



ACADEMIA ROMÂNĂ
SCOSAAR

Anexa nr.3

AVIZAT
DIRECTOR SCOSAAR

M. Zah
Acad. Maria ZAHARESCU

ÎNDEPLINIREA STANDARDELOR MINIMALE

DA

NU

FIȘA DE ÎNDEPLINIRE A STANDARDELOR MINIMALE

prevăzute de CNATDCU pentru Comisia de Biologie și Biochimie, Anexa nr. 19, pg. 49, din ordinul de ministru nr. 6129/20.12.2016 emis de Ministerul Educației și Cercetării Științifice și publicat în Monitorul Oficial al României nr. 123 din 15 februarie 2017

Candidat: Butoi Elena

Data: 05.04.2023

Semnatura:

Elena

FIȘA DE VERIFICARE

a îndeplinirii standardelor minimale

A. Condiții preliminare obligatorii pentru obținerea atestatului de abilitare

Tabel 1. Evaluarea condițiilor preliminare obligatorii.

Categorie	Standard prevăzut de CNATDCU	Standard realizat	Îndeplinirea standardului
1. Calificarea profesionala	Titlul de doctor	- Doctor in Stiintele naturii, ordin 3439 din 12.03.2008 - CSI din 2013, Ordinul nr. 5668MD din 17.12.2013.	DA- indeplinit
2. Articole stiintifice ca autor principal	Minim 4 articole in reviste ISI, cu AIS cumulat mai mare sau egal cu 4, din care 2 articole cu AIS de cel putin 0.3 in ultimii 5 ani	- 13 articole ISI ca autor principal cu AIS cumulat de 16.123 (publicate dupa finalizarea doctoratului); - 6 articole ISI cu AIS mai mare de 0.3, in ultimii 5 ani.	DA- indeplinit
3. Coordonare proiecte de cercetare	Minim 2 granturi nationale in calitate de director (sau responsabil de proiect in cazul parteneriatelor) sau 1 national (director) si 1 international (responsabil national).	- Director proiect/ responsabil pentru 8 proiecte de cercetare, din care 4 după acordarea titlului de Doctor	DA- indeplinit

Director proiect/responsabil pentru 8 proiecte/granturi de cercetare, dintre care 4 după acordarea titlului de Doctor:

1. **2020-2022: PN-III-P2-2.1-PED-2019-4906:** "Development and validation of a native cardiac hydrogel for myocardial repair post infarction" – project coordinator

2. **2018-2021: PCCDI Complex Project nr. 13 PCCDI/2018 (INTERA)** "Intelligent therapies for non-communicable diseases based on controlled release of pharmacological compounds from encapsulated engineered cells and targeted bionanoparticles" Elena Butoi - **coordinator of project 2** "Development of a 3D platform designed for pre-clinical drug testing composed of cells incorporated into 3D bio-matrices".

3. **2017-2019: ELI-RO/ PN-III-P5-Subprogramul 5.1,** On-line measurement of laser-driven proton beams effect on human cells. (partner coordinator).

4. **2015-2017 Grant PN-II-RU-TE-2014-4-0965,** Vascular cell cross-talk, induces specific microRNAs that can be relevant for atherosclerotic plaque rupture, in type 2 diabetes patients –**project coordinator**

5. **2003-2005** “The chemokine modulation in different vascular pathologies; their functional role” Grant supported by the Romanian Ministry of Education and Research, National Program VIASAN–**project coordinator**

6. **2003-2004** Protective effects of aspirin in diabetes mellitus model, in vitro Grant awarded by: Romanian Ministry of Research–**project coordinator**

7. **2001-2002** The effect of the anti-inflammatory drugs on the activated vascular endothelium” Grant supported by the Romanian Ministry of Education and Research –**project coordinator**

8. **2000**“Liposome characterization for drugs delivery. Grant supported by Romanian Academy–**project coordinator**

