

Curriculum vitae Europass



Informații personale

Nume / Prenume **MÂNDUTEANU, ILEANA**
 Adresă(e) Str. George Calinescu, nr.27, Bl.17A, ap.14, Bucuresti, Romania
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Naționalitate(-tăți) Romana

Data nașterii 05.05.1953

Sex Feminin

Domeniul ocupațional Cercetare Biomedicală in domeniul bolilor cardiovasculare , in farmacologie si nanomedicina.

Experiența profesională

Perioada 2012 - prezent
 Funcția Director adjunct
 Numele și adresa angajatorului Institutul de Biologie și Patologie Celulară „Nicolae Simionescu”, Str. B.P. Hașdeu nr.8, Sect 5, București
 Tipul activității sau sectorul de activitate Management

Perioada 2000-prezent
 Funcția sau postul ocupat Cercetător Științific I
 Activități și responsabilități principale Membru in Consiliul Științific
 Coordonatorul Departamentului de Biopatologie si Terapia inflamației
 Numele și adresa angajatorului Institutul de Biologie și Patologie Celulară „Nicolae Simionescu”, Str. B.P. Hașdeu nr.8, Sect 5, București

Tipul activității sau sectorul de activitate	Cercetare Biomedicală, biopatologia si terapia inflamației
Perioada	1993-2000
Funcția sau postul ocupat	Cercetător Științific II
Activități și responsabilități principale	Șef Laborator Adeziune si tromboza
Numele și adresa angajatorului	Institutul de Biologie și Patologie Celulară „Nicolae Simionescu”, Str. B.P. Hașdeu nr.8, Sect 5, București
Tipul activității sau sectorul de activitate	Cercetare biomedicală,molecule de adeziune în boli cardiovasculare, mecanisme de acțiune a unor medicamente anti-inflamatorii
Perioada	1990-1993
Funcția sau postul ocupat	Cercetător Științific III
Activități și responsabilități principale	Cercetare Biomedicală
Numele și adresa angajatorului	Institutul de Biologie și Patologie Celulară „Nicolae Simionescu”, Str. B.P.Hasdeu nr.8, Sect 5, București
Tipul activității sau sectorul de activitate	Cercetare Științifică
Perioada	1988-1989
Funcția sau postul ocupat	Biofizician
Activități și responsabilități principale	Activitate Didactica
Numele și adresa angajatorului	Facultatea de Medicina și Farmacie “Carol Davila”, București, Catedra de Biologie Celulara
Tipul activității sau sectorul de activitate	Activitate didactică
Perioada	1980-1988
Funcția sau postul ocupat	Cercetător Științific
Activități și responsabilități principale	Cercetare Științifică
Numele și adresa angajatorului	Institutul de Biologie și Patologie Celulară „Nicolae Simionescu”, Str. B.P. Hașdeu nr.8, Sect 5, București
Tipul activității sau sectorul de activitate	Cercetare Științifică
Perioada	1978-1980
Funcția sau postul ocupat	Biofizician
Activități și responsabilități principale	Cercetare Științifică
Numele și adresa angajatorului	Laborator de radiobiologie –Platforma Magurele

Tipul activității sau sectorul de activitate	Cercetare Științifică
Perioada	1977-1978
Funcția sau postul ocupat	Fizician
Activități și responsabilități principale	Productie Dispozitive Semiconductoare cu Siliciu IPRS Băneasa
Numele și adresa angajatorului	Producție
Tipul activității sau sectorul de activitate	
Educație și formare	
Perioada	2014
	Teza de abilitare conducere doctorat:”Molecule si mecanisme ale inflamației vasculare ca ținte moleculare pentru terapie”
Perioada	1982-1992
Calificarea / diploma obținută	Doctor in Biologie Titlul:”Izolarea , cultivarea si metabolismul endoteliului valvular cardiac-un model de studiu al interactiei endoteliului cu celulele sanghine”;conducator stiintific:Academician Maya Simionescu
Disciplinele principale studiate / competențe profesionale dobândite	-Biologie celulară -Biochimie -Biopatologia sistemului cardio-vascular -Biopatologia valvelor cardiace -Culturi de celule
Numele și tipul instituției de învățământ / furnizorului de formare	Academia Română, IBPC ”N.Simionescu”
Perioada	1972-1977
Calificarea / diploma obținută	Fizician Diploma de Licența in Fizică, specializarea Biofizică
Numele și tipul instituției de învățământ / furnizorului de formare	Universitatea București - Facultatea de Fizica-Sectia de Biofizica
Aptitudini și competențe personale	
Limba(i) maternă(e)	Română

Limba(i) străină(e)
cunoscută(e)

Autoevaluare
Nivel european ()*

Limba engleza

Limba franceza

Înțelegere				Vorbire				Scriere	
Ascultare		Citire		Participare la conversație		Discurs oral		Exprimare scrisă	
C 1	Utilizator experimentat	C 1	Utilizator experimentat	C 1	Utilizator experimentat	C 1	Utilizator experimentat	C 1	Utilizator experimentat
C 1	Utilizator experimentat	C 1	Utilizator experimentat	C 1	Utilizator experimentat	C 1	Utilizator experimentat	B 1	Utilizator experimentat

(*) *Nivelul Cadrului European Comun de Referință Pentru Limbi Străine*

Competențe și abilități sociale

Spirit de echipă: organizare si coordonare echipe de cercetare precum și conferințe și congrese naționale și internaționale in cadrul IBPC
”N.Simionescu”

Activități de management:

Participare la programe/proiecte naționale/internaționale :

