

Institute of Cellular Biology and Pathology - "Nicolae Simionescu"

CURRICULUM VITAE

Personal data

Name: Alina Constantin (Carale), Ph.D., Principal Investigator III

Born: July 10 th 1977, Bucharest, Romania

Mailing address: Institute of Cellular Biology and Pathology - "Nicolae Simionescu",

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Education, degrees and diplomas:

2014-2015: Postdoctoral Research Fellow- European Social Fund within the Sectorial Operational Program Human Resources Development 2007-2013 (ID: POSDRU/159/1.5/S/133391) Bucharest, Romania - postdoc supervisor Acad. Maya Simionescu

2010: Doctor Degree, Natural Science: Biology Domain, ICBP "NS", Bucharest, Romania, PhD supervisor Acad. Maya Simionescu

2002: Master Degree in Biophysics, Faculty of Physics, University of Bucharest, Romania

2000: Bachelor"s Degree in Physics, Faculty of Physics, University of Bucharest, Romania

1996: Baccalaureate "Victor Gomoiu" High School, Vanju-Mare, Mehedinti, Romania

Professional experience:

2008-Today - Principal Investigator III, Department of Pathophysiology and Pharmacology Institute of Cellular Biology and Pathology "Nicolae Simionescu" (ICBP "NS") 2002-2010 - PhD Student, ICBP "NS" 2001 – 2008 - Research Assistant, ICBP "NS"

Membership in Scientific Societies:

- The Romanian Society for Cell Biology
- International Society of Regenerative Medicine and Surgery
- Healthy Nutrition Foundation
- European Atherosclerosis Society

Reviewer at:

2017 - Biochemia Medica

2015 - Clinical Chemistry and Laboratory Medicine

2020 - International Journal of Medical Sciences

Training stages and courses:

2005 - STSM Fellowship (1 month) - COST Action B17 with the proposal: "Analysis of adipocytes-conditioned media and studies on the regulation of adipocytes secretory function". Host: Juergen Eckel, German Diabetes Center, Institute of Clinical Biochemistry and Pathobiochemistry, Duesseldorf, Germany.

2002- Foundamental Base in Immunology - Romanian Society of Immunology

2001 - Fellowship (1 week) - at Semmelweis University, Hungary

International Workshops:

2012: Workshop of the FP7 "RAMSES" project: Reinforcement of the Adult stem cell research area through Mobility and Scientific networking between Egypt, Romania and Germany; 2010: 2nd International Workshop "On Route from Stem Cell Biology to Clinical Applications for Cardiovascular Regeneration"; 2009: The 30th Anniversary Workshop "30 Years on Route from Cell Biology to Molecular Medicine", and International Symposium "Molecular and metabolic dysfunction in diabetes" part of the COST - Action BM0602 "Adipose tissue: a key target for prevention of the metabolic syndrome"; 2007: International Symposium "Stem Cells as therapeutic alternative"; International workshop "Inflammation-dependent vascular remodeling in

atherosclerosis"; 2006: International Symposium "Recent advances in cardio-diabetology"; International Symposium "Cell and Molecular Biology for the Benefit of Cardiovascular Disease"; International Symposium "Molecular biomarkers of cardiovascular disease and diabetes"; 2005: International Symposium "Combating Cardiovascular Diseases and Diabetes"; International Symposium "New Insights in Molecular Medicine"; 2002: International Workshop "Cardiovascular Dysfunction in Hyperlipidemia and Diabetes" held within the framework of Center of Excellence of the European Community.

2015 -The 4th International Symposium on Adipobiology and Adipopharmacology (ISAA), Bucuresti, 2012 - The Romanian Society for Diabetes, Nutrition and Metabolic Diseases and another from the Berlin-Chemie, Menarini Group and Eli Lilly "Agora Diabetologica".

2017- Prize for Poster Presentation to "22nd World Congress of International Federation for the Surgery of Obesity and Metabolic Disorders", London

