, Krause B, Tentschert J, Rosu M, **Balta C**, Hermenean AO, Wiemann M, Luch A, Haase A. Metabolomics profiling to investigate nanomaterial toxicity in vitro and in vivo. *Nanotoxicology*, 2020, 14, 807-826. doi:10.1080/17435390.2020.1764123. IF=5.913
17. Vlasceanu GM, Şelaru A, Dinescu S, **Balta C**, Herman H, Gharbia S, Hermenean A, Ionita M, Costache M. Comprehensive Appraisal of Graphene-Oxide Ratio in Porous Biopolymer Hybrids Targeting Bone-Tissue Regeneration. *Nanomaterials (Basel)*. 2020 Jul 24;10(8):1444. doi: 10.3390/nano10081444. IF=5.076
18. Mihu AG, **Balta C**, Marti DT, Paduraru AA, Lupu MA, Olariu TR. Seroprevalence of Toxoplasma gondii infection among women of childbearing age in an endemic region of Romania, 2016-2018. *Parasite*. 2020;27:59. doi: 10.1051/parasite/2020057. IF=3
19. Ofiteru AM, Becheru DF, Gharbia S, **Balta C**, Herman H, Mladin B, Ionita M, Hermenean A, Burns JS. Qualifying Osteogenic Potency Assay Metrics for Human Multipotent Stromal Cells: TGF- β 2 a Telling Eligible Biomarker. *Cells*. 2020 Nov 29;9(12):2559. doi: 10.3390/cells9122559. IF=6.6
20. Petre A, **Balta C**, Herman H, Gharbia S, Codreanu A, Onita-Mladin B, Anghel-Zurbau N, Hermenean AG, Ignat SR, Dinescu S, Urzica I, Drafta S, Oancea L, Hermenean A. A novel experimental approach to evaluate guided bone regeneration (GBR) in the rat femur using a 3D-printed CAD/CAM zirconia space-maintaining barrier. *J Adv Res*. 2020 Jul 23;28:221-229. doi: 10.1016/j.jare.2020.07.012. IF=10.479
21. Hermenean A, Trotta MC, Gharbia S, Hermenean AG, Peteu VE, **Balta C**, Cotoraci C, Gesualdo C, Rossi S, Gherghiceanu M, D'Amico M. Changes in Retinal Structure and Ultrastructure in the Aged Mice Correlate With Differences in the Expression of Selected Retinal miRNAs. *Front Pharmacol*. 2021 Jan 13;11:593514. doi: 10.3389/fphar.2020.593514. Erratum in: *Front Pharmacol*. 2021 Mar 15;12:652905. IF=5.811(2020)