B. Criterii si standarde minimale

- Evaluarea activitatii de cercetare -

Tabel 2. Parametrii luați în calcul și modul lor de cuantificare

Nr. Crt	Nr. Art.	Parametrul	Autor principal	Jurnal/ ISSN	AIS	c (nr. Citari fara autocitari preluate din WoS)	Punctaj
1		Articole în reviste cotate ISI - autor principal (prim autor, autor corespondent, ultim autor)					1x[4+(7xA IS)+c]
	1	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	ultim autor	Int J Mol Sci/ 1422-0067	1.064	0	11.448
	2	Mihaila AC, Ciortan L, Macarie RD, Vadana M, Cecoltan S, Preda MB, Hudita A, Gan AM, Tucureanu MM, Simionescu M, Schiopu A and Butoi E. Transcriptional profiling and functional analysis of N1/N2 neutrophils reveal an immunomodulatory effect of S100A9-blockade on the pro-inflammatory N1. Front. Immunol., 2021 , 10;12:708770.	ultim autor	Front. Immunol./ 1664-3224	1.94	4	21.58

3	Cecoltan S, Ciortan L, Macarie RD, Vadana M, Mihaila AC, Tucureanu MM, 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. <i>Front Cardiovasc Med.</i> 2021 Aug 12;8:714573.	autor coresponde nt	Front. Cardiovasc. Med./ 2297- 055X	1.448	2	16.136
4	Ciortan L, Macarie RD, Cecoltan S, Vadana M, Tucureanu MM, Mihaila AC, Droc I, Butoi E , Manduteanu I. 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. <i>Polymers.</i> 2020 25;12(12):2786.	autor coresponde nt	Polymers/2073 -4360	0.599	14	22.193
5	Vadana M, Cecoltan S, Ciortan L, Macarie RD, Tucureanu MM, Mihaila AC, Droc I, Butoi E , Manduteanu I. Molecular mechanisms involved in high glucose-induced valve calcification in a 3D valve model with human valvular cells. <i>J Cell Mol Med.</i> 2020 ; 24(11):6350-6361	autor coresponde nt	J Cell Mol Med./ 1582- 1838	1.013	19	30.091
6	Macarie RD, Vadana M, Ciortan L, Tucureanu MM, Ciobanu A, Vinereanu D, Manduteanu 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. <i>J Cell Mol Med.</i> 2018 Sep;22(9):4366-4376.	ultim autor	J Cell Mol Med./ 1582- 4934	0.992	16	26.944
7	Butoi E , Gan AM, Tucureanu MM, Stan D, Macarie RD, Constantinescu C, Calin M, Simionescu M, Manduteanu I. Cross-talk between macrophages and smooth muscle cells impairs collagen and metalloprotease synthesis and promotes angiogenesis. <i>Biochim Biophys Acta.</i> 2016 Jul;1863(7 Pt A):1568-78.	prim autor	Biochim Biophys Acta./ 0167-4889	1.607	41	56.249
8	Butoi E , Gan AM, Manduteanu I. Molecular and functional interactions among Monocytes/Macrophages and Smooth Muscle Cells and Their Relevance for Atherosclerosis. <i>Critical Reviews™ in Eukaryotic Gene Expression,</i> 2014 , 24(4):341-355.	prim autor	Critical Rev™ in Eukaryotic Gene Exp./1045- 4403	0.98	7	17.86

9	Gan AM, Butoi E , Manea A, Pirvulescu MM, Stan D, Simion V, Calin M, Simionescu M, Manduteanu I. Functional analysis of the fractalkine gene promoter in human aortic smooth muscle cells exposed to proinflammatory conditions. FEBS J. 2014 , 281(17):3869-81.	prim autor, autor corespondent	FEBS J/ 1742-464X	1.341	6	19.387
10	Gan AM, Pirvulescu MM, Stan D, Simion V, Calin M, Manduteanu I, Butoi E . Monocytes and smooth muscle cells cross-talk activates STAT3 and induces resistin and reactive oxygen species production. J Cell Biochem. 2013 , 114(10):2273-83	ultim autor	J Cell Biochem/ 0730-2312	1.056	21	32.392
11	Gan AM, Butoi ED , Manea A, Simion V, Stan D, Parvulescu MM, Calin M, Manduteanu 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(1):161-74	autor corespondent	Cell Tissue Res/ 0302-766X	1.002	39	50.014
12	Butoi ED , Gan AM, Manduteanu 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.	prim autor	Biochim Biophys Acta./ 0167-4889	1.957	46	63.699
13	Dragomir E , Manduteanu I, Calin M, Gan AM, Stan D, Koenen RR, Weber C, Simionescu M. High glucose conditions induce upregulation of fractalkine and monocyte chemotactic protein-1 in human smooth muscle cells, Thrombosis and Haemostasis. 2008 Vol.100, No.6, 1155-1165.	prim autor	Thromb. Haemost./ 0340-6245	1.124	44	55.868
Crit 1.	Total			16.12	259	423.86
2	Articole în reviste cotate ISI, contributor					0.7x[4+(7x AIS)+c]
1	Nicu R, Ciolacu DE, Petrovici AR, Rusu D, Avadanei M, Mihaila AC, Butoi E, Ciolacu F. 3D Matrices for Enhanced Encapsulation and Controlled Release of Anti-Inflammatory Bioactive Compounds in Wound Healing. Int J Mol Sci. 2023 Feb 20;24(4):4213.	contributor	Int J Mol Sci/ 1422-0067	1.064	0	8.0136