- * 'Scientific Achievements Original Article' Award offered by Ministry for Education and Uefiscdi, PNCDI IV Program 5.2 Human Resources- Subprogram 5.2.3-Awarding research results Articles Web of Science (PRECISI) Competition 2023, PRECISI 2023 List 1- Award applications submitted for articles published in 2022-December 2023 for the paper 'Stem cell derived extracellular vesicles reduce the expression of molecules involved in cardiac hypertrophy in a model of human-induced pluripotent stem cell-derived cardiomyocytes' in Frontiers in Pharmacology, 2022, 13:1003684. (Alina Constantin, Ioana Karla Comariţa, Nicoleta Alexandru, Alexandru Filippi, Florina Bojin, Mihaela Gherghiceanu, Alexandra Vîlcu, Miruna Nemecz, Loredan Stefan Niculescu, Virgil Păunescu, Adriana Georgescu).
- *'Scientific Achievements Original Article' Award offered by Ministry for Education and Uefiscdi, PNCDI IV Program 5.2 Human Resources- Subprogram 5.2.3- Awarding research results Articles Web of Science (PRECISI) Competition 2023, PRECISI 2023 List 1- Award applications submitted for articles published in 2022-December 2023 for the paper 'VLA4 enhanced allogeneic endothelial progenitor cell-based therapy preserves aortic valve function in a mouse model of dyslipidemia and diabetes' in Special Issue "Targeted Therapies in Diabetes and Its Complications", Pharmaceutics, 14, 1077-1094, 2022, https://doi.org/10.3390/pharmaceutics14051077. (Alexandru Filippi, Alina Constantin, Nicoleta Alexandru, Cristina Ana Mocanu, Mihaela Loredana Vlad, Ioana Madalina Fenyo, Agneta Simionescu, Dan Teodor Simionescu, Ileana Manduteanu, Adriana Georgescu)
- 3. 'Scientific Achievements Original Article' Award offered by Ministry for Education and Uefiscdi, PNCDI IV Program 5.2 Human Resources- Subprogram 5.2.3- Awarding research results Articles Web of Science (PRECISI) Competition 2023, PRECISI 2023 List 1- Award applications submitted for articles published in 2022-December 2023 for the paper 'Therapeutic potential of stem cell-derived extracellular vesicles on atherosclerosis-induced vascular dysfunction and its key molecular players' in Frontiers in Cell and Developmental Biology, 10:817180: 1-30, 2022, doi: 10.3389/fcell.2022.817180. eCollection 2022. (Ioana Karla Comariţa, Alexandra Vîlcu, Alina Constantin, Anastasia Procopciuc, Florentina Safciuc, Nicoleta Alexandru, Emanuel Dragan, Miruna Nemecz, Alexandru Filippi, Leona Chitoiu, Mihaela Gherghiceanu, Adriana Georgescu)

Managerial competence: Project manager for three national research grants; Collaborator at 12 national and two international research grants.

Research record: (1) 24 ISI articles (7 as first author and 17 as co-authors); (2) 4 articles ISI Thomson (2 as first author and 2 as co-authors); (3) 12 abstracts in ISI journals, (4) 5 oral presentations (at 3 national and 3 international conferences); (5) 30 poster communications at international conferences, and 10 at national conferences.

The published papers

ISI Journals:

Miruna Nemecz, Diana Simona Stefan, Ioana Karla Comarița, **Alina Constantin**, Gabriela Tanko, Cristian Guja, Adriana Georgescu. Microvesicle-associated and circulating microRNAs in diabetic dyslipidemia: miR-218, miR-132, miR-143, and miR-21, miR-122, miR-155 have biomarker potential. Cardiovascular Diabetology, 22(1):260-291, 2023. (IF=9.3)

Constantin A, Comarița IK, Alexandru N, Filippi A, Bojin F, Gherghiceanu M, Vîlcu A, Nemecz M, Niculescu LS, Păunescu V, Georgescu A. Stem cell-derived extracellular vesicles reduce the expression of molecules involved in cardiac hypertrophy-In a model of human-induced pluripotent stem cell-derived cardiomyocytes. Front Pharmacol, 13, 1003684. 2022 (IF = 5.988)

Filippi A, **Constantin A**, Alexandru N, Mocanu CA, Vlad ML, Fenyo IM, Simionescu A, Simionescu DT, Manduteanu I, Georgescu A. VLA4-Enhanced Allogeneic Endothelial Progenitor Cell-Based Therapy Preserves the Aortic Valve Function in a Mouse Model of Dyslipidemia and Diabetes. Pharmaceutics, 14, 1077, 2022 (IF = 6.525)

Comariţa IK, Vîlcu A, **Constantin A**, Procopciuc A, Safciuc F, Alexandru N, Dragan E, Nemecz M, Filippi A, Chiţoiu L, Gherghiceanu M, Georgescu A. Therapeutic Potential of Stem Cell-Derived Extracellular Vesicles on Atherosclerosis-Induced Vascular Dysfunction and Its Key Molecular Players. Front Cell Dev Biol, 10:817180, 2022 (IF 6.684)