22. Ciceu A, **Balta C**, Herman H, Gharbia S, Ignat SR, Dinescu S, Váradi J, Fenyvesi F, Gyöngyösi S, Hermenean A, Costache M. Complexation with Random Methyl- β -Cyclodextrin and (2-Hydroxypropyl)- β -Cyclodextrin Enhances In Vivo Anti-Fibrotic and Anti-Inflammatory Effects of Chrysin via the Inhibition of NF- κ B and TGF- β 1/Smad Signaling Pathways and Modulation of Hepatic Pro/Anti-Fibrotic miRNA. *Int J Mol Sci*. 2021 Feb 13;22(4):1869. doi: 10.3390/ijms22041869. IF=5.924 (2020)
23. Onita (Mladin) B, Albu PC, Herman H, **Balta C**, Lazăr V, Fulop A, Baranyai E, Harangi S, Kéki S, Nagy L, Nagy T, Józsa V, Gál D, Györe K, Stan MS, Hermenean AO, Dinischiotu, A. Correlation between Heavy Metal-Induced Histopathological Changes and Trophic Interactions between Different Fish Species. *Applied Sciences*, 2021, 11, 3760. doi:10.3390/APP11093760. IF=2.679 (2020)
24. Trotta MC, Gharbia S, Herman H, Mladin B, Hermenean A, **Balta C**, Cotoraci C, Peteu VE, Gesualdo C, Petrillo F, Galdiero M, Alfano R, Gherghiceanu M, D'Amico M, Rossi S, Hermenean A. Sex and Age-Related Differences in Neuroinflammation and Apoptosis in Balb/c Mice Retina Involve Resolvin D1. *Int J Mol Sci*. 2021 Jun 11;22(12):6280. doi: 10.3390/ijms22126280. IF=5.924 (2020)
25. Hudita A, Radu IC, Galateanu B, Ginghina O, Herman H, **Balta C**, Rosu M, Zaharia C, Costache M, Tanasa E, Velonia K, Tsatsakis A, Hermenean A. Bioinspired silk fibroin nano-delivery systems protect against 5-FU induced gastrointestinal mucositis in a mouse model and display antitumor effects on HT-29 colorectal cancer cells in vitro. *Nanotoxicology*. 2021 Sep;15(7):973-994. doi: 10.1080/17435390.2021.1943032. IF=5.913 (2020)
26. Savici J, Cristina RT, Brezovan D, Radulov I, **Balta C**, Boldura OM, Muselin F. Aronia melanocarpa Ameliorates Adrenal Cytoarchitecture Against the Hexavalent Chromium-Induced Injury. *Biol Trace Elem Res*. 2021 Aug;199(8):2936-2944. doi: 10.1007/s12011-020-02401-7. IF=3.738 (2020)
27. Şelaru, A.; Herman, H.; Vlăsceanu, G.M.; Dinescu, S.; Gharbia, S.; **Baltă, C.**; Roşu, M.; Mihali, C.V.; Ioniţă, M.; Serafim, A.; Iovu, H.; Hermenean, A.; Costache, M. Graphene–Oxide Porous Biopolymer Hybrids Enhance In Vitro Osteogenic Differentiation and Promote Ectopic Osteogenesis In Vivo. *Int. J. Mol. Sci.* 2022, 23, 491. <https://doi.org/10.3390/ijms23010491>. IF= 5,923 (2020)
28. Gharbia, S., Nazarie, S. R., Dinescu, S., **Balta, C.**, Herman, H., Peteu, V. E., Gherghiceanu, M., Hermenean, A., & Costache, M. 2022. Adipose-Derived Stem Cells (ADSCs) Supplemented with Hepatocyte Growth Factor (HGF) Attenuate Hepatic Stellate Cell Activation and Liver Fibrosis by Inhibiting the TGF- β /Smad Signaling Pathway in Chemical-Induced Liver Fibrosis Associated with Diabetes. *Cells*, 11(21), 3338. <https://doi.org/10.3390/cells11213338>, IF=7.666 (2021)
29. Trotta, M. C., Gesualdo, C., Herman, H., Gharbia, S., **Balta, C.**, Lepre, C. C., Russo, M., Itró, A., D'Amico, G., Peluso, L., Panarese, I., Pieretti, G., Ferraro, G., Simonelli, F., D'Amico, M., Rossi, S., & Hermenean, A. 2022. Systemic Beta-Hydroxybutyrate Affects BDNF and Autophagy into the Retina of Diabetic Mice. *Int J Mol Sci*. 23(17):10184. <https://doi.org/10.3390/ijms231710184>, IF=6.208 (2021)
30. Şerban M.V., Nazarie S.-R., Dinescu S., Radu I.-C., Zaharia C., Istrăţoiu E.-A., Tănasă E., Herman H., Gharbia S., **Baltă C.**, Hermenean A., Costache M. 2022. Silk Proteins Enriched Nanocomposite Hydrogels Based on Modified MMT Clay and Poly (2-hydroxyethyl methacrylate-co-2-acrylamido-2-methylpropane Sulfonic Acid) Display Favorable Properties for Soft Tissue Engineering. *Nanomaterials*. 12, 503. <https://doi.org/10.3390/nano12030503>, IF=5,076 (2020)
31. Savici J, Boldura OM, **Balta C**, et al. Effects of Aronia melanocarpa and Hypericum perforatum aqueous extracts on hexavalent chromium induced toxicity in rat's thyrocytes. *Journal of Trace Elements in Medicine and Biology : Organ of the Society for Minerals and Trace Elements (GMS)*. 2023 Mar;78:127151. DOI: 10.1016/j.jtemb.2023.127151. PMID: 36948046, IF= 3.995
32. Bîrcă, A.C.; Chircov, C.; Niculescu, A.G.; Hildegard, H.; **Baltă, C.**; Roşu, M.; Mladin, B.; Gherasim, O.; Mihaiescu, D.E.; Vasile, B.Ş.; Grumezescu, A.M.; Andronescu, E.; Hermenean, A.O. H2O2-PLA-(Alg)2Ca Hydrogel Enriched in Matrigel® Promotes Diabetic Wound Healing. *Pharmaceutics* 2023, 15, 857. <https://doi.org/10.3390/pharmaceutics15030857> IF= 6.525
33. Trotta, M.C.; Herman, H.; **Balta, C.**; Rosu, M.; Ciceu, A.; Mladin, B.; Gesualdo, C.; Lepre, C.C.; Russo, M.; Petrillo, F.; Pieretti, G.; Simonelli, F.; Rossi, S.; D'Amico, M.; Hermenean, A. Oral Administration of Vitamin D3 Prevents Corneal Damage in a Knock-Out Mouse Model of Sjögren's Syndrome. *Biomedicines* 2023, 11, 616. <https://doi.org/10.3390/biomedicines11020616> IF= 4.757
34. Stoica, A.E.; Bîrcă, A.C.; Gherasim, O.; Ficaï, A.; Grumezescu, A.M.; Oprea, O.-C.; Vasile, B.Ş.; **Balta, C.**; Andronescu, E.; Hermenean, A.O. Electrospun Fibrous Silica for Bone Tissue Engineering Applications. *Pharmaceutics* 2023, 15, 1728. <https://doi.org/10.3390/pharmaceutics15061728> IF=5.4

