

CURRICULUM VITAE

PERSONAL DETAILS

Family name, First name: **Dobre, Elena-Georgiana**

Researcher unique identifier(s): <https://orcid.org/0000-0002-6464-381X> (ORCID)

URL for web site: <https://www.webofscience.com/wos/author/record/46041148> (WoS profile)

• Education and key qualifications

25/06/2024 PhD in Biology, *Summa cum laude*
Faculty of Biology, University of Bucharest, Romania

28/06/2019 MSc in Biochemistry and Molecular Biology,
Faculty of Biology, University of Bucharest, Romania

30/06/2017 BSc in Biochemistry, Faculty of Biology, University of Bucharest, Romania

• Current position(s)

2023 - present Research Assistant, Immunology Department
Victor Babeş National Institute of Pathology Bucharest, Romania

• Previous position(s)

2021 - 2023 Quality Laboratory Manager, NIPT NGS Laboratory
AMS Laborator Genetic SRL, Bucharest, Romania

2019 - 2023 Biochemist, NIPT NGS Laboratory
AMS Laborator Genetic SRL, Bucharest, Romania

RESEARCH ACHIEVEMENTS AND PEER RECOGNITION

Research achievements

Dr. Dobre's work primarily addresses tumor immunology and autoimmune disorders. During her doctoral studies, she investigated the roles of cell cycle machinery and RAS-RAF-MAPK mutations in cutaneous melanoma progression, from normal skin through benign nevus stages. Her findings highlighted that elevated p16 expression compensates for increased mutational burden in benign nevi, indicating cell cycle arrest despite MAPK pathway mutations, and revealed associations between BRAF/NRAS mutations and clinical parameters such as the Breslow index and tumor-infiltrating lymphocytes in melanocytic tumors. These observations, supported by prior studies (Zablocki et al., 2021), may inform novel therapeutic strategies for advanced, BRAF-mutated melanomas. Subsequent research focused on autoimmune disorders, integrating immune, metabolic, and microbiome data to identify microbial signatures linked to obesity-enhanced psoriasis. Pathobionts such as *Ruminococcus* and *Clostridium* were associated with aggravated symptoms, while *Lactobacillus* species appeared to attenuate metabolic and inflammatory burden. Her professional track also includes a three-month fellowship from the EFIS, during which she demonstrated that the ESCRT-0 complex may contribute to IgG receptor activation in autoimmune pathologies.

- Constantin C., **Dobre E.-G.**, Istvan P, Munteanu AN, Surcel M, Isvoranu G, Neagu M. Microbial signatures of obesity-aggravated psoriasis: insights from an imiquimod-based mouse model. *International Journal of Molecular Sciences*. 2025; 26(16):7697.
- **Dobre E.G.**, Nichita L., Popp C., Zurac S., Neagu M., 2024. Assessment of RAS-RAF-MAPK pathway mutation status in healthy skin, benign nevi, and cutaneous melanomas: pilot study using droplet digital PCR. *International Journal of Molecular Sciences*. 25(4):2308.
- **Dobre E.G.**, Caruntu A., Munteanu A.N., Surcel M., Constantin C., Caruntu C., Scheau C., Neagu M., 2024. Investigating EGFR, BRAF, and RAS mutations in oral and cutaneous squamous cell neoplasms: a preliminary report on Romanian patients. *Romanian Journal of Military Medicine*. doi: 10.55453/rjmm.2024.127.5.2

- Constantin M., Chifiriuc M.C., Mihaescu G., Vrancianu C.O., **Dobre E.G.**, Cristian R.E., Bleotu C., Bertesteanu S.V., Grigore R., Serban B., Cirstoiu C., 2023. Implications of oral dysbiosis and HPV infection in head and neck cancer: from molecular and cellular mechanisms to early diagnosis and therapy. *Frontiers in Oncology*. 18:13:1273516.
- Neagu M., **Dobre E.G.** 2024. New insights into the link between melanoma and obesity. In A.B. Engin & A. Engin (Eds.), *Obesity and Lipotoxicity* (Vol. 1460, pp. 851-867). *Advances in Experimental Medicine and Biology*. Springer, Cham.