Constantin A, Filippi A, Alexandru N, Nemecz M, Georgescu A. Extracellular Vesicles from Adipose Tissue Stem Cells in Diabetes and Associated Cardiovascular Disease; Pathobiological Impact and Therapeutic Potential. Int J Mol Sci. 2020 Dec 16;21(24):9598. (IF 4.556)

Filippi A, **Constantin A**, Alexandru N, Voicu G, Constantinescu CA, Rebleanu D, Fenyo M, Simionescu D, Simionescu A, Manduteanu I, Georgescu A. 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 doi: 10.1177/0963689720946277 (IF = 3.341)

Picu A., Petcu L., Stefan D. S., Gradisteanu Pircalabioru G., Mitu M., Bajko D., Lixandru D., Guja C., Savu O., Pantea Stoian A., Constantin A., Smeu B., Copaescu C., Chifiriuc M. C., Ionica E., Ionescu-Tirgovişte C.. Evolution of Inflammatory and Oxidative Stress Markers in Romanian Obese Male Patients with Type 2 Diabetes Mellitus after Laparoscopic Sleeve Gastrectomy: One Year Follow-Up. Metabolites. 28;10(8):308, 2020. (IF= 3.303)

Alexandru N, **Constantin A**, Nemecz M, Comariţa IK, Vîlcu A, Procopciuc A, Tanko G, Georgescu A. Hypertension Associated With Hyperlipidemia Induced Different MicroRNA Expression Profiles in Plasma, Platelets, and Platelet- Derived Microvesicles; Effects of Endothelial Progenitor Cell Therapy.Front Med (Lausanne). 2019 Dec 3;6:280. doi: 10.3389/fmed.2019.00280. eCollection 2019. (IF= 3.303)

Alexandru N, Safciuc F, **Constantin A**, Nemecz M, Tanko G, Filippi A, Dragan E, Bãdilã E, Georgescu A. Platelets of Healthy Origins Promote Functional Improvement of Atherosclerotic Endothelial Progenitor Cells. Front Pharmacol. 2019 Apr 24;10:424. doi: 10.3389/fphar.2019.00424. eCollection 2019.PMID: 31068820 (IF = 4.225)

Constantin A., Dumitrescu M., Nemecz M., Picu A., Smeu B., Guja C., Alexandru N., Georgescu A., Tanko G. "Sera of Obese Type 2 Diabetic Patients Undergoing Metabolic Surgery Instead of Conventional Treatment Exert Beneficial Effects on Beta Cell Survival and Function: Results of a Randomized Clinical Study"Obes Surg. 2019 Jan 30. doi: 10.1007/s11695-019-03710-0. (IF = 3.89)

M. Nemecz, **A. Constantin**, M. Dumitrescu, N. Alexandru, A. Filippi, G. Tanko, A. Georgescu. The distinct effects of palmitic and oleic acid on pancreatic beta cell function: the elucidation of associated mechanisms and effector molecules. Front. Pharmacol. 9:1554. 2019, doi: 10.3389/fphar.2018.01554. (IF = 3.83)

L. Iosif, D. Lixandru, L. Gaman, M. Ilie, B. Smeu, D.S. Stefan, L. Petcu, A. Picu, A. Constantin, C.Ionescu-Tîrgovişte, C Guja, C. Copăescu, I.Stoian. Oxidative stress profile and type 2 diabetes remission at 6 months after sleeve gastrectomy versus conservatory treatment. FARMACIA, 2019, Vol. 67, 1, https://doi.org/10.31925/farmacia.2019. (IF = 1.507)

Popa MA, Mihai MC, **Constantin A**, Şuică V, Ţucureanu C, Costache R, Antohe F, Dubey RK, Simionescu M. Dihydrotestosterone induces pro-angiogenic factors and assists homing of MSC into the cardiac tissue. J Mol Endocrinol. 2018 Jan;60(1):1-15, (IF = 4.869)

Constantin A, Dumitrescu M, Mihai Corotchi MC, Jianu D, Simionescu M. CO2 laser increases the regenerative capacity of human adipose-derived stem cells by a mechanism involving the redox state and enhanced secretion of pro-angiogenic molecules. Lasers Med Sci. 2017 Jan;32(1):117-127. doi: 10.1007/s10103-016-2093-6. (IF = 2.299)