- GAR/Adeziunea monocitelor la celulele endoteliale valvulare crescute în concentrații ridicate de glucoză (1997) –director proiect. Sursa de finanțare:Academia Română.
- MCT/Mecanisme implicate în adeziunea monocitelor la celulele endoteliale valvulare crescute în concentrații ridicate de glucoză(1997-1998):director proiect. Sursa de finanțare:Ministerul Cercetării și Tehnologiei.
- ANSTI/Expresia de molecule de adeziune celulară în endoteliul valvular. Implicații în tratamentul viitor al unor boli valvulare.(1999-2001)-director proiect.Sursa finanțării: Agenția națională Pentru Știință, Tehnologie Și Inovare, Ministerul Educației Și Cercetării
- MEC/Efectul medicamentelor antiinflamatorii asupra activării endoteliului vascular(2001-2002)-colaborator
- VIASAN /Directionarea medicamentelor țintite către endoteliul vascular activat utilizând liposomi "inteligenti": o strategie pentru terapia bolilor cardiovasculare (2001-2003)-colaborator
- VIASAN /Modularea secreției de chemokine în diferite condiții de patologie vasculară; rolul funcțional al acestora în modelele studiate (2003-2005)-colaborator
- VIASAN/O nouă strategie pentru stabilizarea leziunilor aterosclerotice în sindroamele coronariene acute: suprimarea macrofagelor activate cu ajutorul liposomilor- purtători de clodronat (2004-2006)-colaborator
- CEEX / Alterarea mecanismelor celulare și moleculare și a expresiei genice în boli cardiovasculare și diabet/obezitate, afecțiuni majore ale sindromului metabolic - cercetări fundamentale și clinice CEEX/ Inflamația în ateroscleroză: modularea expresiei genice a fractalkinei, apoE, NADPH oxidazei și VEGF de către mediatori inflamatori; capacitatea unor medicamente de prevenire/reversare a procesului (2005-2008)-colaborator.
- CEEX / CEEX/ Inflamația în ateroscleroză: modularea expresiei genice a fractalkinei, apoE, NADPH oxidazei și VEGF de către mediatori inflamatori; capacitatea unor medicamente de prevenire/reversare a procesului, Alterarea mecanismelor celulare și moleculare și a expresiei genice în boli cardiovasculare și diabet/obezitate, afecțiuni majore ale sindromului metabolic - cercetări fundamentale și clinice(2006-2009)-colaborator

- Proiect international: SERA " Intarirea zonei de cercetare europeana prin cresterea competentei cercetarii romanesti in genomica si proteomica maladiilor majore de risc global : ateroscleroza, diabetul si complicatiile lor » Specific Support Action, PC6 (2005-2008) Membru in comitetul de management (WP Lieder)
- Proiect PNCDI2-Parteneriate : Interrelatia la nivel molecular intre inflamatiile cronice si ateroscleroza accelerata: rolul moleculelor recent descoperite, rezistina, fractalkina, CXCL16; oportunitati pentru noi terapii tintite(2007-2010)-director de proiect. Sursa de finantare :Centrul National de management Programe ;volumul finantarii:1.283993 lei
- Proiect transnational (FP7)- Euronanomed: ‘Nanoparticles designed to target chemokine-related inflammatory processes in vascular diseases and cancer metastasis and implementation of a biosensor to diagnose these disorders’(2010-2012)-colaborator
- Proiect PNII:IDEI.” Molecule si mecanisme implicate in inflamatiile vasculare dependente de citokine si chemokine, posibile tinte pentru noi strategii nanoterapeutice”.(2011-2014). -Director proiect. Sursa de Finantare:Unitatea Executiva Pentru Finantarea Invatamintului Superior A cercetarii Dezvoltarii si Inovarii ;volumul finantarii 1.500.000 lei
- Proiect POC-A.1.1.4-E-2015:Terapii tintite pentru boala valvei aortice in diabet, Theravaldis,2016-2020, manager executiv
- Proiect ERANET-NEURON-STATEMENT 2020-2023, Responsabil colectiv România
- Actiunea COST CA20117 “Converting molecular profiles of myeloid cells into biomarkers for inflammation and cancer”2021-2025,membru in Comitetul de Management

Competențe și aptitudini tehnice	Tehnici de Biologie Celulară și Moleculară și de nanomedicină
Competențe și aptitudini de utilizare a calculatorului	O bună stăpânire a aplicațiilor Word, Excel, Photoshop
Permis(e) de conducere	Permis de conducere de tip B

Informații suplimentare

Activitate Didactica:

- Cursuri la Cursul Postuniversitar de Studii Avansate organizat in IBPC "N.Simionescu" (2000 - 2008)

Afilieri Profesionale:

- 2015-prezent Membru Corespondent Academia Romana
- 2017-prezent Membru Academia de Stiinte medicale
- 1982 - prezent: Societatea Nationala de Biologie Celulara.
- 1983 - prezent: Organizatia Europeana de Biologie Celulara.
- 2008 - prezent : Asociatia Europeana de Studiu al Diabetului

Premii stiintifice:

- 1993: Premiul "Emil Racovita" al Academiei Roman
- 1995: Premiul Societatii Romane de Biologie Celulara si al Companiei Becton Dickinson "Cell Science Products pentru contributii speciale in domeniul culturilor Celulare" ;
- 2002: "Bio-Rad Laboratories Prize" pentru cercetare valoroasa cu echipamente Bio-Rad.
- 2019;Premiul "Acad.Nicolae Cajal" pentru realizari obtinute in cercetarea fundamentala

Specializari:

- 1993: Bursa de specializare a Comisiei Comunitatii Europene la Laboratorul de Biologie Vasculara a Institutului de cercetari farmacologice "Mario Negri", Milano, Italia
- 2000: Participare la cursul NATO cu tema: "Endoteliul vascular sursa si tinta terapeutica mediatorilor inflamatiei" (Advanced Study Institute "Vascular endothelium: source and target of inflammatory mediators"), Creta, Grecia.

Scientometrie:

74 publicatii ISI,3 capitoare de carte, 1 capitol de monografie

Comunicari la 66 conferinte si congrese internationale

Comunicari la 65 de conferinte si congrese nationale

Index Hirsch : 29 (Google Scholar)
23(Web of Science)

Citari: 2233 (Google Scholar)
1300 (Web of Science)

Alte informatii:

Expert in Comisia de Biologie si Biochimie a Consiliului National de Atestare a Titlurilor, Diplomelor si Certificatelor Universitare (CNATDCU)(2011-2012)

Membru in comitetul editorial :Journal of Cellular and Molecular Medicine, Frontiers in Cardiovascular Medicine

Reviewer : British Journal of Nutrition, Basic and Clinical Pharmacology, Journal of Cellular and Molecular Medicine, Cell and Tissue Research, Inflammation Research, Cytokine journal,Frontiers in Cardiovascular medicine, Pharmaceutics, Biomolecules