Peer recognition

Fellowships

- 2025 – EFIS-IL short term fellowship to investigate the role of ESCRT-0 complex on traffic, signaling and function of IgG receptors, INSERM 1149. April-July 2025 (Paris, France);
- 2023 – Fellowship awarded by CIVIS University to attend the Blended Intensive Programme Organoid Models in Immunology-Oncology at the Institute of Cancer and Immunology Marseille, 3 June-7 July 2023 (Marseille, France);
- 2023 – Fellowship awarded by the University of Bucharest for training in CRISPR/Cas9 and shRNA techniques to study the genes involved in the proliferation and drug resistance of human melanoma cells, INSERM U1149, February-April 2023 (Paris, France).

ADDITIONAL INFORMATION

Total number of publications: 11 (Web of Science),

Total number of citations (excluding self-citations): 138 (Web of Science),

h-index: 8 (Web of science).

Career breaks, unconventional career paths and major life events

During the 5 years (2018-2023) spent in the private diagnostic sector, Dr. Dobre developed strong managerial and interpersonal communication skills, and gained extensive experience with best practices in biomedical research, clinical diagnostics, and personal and environmental safety, in accordance with European and international standards.

Other contributions to the research community

Since November 2025, Dr. Dobre has served as the National Representative of the Young Romanian Society of Immunology (yRSI) at the European level. Her goal is to foster a strong community of young researchers in Romania, promoting collaboration and education—both public and academic—in immunology, with the aim of increasing national participation in international research initiatives.

Quartiles for Web of Science Core Collection

Nb.	Title, Authors, Journal	IF	Citations	Quartile/ domain
1	Microbial Signatures of Obesity-Aggravated Psoriasis: Insights from an Imiquimod-Based Mouse Model, Constantin C., Dobre E.-G. , Istvan P, Munteanu AN, Surcel M, Isvoranu G, Neagu M. Int. J. Mol. Sci. 2025, 26(16), 7697; https://doi.org/10.3390/ijms26167697	IF=4.9		Q1 Biochemistry
2	Psoriasis, stem cells and obesity: metabolic exploration for therapeutics, Constantin C., Dobre E.-G. , Munteanu AN, Surcel M, Căruntu C, Zurac SA, Neagu M, J Med Life, 2025, 18(7), 608-620. DOI 10.25122/jml-2025-0033	IF=1.61		
3	Antibodies Against Melanoma Antigens - Clinical and Therapeutical Markers. Neagu M, Constantin C, Dobre G-E , Zurac S, J Dermatol Res. 2025;6(1):1-22. https://doi.org/10.46889/JDR.2025.6105 .	IF=1.042		
4	Investigating EGFR, BRAF, and RAS Mutations in Oral and Cutaneous Squamous Cell Neoplasms: A Preliminary Report on Romanian Patients, Dobre E.G. , Caruntu A., Munteanu A.N., Surcel M., Constantin C., Caruntu C., Scheau C., Neagu M., Romanian Journal of Military Medicine, vol-CXXVII-nr-5, 2024, https://doi.org/10.55453/rjmm.2024.127.5.2 .	IF=0.1	1	
5	Assessment of RAS-RAF-MAPK Pathway Mutation Status in Healthy Skin, Benign Nevi, and Cutaneous Melanomas: Pilot Study Using Droplet Digital PCR. Dobre E.-G. ; Nichita L.; Popp C.; Zurac S.; Neagu M. Int. J. Mol. Sci. 2024, 25, 2308. https://doi.org/10.3390/ijms25042308	IF=5.6	5	Q2 Biochemistry and Molecular Biology
6	Constantin M., Chifiriuc M.C., Mihaescu G., Vrancianu C.O., Dobre E.G. , Cristian R.E., Bleotu C., Bertesteanu S.V., Grigore R., Serban B., Cirstoiu C., 2023. Implications of oral dysbiosis and HPV infection in head and neck cancer: from molecular and cellular mechanisms to early diagnosis and therapy. Frontiers in Oncology. 18:13:1273516.	IF=3.5	15	Q2 Oncology
7	Skin Cancer Pathobiology at a Glance: A Focus on Imaging Techniques and Their Potential for Improved Diagnosis and Surveillance in Clinical Cohorts. Dobre, E.-G. ; Surcel, M.; Constantin, C.; Ilie, M.A.; Caruntu, A.; Caruntu, C.; Neagu, M Int. J. Mol. Sci. 2023, 24, 1079. https://doi.org/10.3390/ijms24021079 .	IF=5.542	30	Q2 Biochemistry and Molecular Biology
8	Skin Cancer Research Goes Digital: Looking for Biomarkers within the Droplets, Dobre E.-G. , Constantin C., Neagu M, J. Pers. Med. 2022, 12(7), 1136; https://doi.org/10.3390/jpm12071136 .	IF= 3.508	10	Q3 Healthcare sciences and services
9	Interrogating epigenome toward personalized approach in cutaneous melanoma, Dobre E.-G. , Constantin C., Costache M., Neagu M., J. Pers. Med. 2021, 11, 901. https://doi.org/10.3390/jpm11090901 .	IF=4.94	11	Q2 Healthcare sciences and services
10	Present and future perspectives on therapeutic options for carbapenemase-producing Enterobacterales infections. Vrancianu C.O., Dobre E.G. , Gheorghe I., Barbu I., Cristian R.E., Chifiriuc M.C.,	IF=4.926	19	

	Microorganisms. 2021, 9(4):730.			
11	Emerging strategies to combat β -Lactamase producing ESKAPE pathogens. Vrncianu C.O., Gheorghe I., Dobre E.-G. , Barbu I.C., Cristian R.E., Popa M., Lee S.H., Limban C., Vlad I.M., Chifriuc M.C., Int. J. Mol. Sci. 2020, 21(22):8527.	IF=5.924	33	Q2 Biochemistry and Molecular Biology
12	Connecting the missing dots: ncRNAs as critical regulators of therapeutic susceptibility in breast cancer. Dobre E.-G. , Dinescu S., Costache M., 2020. Cancers. 12(9):2698	IF=6.63	19	Q1 Oncology

Proceedings and Editorials

1. Insights in genetic and epigenetic traits in cutaneous melanoma - new therapy targets, Monica Neagu; **Elena-Georgiana Dobre**; Carolina Constantin; Mihaela Surcel; Adriana Munteanu; Sabina Zurac, *South East European Journal of Immunology*, 2025, page 44, DOI: 10.3889/seejim.2025.6106,
2. Adipokines and gut microbiome shape the outcome of cutaneous melanoma: preliminary insights, Carolina Constantin; **Elena-Georgiana Dobre**; Adriana Narcisa Munteanu; Mihaela Surcel; Sabina Andrada Zurac; Monica Neagu *South East European Journal of Immunology*, 2025, page 69, DOI: 10.3889/seejim.2025.6132,
3. Investigating RUNX2 KO in B16 melanoma cells as a potential strategy to enhance in vivo tumor response to therapeutic approaches, **Elena-Georgiana Dobre**; Mauro Voi; Elisa Orlandi; Carola de Martinis; Carolina Constantin; Donato Zipeto; Maria-Teresa Valenti; Monica Neagu, *South East European Journal of Immunology*, 2025, page 65, DOI: 10.3889/seejim.2025.6121.
4. Multi-Omics-Driven Biomarkers for Precision Medicine in Cutaneous Melanoma, **Elena Georgiana Dobre**, Monica Neagu, MDPI in *1st International Electronic Conference on Biomedicine* session Translational Biomarkers in Clinical Biomedicine and Precision Medicine, *Biol. Life Sci. Forum* 2021, 7(1), 20; <https://doi.org/10.3390/ECB2021-10280>.

Books

1. Neagu M., **Dobre EG**. (2024). Chapter 28 New Insights into the Link Between Melanoma and Obesity. In: ENGIN, A.B., ENGIN, A. (eds) Obesity and Lipotoxicity. Advances in Experimental Medicine and Biology, vol 1460. P. p. 851-867. Springer, Cham. https://doi.org/10.1007/978-3-031-63657-8_28 **citations 2**