Nicoleta Alexandru, Elisabeta Badila, Ana Costa, **Alina Constantin**, Daniel Cochior, Adriana Georgescu. Microparticles: From biogenesis to biomarkers and diagnostic tools in cardiovascular disease. Current Stem Cell Research & Therapy. (Curr Stem Cell Res Ther)12(2):89-102, 2017. (IF = 2.684)

Ciotu IM, **Constantin A**, Voinea L, Atansiu V. Matrix mettaloproteinase and their inhibitors concentration and activity variations in aqueous humor and plasma of glaucoma patients. Revista de Chimie. 2017; 68:1829-1832. (IF = 1.232)

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 peptidesincreases their cellular uptake and enhances the anti-inflammatory effects in endothelial cells. J Pharm Pharmacol. 2016 Feb;68(2):195-207, (IF = 2.39)

Manea SA, **Constantin A**, Manda G, Sasson S, Manea A.Regulation of Nox enzymes expression in vascular pathophysiology: focusing on transcription factors and epigenetic mechanisms. Redox Biology. vol 25 (5), pag 358-366, 2015. (IF = 6.337)

Manea A, Manea SA, Gan AM, Constantin A, Fenyo IM, Raicu M, Muresian H, Simionescu M. Human monocytes and macrophages express NADPH oxidase 5; a potential source of reactive oxygen species in atherosclerosis. Biochem Biophys Res Commun. 22;461(1):172-9, 2015 (IF = 2.985)

Georgescu A, Popov D, Constantin A, Nemecz M, Alexandru N, Cochior D, Tudor A. Dysfunction of human subcutaneous fat arterioles in obesity alone or obesity associated with Type 2 diabetes. Clin Sci (Lond). 2011 May;120(10):463-72. doi: 10.1042/CS20100355 (IF = 4.317)

- **A.** Constantin, G. Costache, A. Sima, C. Glavce, M. Vladica, D. Popov. Leptin G-2548A and leptin receptor Q223R gene polymorphisms are not associated with obesity in Romanian subjects Biochemical and Biophysical Research Communications. 391: 282-286, 2010. (IF = 2.548)
- N. Alexandru, **A. Constantin**, D. Popov. Carbonylation of platelet proteins occurs as consequence of oxidative stress and thrombin activation, and is stimulated by ageing and type 2 diabetes. Clin Chem Lab Med. 46(4): 528-536, 2008 (IF = 1.741)
- F. Safciuc, **A. Constantin**, A. Manea, M. Nicolae, D. Popov, M. Raicu, D. Alexandru, E. Constantinescu. Advanced glycation end products, oxidative stress and metalloproteinases are altered in the cerebral microvasculature during aging. Current Neurovascular Research 4(4):228-234, 2007. (IF = 2.34)
- **A. Constantin**, E. Constantinescu, M. Dumitrescu, D. Popov. Effects of ageing on carbonyl stress and glutathione antioxidant defence in RBCs of obese type II diabetic patients. Journal of Celullar and Molecular Medicine. 9: No 3, 683 691, 2005. (IF = 3.606)
- D.L.Radu, A.Georgescu, C.Stavaru, **Carale A.**, D. Popov. Double transgenic mice with Type 1 diabetes mellitus develop somatic, metabolic and vascular disorders. J. Cell. Mol. Med., 8: 349-358, 2004. (IF = 3.606)

Journals indexed in international databases:

M. Nemecz, M. Dumitrescu, **A. Constantin**, I. Titorencu, G. Tanko, D. Popov. Catalase reduces PDGF-mediated vascular SMCs proliferation in high glucose conditions. Annals of RSCB, XIX(3): 95-103, 2015.

Dumitrescu M., Costache G., **Constantin A**., Popov L-D. Zofenopil functions as antioxidant, correcting the renal oxidative damages in a rat model of L-NAME induced hypertension. Annals of RSCB vol XVIII, issue 1, pp 11- 21, 2013.

- **A. Constantin**, G. Costache. The emerging role of adipose tissue-derived leptin in inflammatory and immune responses in obesity: an update. Proceedings of the Romanian Academy. vol 6: 187-190, 2010.
- **A. Constantin**, D. M. Cheta, D. Popov. Effects of silymarin on red blood cells osmotic fragility in obesity associated with Type 2 diabetes. Proceedings of the Romanian Academy. Vol. 6: 187-190, 2004

Chapters in monograph:

M. Gherghiceanu, N. Alexandru, S. L.Magda, **A. Constantin**, M. Nemecz, A. Filippi, O. C. Ioghen, L. C. Ceafalan, Florina Bojin, Gabriela Tanko, Virgil Paunescu, Dragos Vinereanu, Ewa Stepien, Adriana Georgescu. Chapter's Title: Extracellular Vesicles As Valuable Players In Diabetic Cardiovascular Diseases. Book's Title: Extracellular Vesicles, Book edited by Dr.