35. Stoica Oprea, A. E., Bîrcă, A. C., Mihaiescu, D. E., Grumezescu, A. M., Ficăi, A., Herman, H., Cornel, B., Roșu, M., Gharbia, S., Holban, A. M., Vasile, B. Ș., Andronescu, E., & Hermenean, A. 2023. Biocompatibility and Antimicrobial Profile of Acid Usnic-Loaded Electrospun Recycled Polyethylene Terephthalate (PET)-Magnetite Nanofibers. *Polymers*, 15(15), 3282. <https://doi.org/10.3390/polym15153282>, IF= 5 (2022)
36. Hădăruță, N.-G.; Gârban, Z.; Baltă, C.; Muselin, F.; Hădăruță, D.-I.; Riviș, M. Beneficial Effects of Resveratrol and γ -Cyclodextrin on the Hematological and Biochemical Parameters of Healthy Wistar Rats Treated with Cisplatin: A PCA Approach. *Biomedicines* 2023, 11, 2726. <https://doi.org/10.3390/biomedicines11102726> IF=4,757
37. Cristian, R.-E.; Balta, C.; Herman, H.; Trica, B.; Sbarcea, B.G.; Hermenean, A.; Dinischiotu, A.; Stan, M.S. In Vivo Assessment of Hepatic and Kidney Toxicity Induced by Silicon Quantum Dots in Mice. *Nanomaterials* 2024, 14, 457. <https://doi.org/10.3390/nano14050457> IF=5.3
38. Marti, D.T.; Nesi, A.; Balta, C.; Olariu, T.R.; Mișu, A.G.; Hermenean, A.; Oatis, D.A. Retrospective Analysis of Vitamin D Deficiency in an Adult Population of Arad County, Western Romania (2019–2022). *Life* 2024, 14, 274. <https://doi.org/10.3390/life14020274> IF=3.2

Articole/studii in rezumat, publicate în volumele unor conferințe cotate ISI cu factor de impact:

1. Hutu I., Boldura O.M., Popescu S., **Balta C.**, Chis C., Mircu C., A multiplex PCR approach to the quantification of cow milk in goat products, *Current opinion in Biotechnology*, 2013, Volume 24, Supplement 1, IF= 8,681.
2. Oana Boldura, Sorina Popescu, **Cornel Balta**, Camelia Tulcan, Ioan Hutu, Calin Mircu, Precise, rapid and low cost detection of horse DNA in food by PCR technique, *Journal of Biotechnology*, 2014, Volume 185, pg. S86, ISSN :0168-1656, IF= 2,908.
3. **Balta Cornel**, Herman Hildegard, Gasca Ionela, Ardelean Aurel, Hermenean Anca, Reversal of liver fibrosis by targeting TGF- β signaling pathway. *Toxicology Letters*, 2015, vol. 238, nr. 2S, S264-265, IF=3,522
4. **Balta Cornel**, Herman Hildegard, Gasca Ionela, Onita Bianca, Rosu Marcel, Ardelean Aurel, Hermenean Anca, Chrysin attenuates liver fibrosis and hepatic stellate cell activation through TGF- β signaling pathway. *FEBS Journal*, 2015, vol. 282, suppl. 1, 192, IF= 4.237.
5. N.Anghel, A. Ivan, M.Suciu, H.Herman, **C.Balta**, C.Cotoraci, Z. Galajda, A.Ardelean, A.Hermenean, Chrysin attenuates cardiomyocyte apoptosis and loss of desmin filaments in a mouse model of mitoxantrone cardiotoxicity. *Toxicology Letters*, 2015, vol. 238, nr. 2S, S271, IF=3,522.
6. Camelia Tulcan, Calin Mircu, Ioan Hutu, **Cornel Balta**, Sorina Popescu, Simona Marc, Ersilia Alexa, Oana Maria Boldura, Evaluation of oxidative stress effect for *in vitro* matured cow oocytes through gene expression quantification. *Toxicol. Open Access*, 2018, vol. 4, DOI: 10.4172/2476-2067-C1-006, IF= 3,582.

Articole/Lucrări științifice publicate în reviste de specialitate indexate BDI:

1. Ghibu G.-D., **Baltă C.**, Gabriela Gârban, Sayti L, Corina Falcă, Gârban Z. - Peculiarities of hepatic metallograms in rabbits after nitrates administration, *Journal of Agroalimentary Processes and Technologies*, 2008, 14, 361-366.
2. Ghibu G.-D., Gârban Gabriela, Falcă Corina, **Baltă C.**, Precob V., Gârban Z. - Dyshomeostatic effects of nitrates from drinking water on non-protein nitrogen metabolites in leporides, *Chem. Bull.*, 2008, 53(67), 230-233.
3. Z. Garban, Gabriela Garban, G.-D. Ghibu, **C. Baltă**, Adina-Elena Avacovici, Elisabeta-Mihaela Mitroi, L. Miclău - Xenobiochemistry at the interface of packaging materials-food. Note I. Packaging materials and specific interactions in vivo, *Journal of Agroalimentary Processes and Technologies*, 2010, pp. 265-275, vol. 16, issue 2.
4. Gabriela Garban , G.-D. Ghibu, Adina Avacovici, **C. Baltă**, Nicoleta Hădăruță, Sorina Ciurlea, Mirela Ahmadi-Vincu, Ariana-Bianca Icio, Z. Garban - Animal models used in the investigation of xenobiotics of food interest and pharmaceutical interest, *Journal of Agroalimentary Processes and Technologies* 2011, 17(1), 98-104.
5. G.-D. Ghibu, Gabriela Garban, Adina-Elena Avacovici, **Baltă C.**, Z. Garban - Xenobiochemistry at the interface of packaging materials-food. Note II. Interactions and effects of bisphenol A from food packaging materials, *Journal of Agroalimentary Processes and Technologies*, 2012, 18(4), 318-323.

