

# Curriculum Vitae

## Personal information

<b>Name:</b>	Natalia Simionescu
<b>Date and place of birth</b>	15.03.1987, Iasi
<b>Address:</b>	-
<b>Gender:</b>	Female
<b>Nationality:</b>	Romanian
<b>Phone number:</b>	-
<b>E-mail:</b>	natalia.simionescu@icmpp.ro
<b>Maternal Language:</b>	Romanian
<b>Foreign language:</b>	English

## Studies

	<ul style="list-style-type: none"><li>• <b>2011-2017 - Ph.D. in Cellular and Molecular Biology</b>, Institute of Cellular Biology and Pathology “Nicolae Simionescu” of the Romanian Academy, Bucharest, Romania, thesis title: <i>“Identification and analysis of microRNAs associated with serum lipoproteins; correlations with clinical and biochemical parameters of patients with cardiovascular diseases”</i></li></ul>
	<ul style="list-style-type: none"><li>• <b>2009-2011 - M.Sc. in Microbial and Cellular Biotechnologies</b>, Faculty of Biology, “Alexandru Ioan Cuza” University, Iasi, Romania</li></ul>
	<ul style="list-style-type: none"><li>• <b>2006-2009 - B.Sc. in Biology – Biochemistry</b>, Faculty of Biology, “Alexandru Ioan Cuza” University, Iasi, Romania</li></ul>

## Involvement in projects (director or member)

<b>Project leader</b>	<ul style="list-style-type: none"> <li>• <b>2023</b> - ICUB Fellowship for Young Researchers, Research Institute of the University of Bucharest (ICUB), Bucharest, Romania – <i>“Prebiotic and probiotic properties of Lactic Acid Bacteria: From bacterial identification to final product configuration”</i></li> </ul>
	<ul style="list-style-type: none"> <li>• <b>2020-2022</b> - PN-III-P1-1.1-PD-2019-0283, “Prof. Dr. Nicolae Oblu” Emergency Clinical Hospital, Iasi, Romania – <i>“Microvesicle-associated microRNAs as new potential biomarkers for risk prediction and early diagnosis of glioblastoma recurrence”</i></li> </ul>
<b>Member in research projects</b>	<ul style="list-style-type: none"> <li>• <b>2022-2024</b> - PN-III-P2-2.1-PED-2021-2193 – <i>“Innovative multifunctional, bioactive topical formulation for the management of malignant wounds”</i>. Project manager: Dr. Mihaela Georgescu.</li> </ul>
	<ul style="list-style-type: none"> <li>• <b>2021-2022</b> - PN-III-P1-1.1-TE-2019-0922 – <i>“Modular approach to nanoparticle synthesis processes coated with multifunctional polymers for nanomedical applications”</i>. Project manager: Dr. Sorin-Alexandru Ibanescu.</li> </ul>
	<ul style="list-style-type: none"> <li>• <b>2018-2020</b> - PN-III-P1-1.2-PCCDI-2017-0697 – <i>“Intelligent therapies for non-communicable diseases based on controlled release of pharmacological compounds from encapsulated engineered cells and targeted bionanoparticles”</i>. Project manager: Dr. Gheorghe Fundueanu.</li> </ul>
	<ul style="list-style-type: none"> <li>• <b>2016-2017</b> - PN-III-P3-3.6-H2020-2016-0011 – Support project for <i>“SupraChem Lab - Laboratory of Supramolecular Chemistry for Adaptive Delivery Systems - ERA Chair initiative”</i>. Project manager: Dr. Teodora Rusu.</li> </ul>
	<ul style="list-style-type: none"> <li>• <b>2015-2017</b> - PN-II-RU-TE-2014-4-0290 - <i>“Assessment of molecular strategies to improve atherogenic dyslipidemia by modulating the microRNAs expression”</i>. Project manager: Dr. Loredan S. Niculescu.</li> </ul>
	<ul style="list-style-type: none"> <li>• <b>2012-2016</b> - PN-II-ID-PCCE-2011-2-0028 – <i>“Biologically inspired systems for engineered structural and functional entities”</i>. Project manager: Dr. Mariana Pinteala.</li> </ul>
	<ul style="list-style-type: none"> <li>• <b>2012-2016</b> - PN-II-PT-PCCA-2011-3.1-0184 - <i>“New predictive biomarkers for the evolution of the stable and unstable coronary artery disease identified by lipidomic, proteomic and molecular biology technologies”</i>. Project manager: Acad. Anca V. Sima.</li> </ul>
<b>Member in industry contracts</b>	<ul style="list-style-type: none"> <li>• <b>2021</b> - Services Contract no. 4350/10.07.2020, State University of Moldova, Republic of Moldova. Project managers: Dr. Mariana Pinteala, Dr. Tamara Potlog (Republic of Moldova).</li> </ul>
	<ul style="list-style-type: none"> <li>• <b>2020</b> - CORTHOTEC (Contract no. 5289/09.08.2019) – <i>“Formulation of a bio-absorbable class III medical device for local drug delivery”</i>. Project managers: Dr. Mariana Pinteala, Dr. Rami Farhat Kallala (United Kingdom).</li> </ul>
<b>Internships</b>	<ul style="list-style-type: none"> <li>• <b>2009-2011</b> - NMR Spectroscopy Laboratory, “Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania</li> </ul>
	<ul style="list-style-type: none"> <li>• <b>2009-2010</b> – Medical Analysis Laboratory, Clinical Hospital for Infectious Diseases „Sfânta Parascheva”, Iasi, Romania</li> </ul>

## Scientific Domains

- Biological activity of natural and synthetic compounds;
- MicroRNAs as biomarkers for diseases severity and progression;
- Biocompatibility of medical devices, cytotoxicity of polymeric materials and conjugates designed for cancer therapy;
- Lactic acid bacteria fermentations; extraction, purification and characterization of exopolysaccharides; probiotic and prebiotic properties of lactic acid bacteria fermentations.

## Personal Skills

- responsibility, leadership, team work, adaptability, diplomacy, creativity, fast-learning, analytical thinking, problem solving, protocol optimization
- good communication skills expressed in presentations and public speaking, supervision and training of Master and Ph.D. students, synthetic writing, integrating interdisciplinary information.

## Skills related to the research activity

- Advanced knowledge of molecular biology techniques: RNA and microRNA isolation from different sample types (adapted methods); microRNA and gene expression - real time qPCR, PCR array, OpenArray, microarray; functional analysis of microRNAs;
- Advanced knowledge of cell culture techniques; biochemistry techniques; ELISA;
- Basic knowledge of optical and fluorescence microscopy, flow cytometry, electrophoretic techniques, lipoprotein separation from plasma.
- Basic knowledge of microbiology techniques: lactic acid bacteria isolation and purification; biotechnological process optimization; extraction, purification and characterization of biological compounds resulted from biosynthesis;

## Digital skills

- Intermediate biostatistics (IBM SPSS for Windows, GraphPad Prism);
- Competent with text editing programs (Microsoft Office, EndNote, Mendeley), image editing programs (Adobe Photoshop, Corel Draw, Chem Bio Office, MDL ISIS Draw).

## Scientific Contribution

- 20 scientific papers published in ISI rated journals.
- 17 oral presentations at national (5) and international (12) events.
- 25 posters presented at national (5) and international (20) events.

## Scientific Visibility (Hirsh, Citations, etc.)

- H-index: **6** (according to ISI Web of Science, January 2023).
- Total citations (without self-citations): 211 (according to ISI Web of Science, January 2023).