2	Sanz CG, Mihaila AC, Evanghelidis A, Diculescu VC, Butoi E , Barsan MM. Quantification of cell oxygenation in 2D constructs of metallized electrospun polycaprolactone fibers encapsulating human valvular interstitial cells. <i>Journal of Electroanalytical Chemistry</i> . 2022 , Vol 905, 116005	contributor	J Electroanalytical Chem. /1572-6657	0.568	2	6.9832
3	Wu X, Niculite CM, Preda MB, Rossi A, Tebaldi T, Butoi E , ..., Ivan M. Regulation of cellular sterol homeostasis by the oxygen responsive noncoding RNA lincNORS. <i>Nat Commun</i> . 2020 Sep 21;11(1):4755.	contributor	Nat. Commun/ 2041-1723	5.567	7	34.9783
4	Tucureanu MM, Rebleanu D, Constantinescu CA, Deleanu M, Voicu G, Butoi E , Calin M, Manduteanu I. Lipopolysaccharide-induced inflammation in monocytes/ macrophages is blocked by liposomal delivery of Gi-protein inhibitor. <i>Int J Nanomedicine</i> . 2017 , 20;13:63-76	contributor	Int J Nanomedicine/ 1178-2013	0.896	39	34.4904
5	Simion V, Constantinescu CA, Stan D, Deleanu M, Tucureanu MM, Butoi E , Manduteanu I, Simionescu M, Calin M. P-Selectin Targeted Dexamethasone-Loaded Lipid Nanoemulsions: A Novel Therapy to Reduce Vascular Inflammation. <i>Mediators Inflamm</i> . 2016 ;2016:1625149	contributor	Mediators Inflamm./ 0962-9351	1.01	18	20.349
6	Tucureanu MM, Butoi E , Gan AM, Stan D, Constantinescu CA, Calin M, Simionescu M, Manduteanu I. Amendment of the cytokine profile in macrophages subsequent to their interaction with smooth muscle cells: Differential modulation by fractalkine and resistin. <i>Cytokine</i> . 2016 Jul;83:250-61	contributor	Cytokine/ 1043-4666	0.889	7	12.0561
7	Simion V, Stan D, Constantinescu CA, Deleanu M, Dragan E, Tucureanu MM, Gan AM, Butoi E , Constantin A, Manduteanu I, Simionescu M, Calin M. Conjugation of curcumin-loaded lipid nanoemulsions with cell-penetrating peptides increases their cellular uptake and enhances the anti-inflammatory effects in endothelial cells. <i>J Pharm Pharmacol</i> . 2016 , 68(2):195-207.	contributor	J Pharm Pharmacol/ 0022-3573	0.542	20	19.4558

8	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. <i>Eur J Pharm Biopharm.</i> 2015 Jan;89:18-29	contributor	Eur J Pharm Biopharm./ 0939-641	0.935	37	33.2815
9	Pirvulescu MM, Gan AM, Stan D, Simion V, Calin M, Butoi E , Manduteanu 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. <i>Int J Biochem Cell Biol.</i> 2014 , 50:29-37	contributor	Int J Biochem Cell Biol. 1357-2725	1.352	29	29.7248
10	Simion V, Stan D, Gan AM, Pirvulescu MM, Butoi E , Manduteanu I, Deleanu M, Andrei E, Durdureanu-Angheluta A, Bota M, Enachescu M, Calin M, Simionescu M. Development of curcumin-loaded poly(hydroxybutyrate-co-hydroxyvalerate) nanoparticles as anti-inflammatory carriers to human-activated endothelial cells. <i>Journal of Nanoparticle Research</i> , 2013 , 15:2108.	contributor	J Nano. Res. / 1662-5250	0.189	7	8.6261
11	Pirvulescu M, Manduteanu 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. <i>Biochem Biophys Res Commun.</i> 2012 , 1;422(2):321-6	contributor	Biochem Biophys Res Commun./ 0006-291X	0.778	28	26.2122
12	Postea O, Vasina EM, Cauwenberghs S, Projahn D, Liehn EA, Lievens D, Theelen W, Kramp BK, Butoi ED , Soehnlein O, Heemskerk JW, Ludwig A, Weber C, Koenen RR. Contribution of Platelet CX3CR1 to Platelet-Monocyte Complex Formation and Vascular Recruitment During Hyperlipidemia. <i>Arterioscler Thromb Vasc Biol.</i> May;32(5):1186-93, 2012 .	contributor	Arterioscler Thromb Vasc Biol. / 1079-5642	2.239	70	62.7711