6. G. Garban, N. Hadaruga, **C. Balta**, G.D. Ghibu, C. Mitar, Z. Garban and E. Simiz - Polyethylene Glycol Used in a Study Regarding the In Vivo Effects of the Organometallic Gallium Complex C(85). Volume 57(71), Issue 1, p.88-92, 2012 Chem. Bull. 'POLITEHNICA' Univ. (Timisoara).
7. **Cornel Baltă**, Nicoleta G. Hădărugă, Carmen Manuela Pleșa (Mitar), Daniel Ghibu, Gabriela Gârban, Zeno Gârban, Daniel I. Hădărugă – Hematological properties of cisplatin and its *Ficaria verna* Huds. extracts / β -cyclodextrin complexes in rats, 18(4), 356-359, Journal of Agroalimentary Processes and Technologies, 2012.
8. **C. Balta**, G.D. Ghibu, Carmen. Mitar, Nicoleta G. Hădărugă, Corina Pascu, F. Muselin, Eliza Simiz, Z Garban - Homeostasis changes of some serum enzymes in rats induced by the new organometallic gallium complex C(85). *Lucrări științifice medicină veterinară* vol.XLVI, p.9-17, 2013.
9. Oana-Maria Boldura, **C. Baltă**, C. Mircu, Mirela Ahmadi, Camelia Tulcan, I. Huțu, Sorina Popescu, 2015 TRACEABILITY OF TRANSGENIC SOYBEAN FROM FORAGE THROUGH ANIMAL TISSUE TILL THE FOOD PRODUCT, *Lucrari Stiintifice Medicina Veterinara – Actualitati in cresterea si patologia animalelor 28-29 Mai 2015 Timisoara*, Vol. XLVIII(1).
10. Sasu A., Herman H., Folk A., **Baltă C.**, Roșu M., Miuțescu E., Hermenean A., Cotoraci C., Protective effects of silymarin on epirubicin – induced hepatotoxicity in mice, *Studia Universitatis Vasile Goldis, Seria Stiintele Vietii*, 2016, vol 26 issue 3, pp. 305-316.
11. Sasu A., Onel M., **Balta C.**, Ghib-Para C., Miutescu E., Cotoraci C. Mucositis pathology in chemotherapy induced digestive toxicity, *Jurnal Medical Aradean (Arad Medical Journal)*, Vol. XIX, issue 1, 2016, pp.5-11.
12. Jelena Savici, Oana-Maria Boldura, **C. Balta**, Diana Brezovan, F.Muselin, Camelia Tulcan, C. Mircu, Aronia melanocarpa impact on hexavalent chromium induced apoptosis in pancreas, *LUCRARI STIINTIFICE MEDICINA VETERINARA VOL. L(1)*, 2017, TIMISOARA, ISSN: -1221-5295.
13. Oana-Maria Boldura, Sorina Popescu, **C. Baltă**, Simona Marczarcula, Jelena Savici, O. Bloju, C. Mircu, Cristina Văduva, Camelia Tulcan, Analysis of genetic polymorphism in dog breeds using molecular markers systems, *LUCRARI STIINTIFICE MEDICINA VETERINARA VOL. L(1)*, 2017, TIMISOARA, ISSN: -1221-5295.
14. Oana-Maria Boldura, Sorina Popescu, **C. Baltă**, C. Mircu, I. Huțu, Mirela Ahmadi, Camelia Tulcan, Applicability of a duplex end point pcr method in detecting sheep dairy products adulteration by cow milk fraudulent addition, *LUCRARI STIINTIFICE MEDICINA VETERINARA VOL. L(1)*, 2017, TIMISOARA, ISSN: -1221-5295.

Publicații apărute în volumele principalelor conferințe internaționale de specialitate:

1. **Baltă C.**, Avacovici Adina, Petrusse Cristina, Ghibu G.-D. - Characteristics of biochemical homeostasis in experimental animals: leporides and rats, pp. 371-375, in *Proceedings of the 15th symposium on analytical and environmental problems* (Ed. Zoltan Galbacs), SZAB, Szeged, Hungary, 2008.
2. Ghibu G.-D., Balint M., Garban Gabriela, **Baltă C.**, Avacovici Adina - Dyshomeostatic effects of nitrates on urea in leporides, pp. 166-169, in *Proceedings of the 15th symposium on analytical and environmental problems* (Ed. Zoltan Galbacs), SZAB, Szeged, Hungary, 2008.
3. Ghibu G.D., **Baltă C.**, Hărmănescu Monica, Garban Z., Ursu Adriana - Peculiarities of renal metallograms in rabbits after nitrates administration, pp. 162-165, in *Proceedings of the 15th symposium on analytical and environmental problems* (Ed. Zoltan Galbacs), SZAB, Szeged, Hungary, 2008.
4. Ghibu G.-D., Gârban Gabriela, **Baltă C.**, Bura M., Petrusse Crisitna., Horhoi Doina-Elena, Gârban Z. – Hepatic metallograms in rabbits after sodium nitrate excess in drinking water, pp. 163-168 in *Metal elements in environment medicine and biology* (Eds. Silaghi-Dumitrescu I., Gârban Z., Drăgan P.), Tome VIII, Editura Eurobit, Timișoara, 2008.
5. Gârban Z., Ghibu G.-D., Avacovici Adina, **Baltă C.**, Gârban Gabriela, Mihaela-Elisabeta Mitroi - Effects of sodium nitrate administration in drinking water of leporides regarding zinc concentration in organs and tissues, pp. 43-48 in *Metal elements in environment medicine and biology*, (Eds. Gabriela Garban, Radu Silaghi-Dumitrescu), Tome IX, Editura Cluj University Press, Cluj 2009.
6. C. Falcă, **C. Baltă**, G.D. Ghibu, Corina Falcă, Elisabeta-Mihaela, Mitroi, P. Velcirov- Studiul experimental privind modificările homeostaziei biochimice induse de prebiotice la iepure – *Zilele Medicale Oradene*, Editia XIX-A-2010, ISSN 1844-9530.
7. Ghibu G.-D., Gârban Gabriela, **Baltă C.**, Corina Falcă, Elisabeta-Mihaela Mitroi, Horhoi Doina-Elena - Serum creatinine level and muscle metallograms in rabbits after excess of sodium nitrate administration in drinking water, pp.159-166, in *Metal elements in environment medicine and biology* (Eds. Gabriela Garban, Radu Silaghi-Dumitrescu, Ludovic Sayti), Tome X, Editura Eurobit, Timișoara, 2010.

8. Garban Zeno, Ghibu George-Daniel, Garban Gabriela, Avacovici Adina- Elena, **Baltă C.**, Hădărugă Nicoleta - Biogenesis of DNA adducts in the DNA/Mn+systems with implications innutrition, pathobiochemistry and cytostatic pharmacotherapy, pp. 143-158, , in Metal elements in environment medicine and biology (Eds. Gabriela Garban, Radu Silaghi-Dumitrescu, Ludovic Sayti), Tome X, Editura Eurobit, Timișoara, 2010.
9. GarbanGabriela, Avacovici Adina-Elena, Ghibu George-Daniel, Mitroi Elisabeta-Mihaela, **Baltă Cornel**, Miclău Lucian, Garban Zeno - Homeostasis changes induced by cis-platinum on the serum non-protein nitrogenous metabolites in experimental animals, pp.101-106, in Metal elements in environment medicine and biology (Eds. Gabriela Garban, Radu Silaghi-Dumitrescu, Ludovic Sayti), Tome X, Editura Eurobit, Timișoara, 2010.
10. **C. Baltă**, C. Falcă, G.D. Ghibu, Cristina Petrusă – Cercetări privind influența unor probioticeasupra constantelor biochimice sangvine la tineretul cunicul, al XI-lea Congres Național de Medicină Veterinară, București, România, 2011.
11. Garban Zeno, Avacovici Adina-Elena, Ghibu George-Daniel, **Baltă Cornel** - Peculiarities of the uroconcrements with urates and phosphates determined by atomic absorbtion spectroscopy, Proceedings of the 17th Symposium on Analytical and Environmental Problems, Szeged, 2011.
12. Garban Gabriela, Nicola T., **Balta C.**, Garban Z., Hadaruga Nicoleta, Mitar Carmen, Simiz Eliza, Ghibu G.-D., Rada Olga-Alina – Chronobiological characteristic of some hematology parameters induced by galium, pp. 248-252, The international symposium on analytical and enviromental problems, with special emphasis on heavy metal ions as contaminants, SZAB, Szeged, 2012.
13. Ioan Hutu, Oana Maria Boldura, Sorina Popescu, **Cornel Balta**, Codruta Chis, Calin Mircu - A multiplex PCR approach to the quantification of cow milk in goat products. Current opinion in biotechnology, Volume 24, Supplement 1, July 2013, Pages S95.
14. Boldura O.M, Popescu S., Lazar A., **Balta C.**, 2013, DNA Based methods for food components identification, Proceedings of the Conference "Sustainable agricultural production: restoration of agricultural soil quality by remediation"2013, Novi Sad, Serbia: University of Novi Sad: 31-37.
15. Hădărugă, N.G.; **Baltă, C.**; Muselin, F.; Ordodi, L.V.; Gârban, Z.; Hădărugă, D.I., *Hematological and biochemical changes in rats by cisplatin / resveratrol / cyclodextrin complexes*, The 3rd European Conference on Cyclodextrins (EuroCD2013), *Antalya, Turkey, October 2-4, 2013*, Poster presentation P28, <http://www.eurocd2013.com/>
16. Oana Boldura, Sorina Popescu, **Cornel Balta**, Camelia Tulcan, Ioan Hutu, Calin Mircu, *Precise, rapid and low cost detection of horse DNA in food by PCR technique*, Journal of Biotechnology, European Biotechnology Congress 2014", Lecce, Italia, 15-18 mai 2014.
17. Gârban Zeno, Muselin Florin, **Baltă Cornel**, Avacovici Adina, Simiz Eliza , Boldura Oana-Maria, Ujhelyi Robert, *Peculiarities of the resveratrol action on some biochemical and hematological parameters preliminary data*, *The 20th Int. Symp. on Analytical and Environmental Problems, Szeged, 22 Szeptember 2014, pg.10, file Z10-13.*
18. Alciona Sasu, Hildegard Herman, Teodora Mariasiu, Marcel Rosu, **Cornel Balta**, Nicoleta Anghel, Eftimie Miutescu, Coralia Cotoraci, Anca Hermenean, *Protective effects of silymarin on epirubicin-induced mucosal barrier injury of the gastrointestinal tract*, HURO SCIENTIFIC WORKSHOP organizat in cadrul proiectului HURO/1101/173/2.2.1, in 17 decembrie 2014 la Biological Research Centre, Hungarian Academy of Sciences, Szeged, Ungaria.
19. N. Anghel, A. Ivan, M. Suci, H. Herman, **C. Balta**, C. Cotoraci, Z. Galajda, A. Hermenean, *Chrysin attenuates cardiomyocyte apoptosis and loss of intermediate filaments in a mouse model of mitoxantrone cardiotoxicity*, HURO SCIENTIFIC WORKSHOP organizat in cadrul proiectului HURO/1101/173/2.2.1, in 17 decembrie 2014 la Biological Research Centre, Hungarian Academy of Sciences, Szeged, Ungaria
20. **Cornel Balta**, Hildegard Herman, Marcel Rosu, Teodora Mariasiu, Anca Hermenean, *Antifibrotic activity of silymarin/-cyclodextrins in carbon tetrachloride-induced hepatotoxicity in mice*, The Central and Eastern European Conference on Health and the Environment, May 25–30, 2014, Cluj-Napoca, Romania (poster).
21. Aurel Ardelean, Nicoleta Anghel, Alexandra Ivan, Maria Suci, Hildegard Herman, **Cornel Baltă**, Coralia Cotoraci, Anca Hermenean, *Evaluarea activității cardioprotectoare a flavonoizilor de origine vegetală împotriva toxicității induse de antracicline. Școală de primăvară de Gemmaeterapie și Homeopatie*, Arad, Romania, 23-25 aprilie 2015 – prezentare orală.
22. Anca Hermenean, **Cornel Baltă**, Hildegard Herman, Alex Ivan, Aurel Ardelean, Coralia Cotoraci, *Evaluarea activității hepatoprotectoare a flavonoizilor de origine vegetală împotriva steatozei si fibrozei hepatice induse experimental: studii in vitro si in vivo. Școală de primăvară de Gemmaeterapie și Homeopatie*, Arad, Romania, 23-25 aprilie 2015 – prezentare orală.
23. N. Anghel, A. Hermenean, M. Suci, H. Herman, **C. Balta**, C. Cotoraci, A. Ardelean, *Chrysin attenuates cardiomyocyte apoptosis and loss of desmin filaments in a mouse model of mitoxantrone cardiotoxicity*. 25th Academic Days of Arad, Arad, Romania, 13 - 17 mai 2015 –prezentare orală.

24. **C. Balta**, H. Herman, M. Rosu, I. Gasca, O.M. Boldura, A. Ardelean, A. Hermenean, Chrysin attenuates liver fibrosis and hepatic stellate cell activation through TGF β /Smad signaling pathway. 25th Academic Days of Arad, Arad, Romania, 13 - 17 mai 2015 – prezentare orală.
25. **Balta Cornel**, Herman Hildegard, Gasca Ionela, Onita Bianca, Rosu Marcel, Ardelean Aurel, Hermenean Anca, Chrysin attenuates liver fibrosis and hepatic stellate cell activation through TGF- β signaling pathway. 40th FEBS Congress 2015, cu tema "The Biochemical Basis of Life", sectiunea Targeted Cancer Therapy, Berlin, Germania, 4-9 iulie 2015 – prezentare poster.
26. **Balta Cornel**, Herman Hildegard, Gasca Ionela, Ardelean Aurel, Hermenean Anca, Reversal of liver fibrosis by targeting TGF- β signaling pathway. 51st Congress of the European Societies of Toxicology (EUROTOX), cu tema "Bridging Sciences for Safety", sectiunea Carcinogenesis, Porto, Portugalia, 13 - 16.09.2015 – prezentare poster.
27. N.Anghel, A. Ivan, M.Suciu, H.Herman, **C.Balta**, C.Cotoraci, Z. Galajda, A.Ardelean, A.Hermenean, Chrysin attenuates cardiomyocyte apoptosis and loss of desmin filaments in a mouse model of mitoxantrone cardiotoxicity. 51st Congress of the European Societies of Toxicology (EUROTOX), cu tema "Bridging Sciences for Safety", sectiunea Carcinogenesis, Porto, Portugalia, 13 - 16.09.2015 – prezentare poster.
28. **Cornel Balta**, Hildegard Herman, Marcel Rosu, Aurel Ardelean, Anca Hermenean, Therapeutic potential of chrysin against liver fibrosis in mice: modulation of extracellular matrix. The Spring School of Meristemotherapy, Arad, Romania, 14-16 April 2016 – prezentare orală.
29. A. Hermenean, A. Ivan, S. Dinescu, H. Herman, **C. Balta**, M. Rosu, C. Mihali, M. Pandele, M. Ionita, M. Costache, Evaluation of bone regeneration in critical-sized mouse calvarial defects implanted with chitosan – grapheme oxide porous 3D scaffolds. 26th Academic Days of Arad, Arad, Romania, 18 - 21 mai 2016 – prezentare orală.
30. N. Anghel, **C. Baltă**, H. Herman, A. Hermenean, A. Ardelean, Chrysin attenuates cardiomyocyte apoptosis in a mouse model of mitoxantrone cardiotoxicity. 26th Academic Days of Arad, Arad, Romania, 18 - 21 mai 2016 – prezentare orală.
31. Alexandra Folk, **Cornel Balta**, Hildegard Herman, Aurel Ardelean, Anca Hermenean, Hepatotoxicity evaluation of Amphotericin B and Flucytosine co-treatment for invazive fungal infections. 7th National Congress with International Participation and 33rd Annual Scientific Session of the Romanian Society for Cell Biology, 11-14 Junie 2015, Baia Mare, Romania - prezentare orală.
32. **Baltă Cornel**, Herman Hildegard, Boldura Oana-Maria, Roșu Marcel, Gâscă Ionela, Ardelean Aurel, Hermenean Anca, Antifibrotic activity of chrysin in carbon tetrachloride-induced liver damage in mice. 7th National Congress with International Participation and 33rd Annual Scientific Session of the Romanian Society for Cell Biology, 11-14 Junie 2015, Baia Mare, Romania - prezentare orală.
33. Nicoleta Anghel, Alexandra Ivan, Maria Suciu, Hildegard Herman, **Cornel Balta**, Coralia Cotoraci, Zoltan Galajda, Aurel Ardelean, Anca Hermenean, Chrysin attenuates cardiomyocyte apoptosis and loss of desmin filaments in a mouse model of mitoxantrone cardiotoxicity. 7th National Congress with International Participation and 33rd Annual Scientific Session of the Romanian Society for Cell Biology, 11-14 Junie 2015, Baia Mare, Romania - prezentare orală

Data

10.01.2024

Semnatura

Dr. Balta Cornel