Referent pentru finantare Granturi :UEFISDCI, CNCSIS, CNMP-ANCS

LISTA DE PUBLICATII

CAPITOLE DE CARTE/MONOGRAFII

1. Vasile E, **Mânduțeanu I.** Transport of LDL. in "Endothelial transport of macromolecules: "Transcytosis and endocytosis", Simionescu M. Simionescu N, editors. Cell Biology Reviews, 25,1, 39-41.1991
2. **Mânduțeanu I.** Mechanisms involved in the anti-inflammatory effects of heparin. Cellular Dysfunction in Atherosclerosis and Diabetes-Reports from Bench to Bedside. Simionescu M, Sima A, Popov D.(eds), The Publishing House of the Romanian Academy, pp. 363-372, 2004.
3. Butoi (Dragomir) E. and **Mânduțeanu I.** Fractalkine and its receptor in vascular dysfunction. 'From Vascular Cell Biology to Cardiovascular Medicine', Ed: Adriana Georgescu, Felicia Antohe, published by RESEARCH SIGNPOST TRANSWORLD RESEARCH NETWORK, ISBN - 978-81-7895-503-2, in press 2010.
4. Tucureanu M.M., **Mânduțeanu I.** Resistin in Cardiovascular Diseases, pp 85-14. In *Resistin: Structure, Function and Role in Disease*, published in Nova Science Publishers, Inc. 2018.

LUCRĂRI ȘTIINȚIFICE ORIGINALE ÎN WEB OF SCIENCE CORE COLLECTION

1. Popov D, **Mânduțeanu I.** Synthesis and secretion of ³H-mannose labeled proteins by valvular endothelial cells in culture. Rev.Roum. Biochem. 1987, vol 24, pp 48-54.
2. **Mânduțeanu I**, Popov D, Radu A, Simionescu M. Calf cardiac valvular endothelial cells in culture: production of glycosaminoglycans, prostacyclin and fibronectin. J Mol Cell Cardiol. 1988 Feb;20(2):103-18.
3. **Mânduțeanu I**, Vasile E, Simionescu M. Uptake of LDL by valvular endothelial cells in culture. Rev. Roum. Biochim. 1990, vol 27, pp 235-238.
4. **Mânduțeanu I**, Calb M, Lupu C, Simionescu N, Simionescu M. Increased adhesion of human diabetic platelets to cultured valvular endothelial cells, J. Sobmicrosc. Cytol. and Pathol., 1992, vol 24, pp 543-547.
5. Lupu C, **Mânduțeanu I**, Calb M, Simionescu N, Simionescu M, Ionescu M. Some Major Plasmalemma Proteins of Human Diabetic Platelets are Involved in the Enhanced Platelet Adhesion to Cultured Valvular Endothelial Cells. Platelets. 1993;4(2):79-84.
6. Navarro P, Caveda L, Breviario F, **Mânduțeanu I**, Lampugnani MG, Dejana E. Catenin-dependent and independent functions of vascular endothelial cadherin, Journal of Biol. Chem, 270,52,30965-30972 (1995).
7. **Mânduțeanu I**, Corot C, Simionescu N, Meyer D, Simionescu M. Ultrastructural investigation of the vascular transport of an iodinated macromolecular contrast medium. Acad Radiol. 1996 Aug;3 Suppl 2:S353-5.
8. **Mânduțeanu I**, Corot C, Simionescu N, Meyer D, Simionescu M. Experimental evaluation of the vascular effects and transport of an iodinated macromolecular contrast medium. Invest Radiol. 1997 Aug;32(8):447-52.
9. **Mânduțeanu I**, Voinea M, Serban G, Simionescu M. High glucose induces enhanced monocyte adhesion to valvular endothelial cells via a mechanism involving ICAM-1, ICAM-1 and CD18. Endothelium. 1999;6(4):315-24.
10. **Mânduțeanu I**, M.Voinea, M.Capraru, E. Dragomir, M. Simionescu. A novel attribute of enoxaparin: Inhibition of monocyte adhesion to endothelial cells by a mechanism involving cell adhesion molecules, Pharmacology. Vol.65, No.1, pp.32-37, 2002.
11. Voinea, M, Dragomir, E, **Mânduțeanu, I**, Simionescu, M. Binding and uptake of transferrin-bound liposomes targeted to transferrin receptors of endothelial cells, Vascular Pharmacology Vol.39, No.1-2, pp. 13-20, 2002.