13	Pirvulescu MM, Gan AM, Stan D, Simion V, Calin M, Butoi ED , Tiroviste CI, Manduteanu I. Curcumin and a Morus alba Extract Reduce Pro-Inflammatory Effects of Resistin in Human Endothelial Cells. <i>Phytother Res.</i> Dec;25(12):1737-42, 2011 .	contributor	Phytother Res./ 0951-418X	0.439	22	20.3511
14	D. Stan, M. Calin, I. Manduteanu, M. Pirvulescu, A-M Gan, E. Dragomir Butoi , V. Simion, M. Simionescu. High glucose induces enhanced expression of resistin in human U937 monocyte-like cell line by MAPKs and NF-kB dependent mechanisms; the modulating effect of insulin, <i>Cell Tissue Res.</i> 2011 Feb;343(2):379-87.	contributor	Cell Tissue Res/ 0302-766X	0.91	26	25.459
15	Manduteanu, 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. <i>Biochemical and Biophysical Research Communications</i> , Vol.391, No.3, pp.1443-1448, 2010 ;	contributor	Biochem Biophys Res Commun./ 0006-291X	0.887	45	38.6463
16	Calin VM, Manduteanu, Dragomir E , Draga, E, Nicolae M, Gan AM, Simionescu. Effect of depletion of monocytes/macrophages on early aortic valve lesion in experimental hyperlipidemia, <i>Cell and Tissue Research</i> , Vol. 336, No.2, pp.237-248, 2009	contributor	Cell Tissue Res/ 0302-766X	0.91	20	21.259
17	Manduteanu I, Dragomir E , Calin M, Pirvulescu M, Gan AM, Stan D, Simionescu M. Resistin up-regulates fractalkine expression in human endothelial cells: Lack of additive effect with TNF- α , <i>Biochemical and Biophysical Research Communications</i> , Vol.381, No.1, pp.96-101, 2009	contributor	Biochem Biophys Res Commun./ 0006-291X	0.887	19	20.4463
Crt. 2	Total			18.99	396	423.1
10	Capitole in volume la edituri internationale de prestigiu					(50+c):n
1	Calin M*, Butoi E*, Manea SA*, Simionescu M*, Manea A*. Lessons from Experimental-Induced Atherosclerosis: Valuable for the Precision Medicine of Tomorrow. In: <i>Arterial Revascularization of the Head and Neck</i> . Springer, Cham. Print ISBN978-3-319-34191-0, 2016	Autor principal (contributie egala)	Springer, Cham./ Print ISBN978-3-319-34191-0		1	10.2

Crt. 10	Total						10.2
11	Capitole in volume la alte edituri internationale						(20+c):n
	Elena Butoi (Dragomir) , Ileana Manduteanu. Fractalkine and its receptor in vascular dysfunction. Book chapter in "From Vascular Cell Biology to Cardiovascular Medicine", Research Signpost, 2011.	prim autor	Research Signpost/ ISBN 978-81-7895-503-2		0	10	
Crt. 11	Total						10

Tabel 3. Punctaj total rezultat din calculul indicatorilor din Tabelul 2

Parametrul	Standarde minimale CNATDCU	Standard realizat	Îndeplinirea standardului
Punctaj cumulativ criterii 1 si 2 - Recunoastere internationala	150	846.96	DA- indeplinit
Punctaj cumulativ criterii 1-15 – Performanta totala	250	867.16	DA- indeplinit

Data: 05.04.2023

CSI, Dr. Elena Butoi

Semnatura: