Europass Curriculum Vitae

Informations personnelles

Prénom(s) / Nom	**Alexandra IVAN**
E-mail	ivan.alexandra@umft.ro,
Nationalité	Roumaine

Expérience professionnelle

Dates	**2013 – en cours**
Fonction occupée	**Lecteur**
Nom et adresse de l'employeur	Département des Sciences Fonctionnelles, Immunologie et Allergologie, Biologie, Université de Médecine et Pharmacie „Victor Babeș'', Piața Eftimie Murgu 2, Timișoara, Roumanie
Dates	**2017 – en cours**
Fonction occupée	**Chercheuse**
Nom et adresse de l'employeur	Centre de Thérapies Géniques et Cellulaires dans le Traitement du Cancer (OncoGen), Hôpital Clinique d'Urgence 'Pius Brinzeu', Timișoara
Dates	**20010 – 2017**
Fonction occupée	**Chercheuse**
	Université de Médecine et Pharmacie „Victor Babeș'', Piața Eftimie Murgu 1, Timișoara, Roumanie
Dates	**2007-2009**
Fonction occupée	**Chercheuse**
Nom et adresse de l'employeur	Département de Génétique, Département de Biotechnologies, Université des Sciences Agronomiques et de Médecine Vétérinaire du Banat, Timișoara, Roumanie

Formation et enseignement

Dates	**2010- 2013**
Diplôme / Qualification	**Poste postdoctoral**
Principaux domaines	Biotechnologies cellulaires et moléculaires pour applications médicales
Établissement	Département des Sciences Fonctionnelles, Université de Médecine et Pharmacie „Victor Babeș'', Timișoara
Dates	**2010**
Diplôme / Qualification	**Postdoctoral position**
Principal subjects	Bourse postdoctorale – Australian Endeavour Award Research Fellowship
Établissement	Royal Children's Hospital, Murdoch Children's Research Institute, Cancer and Disease Epigenetics, Melbourne, Australie
Dates	**2005-2009**
Diplôme / Qualification	**Doctorat (PhD)**
Principal subjects	Évaluation de la viabilité des embryons de mammifères par critères morphologiques et tests de coloration
Établissement	Département de Biotechnologie, Faculté des Sciences Animales et Biotechnologie, Université du Banat des Sciences Agronomiques et de Médecine Vétérinaire, Timișoara

Dates	**2023 – ongoing**
Diplôme / Qualification	**Doctorat (PhD)** Sénescence des cellules souches mésenchymateuses - mécanismes et implications thérapeutiques
Établissement	Département des Sciences Fonctionnelles, Université de Médecine et Pharmacie „Victor Babeș'', Timișoara
Dates	**2021-2023**
Diplôme / Qualification	**Master – Biologie du développement et influence des facteurs exogènes sur les organismes -** *"Isolement et caractérisation d'une population de cellules souches isolées du placenta"*
Établissement	Université de l'Ouest, Faculté de Chimie, Biologie et Géographie
Dates	**2004-2006**
Diplôme / Qualification	**Master**
	L'ingénierie génétique et biotechnologies
Dates	**1999-2004**
Diplôme / Qualification	**Ingénieur en Biotechnologie**
Établissement	Université des Sciences Agronomiques et de Médecine Vétérinaire du Banat, Faculté des Sciences Animales et Biotechnologie, Spécialisation : Biotechnologie microbienne
Dates	**2013-2016**
Diplôme / Qualification	**Biologie**
Établissement	"Université de l'Ouest « Vasile Goldiș » d'Arad, Roumanie

Formations complémentaires

Dates	**2024**
Compétences professionnelles	Certificat de compétence Good Clinical Practice, NIDA Clinical Trials Network
Dates	**2020 (Janvier)**
Compétences professionnelles	Certificat de compétence Good Clinical Practice, NIDA Clinical Trials Network
Dates	**2016**
Compétences professionnelles	Formation pratique en biologie des cellules NK, Dresde, Allemagne
Dates	**2011**
Compétences professionnelles	Microscopie FRET pour l'imagerie fonctionnelle et analyse quantitative, Barcelone, Espagne
Dates	**Septembre –Octobre 2010**
Compétences professionnelles	Cours de management de la recherche et bases moléculaires des infections virales, Institut de Biochimie de l'Académie Roumaine
Dates	**Juin 2009-Juin 2010**
Compétences professionnelles	**Activités de recherche: différenciation des cellules souches embryonnaires et mésenchymateuses vers des cellules pancréatiques, RT-PCR, qPCR, cytométrie en flux, immunohistochimie**
Dates	**Novembre 2007**
Compétences professionnelles	Atelier Médecine régénérative, formation pratique en cytométrie, microarray, qPCR
Dates	**Octobre 2007**
Compétences professionnelles	Certificate no. 15/23.10.2007,Cell biology and molecular biology in the XXI century medicine, 7-th edition, Romanian Academy and Institute of cell biology and pathology Nicolae Simionescu, Bucharest, Romani
Dates	**Septembre 2007**
Compétences professionnelles	École d'été Nanotechnologie – vision et stratégie, Bucarest
Dates	**Mars 2007**
Compétences professionnelles	Formation professionnelle en biologie moléculaire, Szeged, Hongrie