12. **Mânduțeanu I**, Voinea M, Antohe F, Dragomir E, Capraru M, Radulescu L, Simionescu M. Effect of enoxaparin on high glucose-induced activation of endothelial cells, *European Journal of Pharmacology*, Vol.477, No.3, pp.269-276, 2003.
13. Voinea M, Georgescu A, Manea A, Dragomir E, **Mânduțeanu I**, Popov D, Simionescu M. Superoxide dismutase entrapped-liposomes restore the impaired endothelium-dependent relaxation of resistance arteries in experimental diabetes, *European Journal of Pharmacology*, Vol.484, No.1, pp.111-118, 2004.
14. Dragomir E, **Mânduțeanu I**, Voinea M, Costache G, Manea A, Simionescu M. Aspirin rectifies calcium homeostasis, decreases reactive oxygen species, and increases NO production in high glucose-exposed human endothelial cells, *Journal of Diabetes and its Complications*, Vol.18, No.5, pp.289-299, 2004.
15. Voinea M, **Mânduțeanu I**, Dragomir E, Capraru M, Simionescu M. Immunoliposomes directed toward VCAM-1 interact specifically with activated endothelial cells - A potential tool for specific drug delivery. *Pharmaceutical Research*, Vol.22, No.11, pp.1906-1917, 2005.
16. Dragomir E, Tircol M, **Mânduțeanu I**, Voinea M, Simionescu M. Aspirin and PPAR- α activators inhibit monocyte chemoattractant protein-1 expression induced by high glucose concentration in human endothelial cells, *Vascular Pharmacology*, Vol.44, No.6, pp.440-449, 2006.
17. **Mânduțeanu I**, Dragomir E, Voinea M, Capraru M, Simionescu M. Enoxaparin reduces H₂O₂-induced activation of human endothelial cells by a mechanism involving cell adhesion molecules and nuclear transcription factors, *Pharmacology*, Vol.79, No.3, pp.154-162, 2007.
18. Dragomir E, **Mânduțeanu I**, Calin M, Gan A.M, Stan D, Koenen R.R, Weber C, Simionescu M. High glucose conditions induce upregulation of fractalkine and monocyte chemotactic protein-1 in human smooth muscle cells, *Thrombosis and Haemostasis*, Vol.100, No.6, 1155-1165, 2008.
19. **Mânduțeanu I**, Dragomir E, Calin M, Pirvulescu M, Gan A.M, Stan D, Simionescu M. Resistin up-regulates fractalkine expression in human endothelial cells: Lack of additive effect with TNF- α , *Biochemical and Biophysical Research Communications*, Vol.381, No.1, pp.96-101, 2009.
20. Calin M, **Mânduțeanu I**, Dragomir E, Dragan E, Nicolae M, Gan A.M, Simionescu M. Effect of depletion of monocytes/macrophages on early aortic valve lesion in experimental hyperlipidemia, *Cell and Tissue Research*, Vol. 336, No.2, pp.237-248, 2009.
21. **Mânduțeanu I**, Pirvulescu M, Gan A.M, Stan D, Simion V, Dragomir E, Calin M, Simionescu M. Similar effects of resistin and high glucose on P-selectin and fractalkine expression and monocyte adhesion in human endothelial cells. *Biochemical and Biophysical Research Communications*, Vol.391, No.3, pp.1443-1448, 2010.
22. Stan D, Calin M, **Mânduțeanu I**, Pirvulescu M, Gan AM, Dragomir Butoi E, Simion V, Simionescu M. High glucose induces enhanced expression of resistin in human U937 monocyte-like cell line by MAPKs and NF- κ B dependent mechanisms; the modulating effect of insulin, *Cell Tissue Res*. 2011 Feb;343(2):379-87.
23. Pirvulescu MM, Gan AM, Stan D, Simion V, Calin M, Butoi ED, Tirgoviste CI, **Mânduțeanu I**. Curcumin and a Morus alba Extract Reduce Pro-Inflammatory Effects of Resistin in Human Endothelial Cells. *Phytother Res*. Dec;25(12):1737-42, 2011.
24. Butoi ED, Gan AM, **Mânduțeanu I**, Stan D, Calin M, Pirvulescu M, Koenen RR, Weber C, Simionescu M. Cross talk between smooth muscle cells and monocytes/ activated monocytes via CX3CL1/CX3CR1 axis augments expression of pro-atherogenic molecules. *Biochim Biophys Acta*. 2011 Aug 22;1813(12):2026-2035.
25. **Mânduțeanu I**, Simionescu M. Inflammation in atherosclerosis: a cause or a result of vascular disorders? *J Cell Mol Med*. 2012 Sep;16(9):1978-90.

26. Pirvulescu M, **Mânduțeanu I**, Gan AM, Stan D, Simion V, Butoi E, Calin M, Simionescu M. A novel pro-inflammatory mechanism of action of resistin in human endothelial cells: up-regulation of SOCS3 expression through STAT3 activation. *Biochem Biophys Res Commun*. 2012, 1;422(2):321-6.
27. Gan AM, Butoi ED, Manea A, Simion V, Stan D, Parvulescu MM, Calin M, **Mânduțeanu I**, Simionescu M. Inflammatory effects of resistin on human smooth muscle cells: up-regulation of fractalkine and its receptor, CX3CR1 expression by TLR4 and Gi-protein pathways. *Cell Tissue Res*. (2013) 351:161–174.
28. Simion V, Stan D, Gan AM, Pirvulescu MM, Butoi E, **Mânduțeanu I**, Deleanu M, Andrei E, Durdureanu-Angheluta A, Bota M, Enachescu M, Calin M, Simionescu M. Development of curcumin-loaded poly(hydroxybutyrate-cohydroxyvalerate) nanoparticles as anti- nflammatory carriers to human-activated endothelial cells. *J Nanopart Res* (2013) 15:2108.
29. Gan AM, Pirvulescu MM, Stan D, Simion V, Calin M, **Mânduțeanu I**, Butoi E. Monocytes and smooth muscle cells cross-talk activates STAT3 and induces resistin and reactive oxygen species production. *J Cell Biochem*. 2013 Oct; 114(10):2273-83. doi: 10.1002/jcb.24571.
30. Pirvulescu MM, Gan AM, Stan D, Simion V, Calin M, Butoi E, **Mânduțeanu I**. Subendothelial resistin enhances monocyte transmigration in a co-culture of human endothelial and smooth muscle cells by mechanisms involving fractalkine, MCP-1 and activation of TLR4 and Gi/o proteins signaling, *Int J Biochem Cell Biol*. 2014, 50:29-37, doi:10.1016/j.biocel.2014.01.022.
31. Gan AM, Butoi E, Manea A, Pirvulescu MM, Stan D, Simion V, Calin M, Simionescu M, **Mânduțeanu I**. Functional analysis of the fractalkine gene promoter in human aortic smooth muscle cells exposed to proinflammatory conditions, *FEBS J*. 2014 Sep;281(17):3869-81. doi: 10.1111/febs.12921.
32. Butoi E, Gan AM, **Mânduțeanu I**. Molecular and functional interactions among monocytes/macrophages and smooth muscle cells and their relevance for atherosclerosis. *Crit Rev Eukaryot Gene Expr*. 2014;24(4):341-55.
33. Calin M, Stan D, Schlesinger M, Simion V, Deleanu M, Constantinescu CA, Gan AM, Pirvulescu MM, Butoi E, **Manduteanu I**, Bota M, Enachescu M, Borsig L, Bendas G, Simionescu M. VCAM-1 directed target-sensitive liposomes carrying CCR2 antagonists bind to activated endothelium and reduce adhesion and transmigration of monocytes. *Eur J Pharm Biopharm*. 2015 Jan;89:18-29. doi: 10.1016/j.ejpb.2014.11.016.
34. Conjugation of curcumin-loaded lipid nanoemulsions with cell-penetrating peptides increases their cellular uptake and enhances the anti-inflammatory effects in endothelial cells. Simion V, Stan D, Constantinescu CA, Deleanu M, Dragan E, Tucureanu MM, Gan AM, Butoi E, Constantin A, **Mânduțeanu I**, Simionescu M, Calin M. *J Pharm Pharmacol*. 2016 Feb;68(2):195-207. doi: 10.1111/jphp.12513. Epub 2016 Jan 8. PMID:26748549.
35. Cross-talk between macrophages and smooth muscle cells impairs collagen and metalloprotease synthesis and promotes angiogenesis. Butoi E, Gan AM, Tucureanu MM, Stan D, Macarie RD, Calin M, Simionescu M, **Mânduțeanu I**. *Biochim Biophys Acta*. 2016 Apr 6. pii: S0167-4889(16)30082-9. doi: 10.1016/j.bbamer.2016.04.001. [Epub ahead of print] PMID: 27060293.
36. Amendment of the cytokine profile in macrophages subsequent to their interaction with smooth muscle cells: Differential modulation by fractalkine and resistin. Tucureanu MM, Butoi E, Gan AM, Stan D, Constantinescu CA, Calin M, Simionescu M, **Mânduțeanu I**. *Cytokine*. 2016 Jul;83:250-261. doi: 10.1016/j.cyto.2016.04.019. Epub 2016 May 12.

