

GIORGIANA GABRIELA NEGREA

EDUCATION & TRAINING.

2020-Present Doctorate in BIOLOGY

Doctoral School in Integrative Biology, Faculty of Biology and Geology, "Babeş-Bolyai" University, Cluj-Napoca (Romania)

PhD thesis title: Advancing Melanoma Treatment: Targeted Therapeutic Strategies to Overcome Drug Resistance (Progrese in Tratamentul Melanomului: Strategii Terapeutice Țintite pentru Combaterea Rezistenței la Medicamente) (thesis coordinator: prof. univ. dr. Banciu Manuela)

2018–2020 Master's degree in biology - MOLECULAR BIOTECHNOLOGY

Faculty of Biology and Geology, "Babeş-Bolyai" University, Cluj-Napoca (Romania)

2018–2020 Pedagogical module Level II

Department for Didactic Staff Training, "Babes-Bolyai" University, Cluj-Napoca (Romania)

2015–2018 Bachelor's degree in biology - BIOCHEMISTRY

Faculty of Biology and Geology, "Babeş-Bolyai" University, Cluj-Napoca (Romania)

Graduated as a valedictorian

015–2018 Pedagogical module Level I

Department for Didactic Staff Training, "Babeş-Bolyai" University, Cluj-Napoca (Romania)

2010–2014 HIGH SCHOOL degree

"Avram Iancu" High school, top 3 ranking in Cluj-Napoca (Romania)

Intensive courses of biology, chemistry, and informatics. Final GPA (4-year program): 9.53 / 10

WORK EXPERIENCE

2022-Current Research Assistant

Faculty of Biology and Geology, Babeş-Bolyai University, Cluj-Napoca (Romania)

Research project: PN-III-P2-2.1-PED2021-0411, contract no: 659PED/2022 entitled "In vitro 3D co-culture system for the screening of anticancer drugs and exploration of intratumoral cellular interactions"

2020-Current Academic teaching associate

Molecular Biology and Biotechnology Department Laboratory, Faculty of Biology and Geology, Babeş-Bolyai University, Cluj-Napoca (Romania)

1. Department of Molecular Biology and Biotechnology, Faculty of Biology and Geology, Babeş-Bolyai University, Cluj-Napoca (Romania). Teaching Structural Biochemistry, Biochemistry of Metabolism, Protein Biochemistry (with elements of proteomics), Carbohydrates & Lipid Biochemistry - Practical courses, seminars and final evaluations for Ist and II nd year bachelor students.

2. Co-coordinator of graduation thesis for bachelor and master students in Biology of Cancer and Immunology.

Postgraduate programme for permanent education, and professional improvement of adults

11/2021-05/2022

"UBB Entrepreneur" AUBB - POCU/379/6/21/124662

ADDITIONAL INFORMATION

Awards & bursaries

[Open Science Fellowship] – Granted by Babes-Bolyai University, code 33.316/15.07.2024 in the project CNFIS-FDI-2024-F-0456, July 2024.

[Bursary and Travel grant] granted by Federation of European Biochemical Societies (FEBS), as financial assistance for attending FEBS congress, Milan Italy, July 2024.

[First-place award] in a training program: AUBB competition (Postgraduate programme for permanent education, and professional improvement of adults, "UBB Entrepreneur"), project code: POCU/379/6/21/124662 (continuous professional development program), June 2023.

[Best Poster Presentation Award] – Provided by Conference Committee - Connecting Scientists and Physicians for Next Generation Cancer Management, 2nd Edition of the OncoHub Conference, Brasov, Romania, September 2022.

[Young Researchers OncoHub bursary] - Sponsored by OncoHub Conference Committee -Connecting Scientists and Physicians for Next Generation Cancer Management, 2nd Edition of the OncoHub Conference, Brasov, Romania, July 2022.

Participation in national/ international funding projects [Research assistant] in UEFISCDI Research project: PN-III-P2-2.1-PED2021-0411, contract no: 659PED/2022 entitled "In vitro 3D co-culture system for the screening of anticancer drugs and exploration of intratumoral cellular interactions" (June 2022-June 2024).

[Doctoral researcher] in Internal research project: Reprogramming the cellular metabolism - target for antitumor therapies applied within melanoma (September 2021- September 2024).

[Member] in UEFISCDI grant, Project code: PN-III-P4-ID-PCE-2016-0342/Tumor intercellular communication tools-inspiration for future tumor-targeted therapies - biologist volunteer (October 2020-August 2021).

[Member] in UEFISCDI Research project: PN-II-PT-PCCA-2011-3-2-1060/ Development and preclinical evaluation of nanoparticle drug delivery systems for targeted antitumor therapy of colorectal cancer (January 2019-August 2020).

Presentations

I have attended over *10 conferences*, with oral and/or poster presentation such as: the **48**th FEBS Congress (July **2024**, Milano, Italy), EMBO Congress (Rimini, Italy **2024**); RoBioinfo Conference (Cluj-Napoca, Romania, 2024), BIO.T.A - Biodiversity, Traditions and Actuality (Cluj-Napoca, Romania, 2024 and 2022), RSCB (Cluj-Napoca, Romania, 2022), BIO.T.A (2023, Cluj-Napoca, Romania), SRBBM (2023, Cluj-Napoca, Romania), Young Researchers in BioSciences International Symposium (2021, Cluj-Napoca, Romania), Young BM (2019, Madrid, Spain), Oncohub (Poiana Braşov, Romania, 2022), LISA Summer Academy (Hanover Biomedical Research School, Germany, 2019).

Publications

Negrea, G., Rauca, V. F., Meszaros, M. S., Patras, L., Luput, L., Licarete, E., Toma, V. A., Porfire, A., Muntean, D., Sesarman, A., & Banciu, M. (2022). Active Tumor-Targeting Nano-formulations Containing Simvastatin and Doxorubicin Inhibit Melanoma Growth and Angiogenesis. Frontiers in pharmacology, 13, 870347. https://doi.org/10.3389/fphar.2022.870347.

Sesarman, A., Luput, L., Rauca, V., Patras, L., Licarete, E., Meszaros, S., Dume, B., **Negrea, G.,** Toma, V., Muntean, D., Porfire, A., Banciu, M. (2024). Targeting of M2 macrophages with IL-13-functionalized liposomal prednisolone inhibits melanoma angiogenesis in vivo. Journal of Liposome Research, 34(4), 535–546. https://doi.org/10.1080/08982104.2024.2315452

Patras L, Sesarman A, **Negrea G,** Dragan SM, Meszaros M-S, Licarete E, Rauca V, Luput L, Alupei M, Porfire A, Banciu M. Cancer therapeutic strategies to rewire tumor microenvironment .SEE J Immunol. 2025 Mar 27;8 (CITIM):030. https://doi.org/10.3889/seejim.2025.6091

Tóth, Z. R., Kiss, J., Todea, M., Kovács, G., Gyulavári, T., Sesarman, A., **Negrea, G.,** Vodnar, D. C., Szabó, A., Baia, L., & Magyari, K. (2022). Bioactive Properties of Composites Based on Silicate Glasses and Different Silver and Gold Structures. Materials (Basel, Switzerland), 15(5), 1655. https://doi.org/10.3390/ma15051655.

Tóth, Z. R., Kiss, J., Todea, M., Kovács, G., Gyulavári, T., Sesarman, A., **Negrea, G.,** Vodnar, D. C., Szabó, A., Baia, L., & Magyari, K. (2022). Bioactive Properties of Composites Based on Silicate Glasses and Different Silver and Gold Structures. Materials (Basel, Switzerland), 15(5), 1655. https://doi.org/10.3390/ma15051655

Patras, L., Ionescu, A. E., Munteanu, C., Hajdu, R., Kosa, A., Porfire, A., Licarete, E., Rauca, V. F., Sesarman, A., Luput, L., Bulzu, P., Chiroi, P., Tranca, R. A., Meszaros, M., **Negrea, G.,** Barbu-Tudoran, L., Potara, M., Szedlacsek, S., & Banciu, M. (2022). Trojan horse treatment based on PEG-coated extracellular vesicles to deliver doxorubicin to melanoma in vitro and in vivo. Cancer biology & therapy, 23(1), 1–16. https://doi.org/10.1080/15384047.2021.2003656

12.04.2025 Negrea G.

 \diamond