Ana Gil De Bona, IntechOpen, ISBN 978-1-78923-944-7, pp. 1-25, 2019.

L. C. Ceafalan, O. C. Ioghen, D. S. Marta, **A. Constantin**, N. Alexandru, M. Nemecz, G. Tanko, A. Filippi, S. L. Magda, F. Bojin, V. Paunescu, D. Vinereanu, A. Georgescu, M. Gherghiceanu. Chapter's Title: Extracellular Vesicles as Risk Factor in Neurodegenerative Diseases. Book's Title: Extracellular Vesicles, Book edited by Dr. Ana Gil De Bona, IntechOpen, ISBN 978-1-78923-944-7, pp. 1-21, 2019.

Patents:

- Alexandru Filippi, Loredana Antonescu, Alina Constantin, Cristina Constantinescu, Nicoleta Alexandru, Adriana Georgescu. Procedeu de obtinere a unor celule progenitoare endoteliale modificate genetic. Cerere de Brevet de Inventie, OSIM Nr. A/00284 din 25.05.2020.
- 2. Alexandru Filippi, Nicoleta Alexandru, Alina Constantin, Karla Comarită, Alexandra Vîlcu, Anastasia Procopciuc, Adriana Georgescu "Procedeu de obținere a veziculelor extracelulare modificate să încapsuleze siARN anti- Smad2/3 și veziculele extracelulare rezultate", Cerere de Brevet de Inventie, OSIM Nr. A/100017 din 20.01.2021.

Grants:

Project manager of following national projects:

- **1. 2002:** National Consortium: Institute of Diabetes, Nutrition and Metabolic Diseases "Prof. Dr N. Paulescu", "Cantacuzino" Institute and Institute of Cellular Biology and Pathology "N. Simionescu"- Effect of antioxidants on carbonyl stress modulation in diabetes".
- **2. 2004-2006:** Grant Awarded By: Romanian Ministry Of Research-National Research Program For Fundamental Research VIASAN- grant no. 422/ 6.10.2004. Adiponectin as mediator of the insulin activated intracellular signaling clinical implications in obesity associated with type 2 diabetes".
- **3. 2007-2008:** Grant from Ministry of Education, Research and Youth, CNCSIS, National Program for Research-Development and Innovation 2 (PNCDI-2), Program Human Resources/ Research Projects for young PhD. Students- TD type- Code: TD-448, Grant no. 69GR/11.05.2007, Tema 6. Strategies to combat cardiovascular complications in obesity: the anti-inflammatory effect of Rosiglitazone in the recovery of atheroma instability and endothelial dysfunction caused by adipokines.

Collaborator of following national projects:

- **1. 2002 2005:** Grant Awarded By: Romanian Ministry Of Research- National Research Program For Fundamental Research VIASAN- The pharmacological properties and the cellular mechanisms involved in the effect of nebivolol in the renal artery in diabetes; the experimental data.
- 2. 2003 2004: Grant Awarded By: Romanian Ministry Of Research-National Research Program For Fundamental Research VIASAN- Possibilities for reestablishment of vascular dysfunction and biochemical changes in diabetes and atherosclerosis.
- **3. 2003 2005:** Grant Awarded By: Romanian Ministry Of Research- National Research Program For Fundamental Research VIASAN-Impact of obesity on diabetes and cardiovascular diseases generation in urban communities in Romania-a population, pathophysiological and genetic study.
- **4. 2003 2005:** Grant Awarded By: Romanian Ministry Of Research National Research Program For Fundamental Research ceres- The studies on the cerebral vasculature in aging.
- **5. 2004 2006:** Grant Awarded By: Romanian Ministry Of Research-National Research Program For Fundamental Research VIASAN: Adiponectin the mediator in the intercellular signaling activated by insulin; the clinical involvements in the obesity associated with type 2 diabetes
- **6. 2004-2006:** Grant Awarded By: Romanian Ministry Of Research- National Research Program For Fundamental Research VIASAN- The effect of the enoxaparin (a low molecular weight heparin) in the reestablishment of the endothelial
- vascular dysfunctions in aging and in diabetes; the involvement of the mitogen-activated protein kinase evidentiated by changes in the expression of c-fos gene and transcription factor AP-1.
- **7. 2005 2006:** Grant from Romanian Academy Cellular senescence in the kidneys- a genetically determined process or a consequence of oxidative stress and nitrosative stress?
- **8.** 2005 2008: Grant Awarded By: Romanian Ministry of Research National Research Program for Fundamental Research "Excellence Research Project" The alteration of the cellular and molecular mechanisms and of gene expression in the cardiovascular disease and diabetes/ obesity, the major alteration of the metabolic syndrome the fundamental and clinical researches.