37. P-Selectin Targeted Dexamethasone-Loaded Lipid Nanoemulsions: A Novel Therapy to Reduce Vascular Inflammation. Simion V, Constantinescu CA, Stan D, Deleanu M, Tucureanu MM, Butoi E, Mânduțeanu I, Simionescu M, Calin M. *Mediators Inflamm.* 2016;2016:1625149. Epub 2016 Sep 14.
38. Emerging Nanocarriers-based Approaches to Diagnose and Reduce Vascular Inflammation in Atherosclerosis. Calin M, **Mânduțeanu I.** *Curr Med Chem.* 2017;24(6):550-567. doi: 10.2174/0929867324666161123091627. Review.
39. Lipopolysaccharide-induced inflammation in monocytes/macrophages is blocked by liposomal delivery of G_i-protein inhibitor. Tucureanu MM, Rebleanu D, Constantinescu CA, Deleanu M, Voicu G, Butoi E, Calin M, **Mânduțeanu I.** *Int J Nanomedicine.* 2017 Dec 20;13:63-76
40. Macarie RD, Vadana M, Ciortan L, Tucureanu MM, Ciobanu A, Vinereanu D, Mânduțeanu I, Simionescu M, Butoi E. The expression of MMP-1 and MMP-9 is up-regulated by smooth muscle cells after their cross-talk with macrophages in high glucose conditions. *J Cell Mol Med.* 2018 Sep;22(9):4366-4376
41. Constantinescu CA, Fuior EV, Rebleanu D, Deleanu M, Simion V, Voicu G, Escriou V, **Mânduțeanu I,** Simionescu M, Calin M. Targeted Transfection Using PEGylated Cationic Liposomes Directed Towards P-Selectin Increases siRNA Delivery into Activated Endothelial Cells. *Pharmaceutics.* 2019 Jan 21;11(1). pii: E47. doi: 10.3390/pharmaceutics11010047.
42. Tucureanu MM, Filippi A, Alexandru N, Ana Constantinescu C, Ciortan L, Macarie R, Vadana M, Voicu G, Frunza S, Nistor D, Simionescu A, Simionescu DT, Georgescu A, **Mânduțeanu I.** Diabetes-induced early molecular and functional changes in aortic heart valves in a murine model of atherosclerosis. *Diab Vasc Dis Res.* 2019 Nov;16(6):562-576. doi: 10.1177/1479164119874469. Epub 2019 Sep 18.
43. Vadana M, Cecoltan S, Ciortan L, Macarie RD, Tucureanu MM, Mihaila AC, Droc I, Butoi E, **Mânduțeanu I.** Molecular mechanisms involved in high glucose-induced valve calcification in a 3D valve model with human valvular cells. *J Cell Mol Med.* 2020 Apr 19. doi: 10.1111/jcmm.15277.
44. Alexandru Filippi, Alina Constantin, Nicoleta Alexandru, Geanina Voicu, Cristina Ana Constantinescu, Daniela Rebleanu, Madalina Fenyo, Dan Simionescu, Agneta Simionescu, **Ileana Manduteanu,** Adriana Georgescu. Integrins $\alpha 4\beta 1$ and $\alpha V\beta 3$ are Reduced in Endothelial Progenitor Cells from Diabetic Dyslipidemic Mice and May Represent New Targets for Therapy in Aortic Valve Disease. *Cell Transplant.* 2020 Jan-Dec; 29: 0963689720946277. Published online 2020 Aug 25. doi: 10.1177/0963689720946277 PMID: 32963689
45. Geanina Voicu, Daniela Rebleanu, Cristina Ana Constantinescu, Elena Valeria Fuior, Letitia Ciortan, Ionel Droc, Cristina Mariana Uritu, Mariana Pinteala, **Ileana Manduteanu,** Maya Simionescu, Manuela Calin. Nano-Polyplexes Mediated Transfection of Runx2-shRNA Mitigates the Osteodifferentiation of Human Valvular Interstitial Cells. *Pharmaceutics.* 2020 Jun; 12(6): 507. Published online 2020 Jun 2. doi: 10.3390/pharmaceutics12060507
46. Letitia Ciortan, Razvan Daniel Macarie, Sergiu Cecoltan, Mihaela Vadana, Monica Madalina Tucureanu, Andreea Cristina Mihaila, Ionel Droc, Elena Butoi, **Ileana Manduteanu** Chronic High Glucose Concentration Induces Inflammatory and Remodeling Changes in Valvular Endothelial Cells and Valvular Interstitial Cells in a Gelatin Methacrylate 3D Model of the Human Aortic Valve. *Polymers (Basel)* 2020 Dec; 12(12): 2786. Published online 2020 Nov 25. doi: 10.3390/polym12122786 PMID: 33282866
47. Turtoi M, Anghelache M, Patrascu AA, Maxim C, **Manduteanu I,** Calin M, Popescu DL Synthesis, Characterization, and In Vitro Insulin-Mimetic Activity Evaluation of Valine Schiff Base Coordination Compounds of Oxidovanadium(V). *Biomedicines.* 2021 May 17;9(5):562. doi: 10.3390/biomedicines9050562.PMID: 34067862

48. Turtoi M, Anghelache M, Bucatariu SM, Deleanu M, Voicu G, Safciuc F, **Manduteanu I**, Fundueanu G, Simionescu M, Calin M A novel platform for drug testing: Biomimetic three-dimensional hyaluronic acid-based scaffold seeded with human hepatocarcinoma cells..Int J Biol Macromol. 2021 Aug 31;185:604-619. doi: 10.1016/j.ijbiomac.2021.06.174. Epub 2021 Jul 1.PMID: 34216662
49. Cecoltan S, Ciortan L, Macarie RD, Vadana M, Mihaila AC, Tucureanu M, Vlad ML, Droc I, Gherghiceanu M, Simionescu A, Simionescu DT, Butoi E, **Manduteanu I** High Glucose Induced Changes in Human VEC Phenotype in a 3D Hydrogel Derived From Cell-Free Native Aortic Root.Front Cardiovasc Med. 2021 Aug 12;8:714573. doi: 10.3389/fcvm.2021.714573. eCollection 2021.PMID: 34458339
50. Mocanu CA, Fuior EV, Voicu G, Rebleanu D, Safciuc F, Deleanu M, Fenyo IM, Escrion V, **Manduteanu I**, Simionescu M, Calin M P-selectin targeted RAGE-shRNA lipoplexes alleviate atherosclerosis-associated inflammation. J Control Release. 2021 Oct 10;338:754-772. doi: 10.1016/j.jconrel.2021.09.012. Epub 2021 Sep 14.PMID: 34530051
51. **Manduteanu I**, Simionescu D, Simionescu A, Simionescu M..Aortic valve disease in diabetes: Molecular mechanisms and novel therapies..J Cell Mol Med. 2021 Oct;25(20):9483-9495. doi: 10.1111/jcmm.16937. Epub 2021 Sep 24.PMID: 34561944
52. Vadana M, Cecoltan S, Ciortan L, Macarie RD, Mihaila AC, Tucureanu MM, Gan AM, Simionescu M, **Manduteanu I**, Droc I, Butoi E .Parathyroid Hormone Induces Human Valvular Endothelial Cells Dysfunction That Impacts the Osteogenic Phenotype of Valvular Interstitial Cells. Int J Mol Sci. 2022 Mar 29;23(7):3776. doi: 10.3390/ijms23073776.PMID: 35409134
53. Voicu G, Rebleanu D, Mocanu CA, Tanko G, Droc I, Uritu CM, Pinteala M, **Manduteanu I**, Simionescu M, Calin M .VCAM-1 Targeted Lipopolyplexes as Vehicles for Efficient Delivery of shRNA-Runx2 to Osteoblast-Differentiated Valvular Interstitial Cells; Implications in Calcific Valve Disease Treatment..Int J Mol Sci. 2022 Mar 30;23(7):3824. doi: 10.3390/ijms23073824.PMID: 35409184

Non-ISI Papers

1. **Mânduțeanu I**, Radu A, Simionescu M. Isolation and cultivation of rabbit endocardial endothelial cells. Preliminary data. Morphol. Embriol, 1988, vol XXXIV, pp 165-169.
2. Voinea M, **Mânduțeanu I**, Simionescu M. Interaction of liposomes with vascular endothelium. Current problems and techniques in cellular and molecular biology. 1998, Vol.3, pp.26-29.
3. Voinea M, **Mânduțeanu I**, Simionescu M. Effect of antioxidants on adhesion of monocytes to valvular endothelial cells grown in high glucose concentrations. Current problems and techniques in cellular and molecular biology. 1998, Vol 3, pp 141-145
4. Radulescu L, **Mânduțeanu I**, Antohe F, Simionescu M. Detection of new antigens in activated endothelial cells by high-resolution 2-D gel technology, Electrophoresis-Tech NotE., Bio-Rad, 2003, pp2979
5. Voinea M, Dragomir E, **Mânduțeanu I**. Gene transfer into endothelial cells using transferrin bound cationic liposomes, Proc. Rom Acad, 2004 Series B, vol 3, pp 203-206

SELECTIE LUCRARI PREZENTATE LA CONGRESE NATIONALE SI INTERNATIONALE

1. **Mânduțeanu I**, Corot C, Simionescu, N, et al, Ultrastructural investigation of the vascular transport of an iodinated macromolecular contrast medium, Conference Information: Contrast Media Research Symposium, jun 17-22, 1995 Naantali Finland, Source: Academic radiology Volume: 3 Pages: S353-S355 Published: 1996.
2. Voinea M, Serban G, **Mânduțeanu I**, et al, ICAM-1 and VCAM-1 are involved in the increased adhesion of monocytes to valvular endothelial cells grown in high glucose concentrations, Source: Hypertension Volume: 30 Issue: 4 Pages: 65-65 Published: OCT 1997

3. Capraru MS, Dragomir E, Voinea M, **Mânduțeanu I**, Capraru D, Sbarcea A. The effect of CD40 L-CD40 on fractalkine expression on synovial fibroblasts, Conference Information: Annual European Congress of Rheumatology (EULAR 2004), JUN 09-12, 2004 Berlin GERMANY, Source: Annals of the rheumatic diseases Volume: 63 Pages: 137-137 Published: 2004
4. Capraru MS, Dragomir E, Voinea M, Capraru D, **Mânduțeanu I**, Signaling pathways involved in CD40L induced fractalkine expression on synovial fibroblasts, Conference Information: Annual European Congress of Rheumatology, JUN 08-11, 2005 Vienna Austria, Source: Annals of the rheumatic diseases Volume: 64 Pages: 130-130 Published: 2005
5. Dragomir E, Voinea M, **Mânduțeanu I**, et al, High glucose stimulates fractalkine and MCP-1 expression in human aortic smooth muscle cells, Conference Information: 14th Meeting of the International-Society-of-Atherosclerosis, JUN 18-22, 2006 Rome ITALY, Source: Atherosclerosis supplements Volume: 7 Issue: 355-355, Published: 2006 Meeting Abstract: WeP1141
6. **Mânduțeanu I**, Dragomir E, Voinea M, et al, Molecular mechanisms involved in enoxaparin effect on hydrogen peroxide exposed human endothelial cells, Conference Information: World Congress of Cardiology, SEP 02-06, 2006 Barcelona SPAIN, Source: European heart journal Volume: 27 Pages: 127-127 Published: 2006
7. Voinea M, Georgescu A, Manea A, Dragomir E, **Mânduțeanu I**, Popov D, Simionescu M. Superoxide dismutase entrapped-liposomes restore the impaired endothelium-dependent relaxation of resistance arteries in experimental diabetes, Conference Information: 24th Conference of the European-Society-for-Microcirculation, AUG 30-SEP 02, 2006 Amsterdam Netherlands, Source: Journal of vascular research Volume: 43 Pages: 18-18 Published: 2006
8. **Mânduțeanu I**, Gan AM, Dragomir E, et al. Molecular mechanisms involved in resistin-induced activation of human endothelial cells, Conference Information: 16th European Congress, on obesity, may 14-17, 2008 Geneva Switzerland, Source: International journal of obesity Volume: 32 Pages: S62-S62 Published: 2008
9. **Mânduțeanu I**, Dragomir E, Calin M, et al. Resistin upregulates ICAM-1, P-selectin and fractalkine in human endothelial cells, source: Atherosclerosis supplements Volume: 9 Issue: 1 Pages: 66-66 Published: 2008
10. Pirvulescu MM, Stan D, Gan AM, Simion V, Ionescu-Tirgoviste C, **Mânduțeanu I**. Morus alba extract and curcumin reduce resistin induced-human endothelial cells activation by a mechanism involving p38 MAPK, Conference Information: 78th Congress of the European-Atherosclerosis-Society, jun 20-23, 2010 Hamburg Germany, Source: Atherosclerosis supplements Volume: 11 Issue: 2 Pages: 191-191 Published: 2010, Meeting Abstract: MS402.
11. Stan D, Calin M, Butoi E, Gan AM, Pirvulescu MM, Simion V, **Mânduțeanu I**, Simionescu M. Resistin and high glucose modulate the expression of fractalkine receptor (CX3CR1) in human monocytes, Conference Information: 78th Congress of the European-Atherosclerosis-Society, jun 20-23, 2010 Hamburg Germany, Source: Atherosclerosis supplements Volume: 11 Issue: 2 Pages: 143-143 Published: 2010, Meeting Abstract: MS169
12. Gan AM, Butoi E, Stan D, Pirvulescu M, Simion V, **Mânduțeanu I**, Simionescu M. Fractalkine promotes a pro-inflammatory phenotype in human smooth muscle cells, Conference Information: 78th Congress of the European-Atherosclerosis-Society, 2010, jun 20-23, Hamburg Germany, Source: Atherosclerosis supplements Volume: 11 Issue: 2 Pages: 138-138 Published: 2010. Meeting Abstract: MS143
13. M Calin, **I Mânduțeanu**, E Butoi, D Stan, E Dragan, AM Gan, M Simionescu. 401 An approach based on lipid nanoparticles to determine the role of monocytes/macrophages in the development of aortic valve atherosclerotic lesions, Atherosclerosis Supplements 12 (1), 86, 2011
14. AM Gan, **I Mânduțeanu**, V Simion, D Stan, MM Pirvulescu, M Calin, E Butoi, M. Simionescu. 316 Resistin up-regulates fractalkine and CX3CR1 expression in vascular smooth muscle cells by MAPK-NF-kB pathway, Atherosclerosis Supplements 12 (1), 68, 2011
15. D Stan, V Simion, AM Gan, M Pirvulescu, E Butoi, **I Mânduțeanu**, M Calin, P 13: Chemokine receptor antagonists influence on monocytes infiltration through endothelial cells monolayer studied by a real-time electrical impedance assay, Diabetes & Metabolism 38, S108, 2012
16. Simion, V.; Stan, D.; Pirvulescu, M, Gan AM,, Butoi E, **Mânduțeanu I**, Calin M. Nanoparticles designed to treat atherosclerosis and cancer. FEBS JOURNAL Volume: 280 Special Issue: SI Supplement:, Pages: 304-304 Published: JUL 2013.
17. Gan, AM et al. Functional analysis of fractalkine gene promoter in human aortic smooth muscle cells exposed to pro-inflammatory conditions. Conference: FEBS EMBO 2014 Conference Location: Paris,

18. Simion V et al, Dexamethasone-encapsulated lipid nanoemulsions targeted to P-selectin reduce endothelium inflammation Conference: Congress of the European-Society-of-Cardiology (ESC) Location: Rome, ITALY Date: AUG 27-31, 2016 Sponsor(s): European Soc Cardiol EUROPEAN HEART JOURNAL Volume: 37 Supplement: 1 Pages: 907-907 Meeting Abstract: P4546 Published: AUG 1 2016

19. Filipi , A et al, Early diabetes induces alterations in endothelial progenitor cell phenotype and homing in mice susceptible to atherosclerosis Conference: 87th Congress of the European-Atherosclerosis-Society (EAS) Location: Maastricht, NETHERLANDS Date: MAY 26-29, 2019 Sponsor(s): European Atherosclerosis Soc ATHEROSCLEROSIS Volume: 287 Pages: E97-E97 Meeting Abstract: EAS19-0647 Published: AUG 2019

20. Daniela Rebleanu, Cristina Ana Constantinescu, Monica Tucureanu, Geanina Voicu, Elena Butoi, Agneta Simionescu, **Ileana Mânduțeanu**, Manuela Calin. Preparation and characterization of lipid-based nanocarriers for RNA-interference The 35th Annual scientific session of Romanian Society for cell biology, June 7-11, 2017.

21. Razvan D. Macarie, Sergiu Cecoltan, Letitia Ciortan, Agneta Simionescu, Elena Butoi, **Ileana Mânduțeanu**. Extracellular matrix remodeling induced by diabetic stimuli in a 3d model of human aortic valve leaflet . Combined International Symposium for Applied Cardiovascular Biology and Vascular Tissue Engineering, June 19-21, Zurich, Switzerland, 2019.

22. Vadana Mihaela, Letitia Ciortan, et al
High glucose increase pro-osteogenic molecules expression in valvular cells in a 3D model of human aortic valve. Combined International Symposium for Applied Cardiovascular Biology and Vascular Tissue Engineering, June 19-21, Zurich, Switzerland, 2019.

23.. Monica Tucureanu, Letitia Ciortan, Razvan Macarie, Mihaela Vadana, Sergiu Cecoltan, Elena Butoi, Agneta Simionescu, **Ileana Mânduțeanu**. Natural 3D models for tissue engineering of aortic valve , 10th National congress with international participation and 36th Annual scientific session of the Romanian society for cell biology, June 6-9, 2018.