Compétences personnelles

Langue maternelle	**Roumain**
Langues étrangères (s)	

Auto-évaluation	**Compréhension orale**		**Expression orale**		**Expression écrite**
Niveau européen (*)	Compréhension orale	Compréhension écrite	Interaction orale	Expression orale	
English Language	C2 Utilisateur expérimenté	C2 Utilisateur expérimenté	C2 Utilisateur expérimenté	C2 Utilisateur expérimenté.	C1 Utilisateur expérimenté

(*) Common European Framework of Reference for Languages

Compétences informatiques

Bonne maîtrise de: Adobe Photoshop, IPA (Ingenuity System Pathway Analysis), Microsoft Word, Microsoft Excel

Projets de recherche

2007-2008
Principal investigator – **Project CNCSIS 44 GR/23.05.2007,** Assessment of mammalian embryos viability using non invasive and no time consuming methods.
http://old.uefiscdi.ro/articole/1334/COMISIA_5_TD_NOI_FINANTATE.html
2016-2020
Researcher - POC- ID: P_37_786 - Chimeric antigen receptor targeted oncoimmunotherapy with natural killer cells - *CAR-NK*
2015-2016
Researcher – PN2/TE81/2015 - Environmental factors and epigenetic mechanisms – a common link in chronic kidney diseases - *Enviroconnect*
2014-2015
Researcher - PN2/PT PCCA-2011-3.2-1336 - Translating stem cells technologies to the conservation of highly endangered species *(CONSENS).*
2013-2015
Researcher - HURO/1101/173/2.2.1, - Integrated Trans-border Research Platform for Identification of Cellular Processes as Potential Targets for Personalized Cancer therapy
2009 -2010
Researcher PN2/CNCSIS IDEI – Studies regarding the in vitro differentiation of mesenchymal stem cells toward the adipogenic lineage and validation ofmolecular factors involved in adipogenesis
2009-2011
Researcher – PN2/CNCSIS 1088/2009 - Morphometric and viability studies of mammalian embryos,
2008-2011
Researcher – Project PNCDI II – 3257, Researches to identify and to make available the Trichogramma bioforms for agricultural and forest ecosystems, impact and management of bioactive nanomaterials use in the oophag propagation technology
2007-2010
Researcher – Project SanderBiot PNCDI II 61-020/2007, Implementing some biotechnologies of reproduction for pikeperch in order to improve productive potential at this specie.
2007-2008
Research assistant – Project 44GR/2007/1180, Comparative complex biological study of several *Robinia pseudocacia* valuble genotypes. *Robinia pseudocacia var. Oltenica: clone or variety?*
2005-2007
Research assistant – Project CEEX 37- Matnatech, Obtaining of TiO_2 nanocristals doped with metallic ions by alternative methods. Studies of their application for health, biology and environment
2005-2007
Research assistant – Project CEEX 18- Biotech, Obtaining of several nanocomposite/nanocristals with applications on biotechnologies, agriculture, food industry and environmental protection.

Additional information

Membre de sociétés scientifiques
Société Nationale de Biologie Cellulaire (SNBC), EuroScience, Australia Awards Alumni Network

Distinctions et bourses

2010 - UNESCO Travel Grant, Euroscience Open Forum, Torino, Italy
2010 - Australian Endeavour Award - Postdoctoral Research Fellowship

Date: 17.02.2026

Publications scientifiques

Alexandra Ivan#, Maria-Alexandra Pricop#, Alexandra Teodora Lukinich-Gruia,*, Iustina-Mirabela Cristea, Adina Negrea, Ioan Bogdan Pascu, Crenguta Livia Calma, Andreea Paunescu, Virgil Paunescu, Calin Adrian Tatu, Cellular metabolic responses to Copper Nanoparticles: Comparison between normal and breast cancer cells, *Int. J. Mol. Sci*. 2025

Pricop, Maria-Alexandra; Negrea, Adrian; Ciopec, M.; Pascu, I.B.; Oprean, Camelia; Lukinich-Gruia, Alexandra Teodora; Cristea, Iustina Mirabela; **Ivan, Alexandra**.; Păunescu, Virgil; Tatu, Calin Adrian Aristolochic Acid I Adsorption onto Activated Carbon: Kinetics, Equilibrium, and Thermodynamic Studies. Processes 2025, *13*, 3397.

Ivan, Alexandra; Lukinich-Gruia, Alexandra Teodora; Cristea, Iustina Mirabela; Pricop, Maria-Alexandra; Calma, Crenguta; Paunescu, Andreea; Tatu, Calin Adrian; Galuscan, Atena; Paunescu, Virigil. In Vitro Antioxidant Effects of Coenzyme Q10 on Cellular Metabolism in Aged Mesenchymal Stem Cells. *Appl. Sci.* 2025, *15*, 2783. https://doi.org/10.3390/app15052783

Pricop, Maria Alexandra; Negrea, Adrian; Pascu, B.; Nemeş, N.S.; Ciopec, M.; Negrea, P.; Ianăşi, C.; Svera, P.; Muntean, D.; **Ivan, Alexandra**; et al. Copper Nanoparticles Synthesized by Chemical Reduction with Medical Applications. *Int. J. Mol. Sci*. 2025, 26, 1628. https://doi.org/10.3390/ijms26041628

Ivan, A.; Lukinich-Gruia, A.T.; Cristea, I.-M.; Pricop, M.-A.; Calma, C.L.; Simina, A.-G.; Tatu, C.A.; Galuscan, A.; Păunescu, V. Quercetin and Mesenchymal Stem Cell Metabolism: A Comparative Analysis of Young and Senescent States. *Molecules* 2024, 29, 5755.

Ivan Alexandra, Cristea MI, Telea A, Oprean C, Galuscan A, Tatu CA, Paunescu V. Stem Cells Derived from Human Exfoliated Deciduous Teeth Functional Assessment: Exploring the Changes of Free Fatty Acids Composition during Cultivation. *Int J Mol Sci*. 2023 Dec 8;24(24):17249. doi: 10.3390/ijms242417249. PMID: 38139076; PMCID: PMC10743411.

Kis, B.; Pavel, I.Z.; Haidu, D.; Stefanut, M.N.; Diaconeasa, Z.; Moaca, E.-A.; Dehelean, C.A.;S, Sipos, S.; **Ivan, Alexandra**; Danciu, C. Inorganic Element Determination of Romanian Populus nigra L. Buds Extract and In Vitro Antiproliferative and Pro-Apoptotic Evaluation on A549 Human Lung Cancer Cell Line. *Pharmaceutics* 2021, 13, 986. https:// doi.org/10.3390/pharmaceutics 13070986

Ivan, A., Lam, D., Cristea, M.I. Telea A, Gruia AT, Oprean C, Margineanu F, Bojin FM, Saffery R, Paunescu V, Tatu Differential methylation pattern of xenobiotic metabolizing genes and susceptibility to Balkan endemic nephropathy, in a cohort of Romanian patients, *Journal of Nephrology*, 1-10, 2020, https://doi.org/10.1007/s40620-019-00621-2, Print ISSN 1121-8428

Nicoleta Anghel, Hildegard Herman, Cornel Balta, Marcel Rosu, MirunaS. Stan, D. Nita, **Alexandra Ivan**, Zoltan Galajda, Aurel Ardelean, Anca Dinischiotu and Anca Hermenean Acute cardiotoxicity induced by doxorubicin in right ventricle is associated with increase of oxidative stress and apoptosis in rats, *Histology and histopathology* 33(4):11932, 2018 DOI10.14670/HH-11-932

Alexandra T. Gruia, Camelia Oprean, **Alexandra Ivan**, Ada Cean, Mirabela Cristea, Lavinia Draghia, Roxana Damiescu, Nikola M. Pavlovic, Virgil Paunescu, Calin A. Tatu Balkan endemic nephropathy and aristolochic acid I: an investigation into the role of soil and soil organic matter contamination, as a potential natural exposure pathway, *Environ Geochem Health*, 2018, https://doi.org/10.1007/s10653-017-0065-9

Camelia Oprean, **Alexandra Ivan (Coresp author)**, Florina Bojin, Mirabela Cristea, Codruta Soica, Lavinia Drăghia, Angela Caunii, Virgil Paunescu & Calin Tatu Selective in vitro anti-melanoma activity of ursolic and oleanolic acids, *Toxicology Mechanisms and Methods*, 2018 https://doi.org/10.1080/15376516.2017.1373881

Anca Hermenean, Ada Codreanu, Hildegard Herman, Cornel Balta, Marcel Rosu, Ciprian Valentin Mihali, **Alexandra Ivan**, Sorina Dinescu, Mariana Ionita, Marieta Costache, Chitosan-Graphene Oxide 3D scaffolds as Promising Tools for Bone Regeneration in Critical-Size Mouse Calvarial Defects, *Scientific Reports*, 2017, 7: 16641 | DOI:10.1038/s41598-017-16599-5

Angela Caunii, Camelia Oprean, Mirabela Cristea, **Alexandra Ivan**, Corina Danciu, Calin Tatu, Virgil Paunescu, Daniela Marti, George Tzanakakis, Demetrios A. Spandidos, Aristides Tsatsakis, Razvan Susan, Codruta Soica, Stefana Avram and Cristina Dehelean Effects of ursolic and oleanolic on SK-MEL-2 melanoma cells: In vitro and in vivo assays, *International Journal of Oncology*, 2017, DOI: 10.3892/ijo.2017.416

Folk A., Herman H., Boldura OM., Ardelean A., Balta C., **Ivan A.,** Pausian L.,Hemenean A., Flucytosine and Amphotericin B Coadministration Induces Dose-Related Renal Injury, *Dose-Response* 15(2):155932581770346, June 2017 DOI: 10.1177/1559325817703461

Ivan Alexandra, Herman Hildegard, Balta Cornel, Hadaruga DI, Mihali CiprianV, Ardelean Aurel, Hermenean Anca, Berberis vulgaris extract/β-cyclodextrin complex increases protection of hepatic cells via suppression of apoptosis and lipogenesis pathways, *Experimental and Therapeutic Medicine*, 13(5) · March 2017, DOI: 10.3892/etm.2017.4240

Oprean C, Borcan F, Pavel I, Dema A, Danciu C, Soica C, Dehelean C, Nicu A, Ardelean A, Cristea M, **Ivan A**, Tatu C, Bojin F In vivo biological evaluation of polyurethane nanostructures with ursolic and oleanolic acids on chemically-induced skin carcinogenesis, *In Vivo*. 2016 09-10; 30(5):633-8

Camelia Oprean, Marius Mioc, Erzsébet Csányi, Rita Ambrus, Florina Bojin, Calin Tatu, Mirabela Cristea, **Alexandra Ivan**, Corina Danciu, Cristina Dehelean, Virgil Paunescu, Codruta Soica, Improvement of ursolic and oleanolic acids' antitumor activity by complexation with hydrophilic cyclodextrins, *Biomedicine & Pharmacotherapy*, Volume 83, October 2016, Pages 1095–1104, http://www.sciencedirect.com/science/article/pii/S0753332216308599

Balta C, Herman H, Rosu M, Cotoraci C, **Ivan A**, Folk A, Duka R, Dinescu S, Costache M, Petre A, Hemenean Anca Homeostasis of blood parameters and inflammatory markers analysis during bone defect healing after scaffolds implantation in mice calvaria defects, *Romanian Biotechnological Letters* 22(6):12018-12025, 2016

Anghel, C.Cotoraci, **A. Ivan** , M.Suciu, H.Herman, C.Balta , L. Nicolescu, T. Olariu , Z. Galajda, A.Ardelean, A.Hermenean Chrysin attenuates cardiomyocyte apoptosis and loss of intermediate filaments in a mouse model of mitoxantrone cardiotoxicity, *Histology and hystopathyology*, 2015, 30, 1465-1475, DOI: 10.14670/HH-11-641

Daniela Elena Ilie, Ada Cean, Ludovic Toma Cziszter, Dinu Gavojdian**, Alexandra Ivan,** Szilvia Kusza Microsatellite and Mitochondrial DNA Study of Native Eastern European Cattle Populations: The Case of the Romanian Grey, *PLOS ONE*, 2015, 10/10(9) | DOI:10.1371/journal.pone.0138736

Alexandra Ivan, Ordodi, V, Ada Cean, Daniela E. Ilie, Carmen Panaitescu and Gabriela Tănasie Comparative study of the differentiation potential of rat bone marrow mesenchymal stem cells and rat muscle-derived stem cells, *Arch. Biol. Sci.*, Belgrade, 65 (4), 1307-1315, 2013

Nicolae Pacala, **Alexandra Ivan,** Ada Cean, 2012, Vitrification of mice embryos in different developmental stages using four vitrification methods, *Biotechnology and Biotechnological Equipment,* 2012, 26(5),3324-3328,

Alexandra Ivan (Boleman), Gabriela Tănasie, Atena Găluşcan, Simona Anghel, Mirabela Cristea, Florina Maria Bojin, Carmen Panaitescu, Virgil Păunescu, Studies regarding the in vitro wound healing potential of mouse dental pulp stem like progenitor cells, *Biotechnology and Biotechnological Equipmen*t, 2012, 26(1),2781-2785,