- **9. 2008-2011**: COST Programme EU COST Action BM 0602. Adipose tissue cells dialogue in obesity, diabetes and inflammation; search for molecules of pharmacological potential in reducing adipose tissue inflammatory proteins.
- **10. 2011-2014:** Grant of the Romanian National Authority for Scientific Research and Innovation, CNCSIS-UEFISCDI, Human Resources Program/ TE, Project number PNII-TE 26/2011-2014 Investigation of molecular mechanisms of endothelin system in diabetes; development of new pharmacological strategies to improve vascular function.
- **11. 2015-2017**: Grant of the Romanian National Authority for Scientific Research and Innovation, CNCS -UEFISCDI, Human Resources Program / Project number PN-II-RU-TE-2014-4-0525: Microparticles as intracellular delivery strategies for microRNAs and potential therapies for atherosclerotic vascular disease; Grant no 79/01.10.2015; the project was funded with: 550 000 lei
- 12. 2016-2020: MNE NASRI (INTERMEDIATE BODY FOR RESEARCH): COMPETITIVENESS OPERATIONAL PROGRAMME 2014-2020 PRIORITY AXIS 1 RESEARCH, TECHNOLOGICAL DEVELOPMENT AND INNOVATION (RD&I) TO SUPPORT ECONOMIC COMPETITIVENESS AND BUSINESS DEVELOPMENT. Action 1.1.4 Attracting high-level personnel from abroad in order to enhance the RD capacity. Project Title: Targeted therapies for diabetes related aortic valve disease. Contract no. 115/13.09.2016/ Project Code: 104362- the project was funded with: 8657500 lei
- 13. 2018-2020: Grants of the Romanian National Authority for Scientific Research, CNCS-UEFISCDI Complex Projects Completed in Consortia CDI (PCCDI), under Program 1. Developing national CD, Subprogram 1.2. Institutional performance "Institutional Development Project". Project no. PN-III-P1-1.2-PCCDI-2017-0527/Contract no. 83 PCCDI/2018 Project title: Development of BIOnanotechnologies based on extracellular Vesicles for early diagnosis, prognosis and therapy of Atherosclerotic disease; Project acronym: BIOVEA.
- **14. 2018-2020**: Grants of the Romanian National Authority for Scientific Research, CNCS-UEFISCDI Complex Projects Completed in Consortia CDI (PCCDI), under Program 1. Developing national CD, Subprogram 1.2. Institutional performance "Institutional Development Project". Project no. PN-III-P1-1.2-PCCDI-2017-0797/Contract no. 66 PCCDI/2018 Project title: Pathogenic mechanisms and personalized treatment in pancreatic cancer using multi-omics technologies. Project acronym: PANCNGS
- **15.2018-2020**: Grants of the Romanian National Authority for Scientific Research, CNCS-UEFISCDI Complex Projects Completed in Consortia CDI (PCCDI), under Program 1. Developing national CD, Subprogram 1.2. Institutional performance "Institutional Development Project". Project no. PN-III-P1-1.2-PCCDI-2017-0749/Contract no. 45 PCCDI/2018, Project title: Bioactive nanostructures for innovative therapeutic strategies. Project acronym: NANO-LIFE
- **16.2023-2026**: Grant of the Ministry of Research, Innovation and Digitization of Romania Romania's National Recovery and Resilience Plan. Component C9. SUPPORT FOR THE PRIVATE SECTOR, RESEARCH, DEVELOPMENT AND INNOVATION "18. Development of a program to attract highly specialised human resources from abroad in research, development and innovation activities" (PNRR /2022/C9/MCID/I8)- Project Code" 93.

Project title: New nanotherapeutic strategies for cardiac fibrosis targeting the mechanisms underlying the fibroblast to myofibroblast transition; Project Acronym: HeartCure; Project Manager: Dr. ROSTYSLAV BILYY