24.. Elena Butoi, Sergiu Cecoltan, Letitia Ciortan, Razvan D. Macarie, Florin Iordache, Monica M. Tucureanu, Mihaela Vadana, Horia Maniu, Dorin Alexandru, Agneta Simionescu, Maya Simionescu, Ileana Mânduțeanu Constructing of 3D gelatin scaffolds for aortic valve tissue engineering .10th National congress with international participation and 36th Annual scientific session of Romanian society for cell biology, June 6-9, 2018.

25. Monica Tucureanu. Alexandru Filippi, Cristina Ana Constantinescu, Nicoleta Alexandru, Daniela Rebleanu, Letitia Ciortan, Razvan Macarie, Manuela Calin, Sabina Frunza, Agneta Simionescu, Adriana Georgescu, **Ileana Mânduțeanu**. Structural-functional correlations of the early and progression changes of valvular aortic lesion induced by diabetes 2018 27th European Cardiology Conference " October, 22-24,

26. Elena Butoi, Sergiu Cecoltan, Letitia Ciortan, Razvan D Macarie, Florin Iordache, Monica M. Tucureanu, Mihaela Vadana, Horia Maniu, Dorin Alexandru, Agneta Simionescu, **Ileana Mânduțeanu**. Development of a bioprinted 3D model of aortic valve leaflet seeded with human valvular interstitial and endothelial cells 11th International Conference on Tissue Engineering & Regenerative Medicine, Octob. 18-20, Rome, 2018.

27. Elena Butoi, Letitia Ciortan,¹Florin Iordache, Razvan D Macarie, Monica M. Tucureanu, Dorin Alexandru, Horia Maniu,²Agneta Simionescu, **Ileana Mânduțeanu**. Development of a 3D bioprinted model of the aortic valve leaflets . TEDD Annual Meeting Symposium and Workshop, November 8-9, 2017 , Wädenswil, Switzerland

- 28.** Geanina Voicu, Cristina Ana Constantinescu, Daniela Rebleanu, Agneta Simionescu, Maya Simionescu, **Ileana Mânduțeanu**, Manuela Calin. Plyplexes carrying a shRNA plasmid down-regulate the transcription factor runx2 in valvular interstitial cells exposed to high glucose concentrations. EuroSciCon conference on nanotechnology, June 8-10, Prague, Czech Republic, 2019
- 30.** Daniela Rebleanu, Geanina Voicu, Cristina Ana Constantinescu, Letitia Ciortan, Razvan Daniel Macarie, Mihaela Avadanei, Agneta Simionescu, **Ileana Mânduțeanu**, Manuela Calin. Smad3 silencing inhibits endmt transition in valvular endothelial cells exposed to high glucose and osteogenic factors Euroscicon conference on nanotechnology June 8-10, Prague, 2019.
- 31.** Cristina Ana Constantinescu, Letitia Ciortan, Daniela Rebleanu, Monica Tucureanu, Nicoleta Alexandru, Manuela Calin, Agneta Simionescu³, Adriana Georgescu, **Ileana Mânduțeanu**. Study to establish an optimal model for investigation of diabetes-induced aortic valve disease. 14th Felasa congress, June 10-13, Prague, Czech Republic, 2019.
- 32.** Cristina Ana Constantinescu, Daniela Rebleanu, Geanina Voicu, Letitia Ciortan, Sergiu Cecoltan, Dan Simionescu, Agneta Simionescu, **Ileana Mânduțeanu**, Manuela Calin. vcam-1 targeted nanoparticles are specifically internalized by high glucose-activated valvular endothelial cells cultured in a dynamic 3D bioreactor 2019 11th national congress with international participation and 37th Annual scientific session of Romanian society for cell biology, June 20th-23rd, 2019.
- 33.** Geanina Voicu, Cristina Ana Constantinescu, Daniela Rebleanu, Agneta Simionescu, Maya Simionescu, **Ileana Mânduțeanu**, Manuela Calin. High glucose concentrations potentiate the induction of osteoblast phenotype of valvular interstitial cells exposed to osteogenic factors. 11th national congress with international participation and 37th Annual scientific session of Romanian society for cell biology, June 20th-23rd, 2019.
- 34.** Daniela Rebleanu, Geanina Voicu, Cristina Ana Constantinescu, Letitia Ciortan, Agneta Simionescu, **Ileana Mânduțeanu**, Manuela Calin. High glucose concentrations and tgf- β 1 induce endothelial to mesenchymal transition in valvular endothelial cells 2019 11th national congress with international participation and 37th Annual scientific session of Romanian society for cell biology, June 20th-23rd, 2019.
- 35.** Daniela Rebleanu, Cristina Ana Constantinescu, Geanina Voicu, Agneta Simionescu, **Ileana Mânduțeanu**, Manuela Calin. Studies on transfection efficiency and toxicity of different nanocarriers of shRNA-expressing plasmid on human valvular interstitial cells. 1st international conference on nanobiotechnologies and bionanoscience (nanobio2018), 24-28 september, Heraklion, Crete, Greece, 2018.
- 36.** Daniela Rebleanu, Geanina Voicu, Cristina Ana Constantinescu, Monica Tucureanu, Elena Butoi, Agneta Simionescu, **Ileana Mânduțeanu**, Manuela Calin. Investigation of cytotoxic effect induced by shRNA-expressing plasmid nanocarriers in human valvular cells. 10th national congress with international participation and 36th Annual scientific session of Romanian society for cell biology, June 6-9, 2018
- 37. Ileana Mânduțeanu:** “Early diabetes associated alterations of aortic heart valves in a murine model of arteriosclerosis”, 19 septembrie 2019, Workshop Internațional “Cardiac valves disease: New targets for therapies and tissue engineering”.
- 38. Ileana Mânduțeanu:** “Mecanisme și noi strategii terapeutice în boala valvei aortice în diabet”, Conferința Cercetării Științifice din Academia Română (CCSAR-2021) 22 – 23 noiembrie 2021.
- 39. Ileana Mânduțeanu:** Mechanisms and novel therapies for aortic valve disease in diabetes, The 42 anniversary symposium of the Institute of Cellular Biology and Pathology :Nicolae Simionescu” held jointly with the 38 th Annual Scientific Session of the Romanian Society for Cell Biology “from basic cell biology to personalized medicine during Covid -19 pandemic ;creativity and vision in a rapidly changing world” november 4 -6 , 2021.