

CURRICULUM VITAE

2025-01-20

Name(-s), Surname (-s)	RENATA GUDIUKAITĖ	
Date of birth	1987-03-04	
Languages	German, English, Russian	
E-mail	renata.gudiukaite@gf.vu.lt	
Education Background		
Institution	Academic and Science Degree	Year
Vilnius University	PhD Biomedical Sciences (Biology)	2016
Vilnius University	MSc Microbiology	2012
Vilnius University	BSc Biology (Molecular Biology)	2010
Work experience		
Workplace	Position	Period
Vilnius University	Associate Professor Lectures of Microbiology (I cycle study program: additional Biology study program); Lectures of Microbiology (I cycle study program: Microbiology); Lectures of Industrial Microbiology (I cycle study programs: Microbiology; Molecular biology); Lectures and seminars of Systems Biology (II cycle study program: Microbiology); Lectures of Microbiology and Biotechnology (I cycle study programs: Biology; Genetics; Neurophysics; Subject pedagogy: science education (biology); Lectures of Microbiology and Microorganisms in Industrial Processes (I cycle study program: Molecular biotechnology); <i>Lectures of Microorganisms in Industrial Processes (till 2022) (II cycle study program: Microbiology);</i> <i>Lectures of Microorganism's World (till 2022)</i>	From 2021 09
Vilnius University	Senior Researcher	2023 04 – 2025 03
Vilnius University	Research Fellow	2019 08 – 2022 09
Vilnius University	Assistant Professor Laboratory works and lectures of Microbiology; Lectures and seminars of Industrial Biotechnology; Lectures and seminars of Systems Biology Lectures of Microbiology and Biotechnology Lectures of Microorganisms in Industrial Processes Lectures of Microbiology and Microorganisms in Industrial Processes Lectures and seminars of Microorganism's World	2017 09 – 2021 09
Vilnius University	Junior Research Associate	2016 09 -2017 09
National Centre of Physical and Technological Sciences	Research Fellow	2017 03- 2017 04

Vilnius University	Lecturer Laboratory works of Microbiology; Laboratory works of Biotechnology; Lectures of Industrial Microbiology; Lectures of Industrial Biotechnology	2014 09 – 2017 09
Vilnius University	Specialist	2014-2015
Vilnius University	Junior Research Associate	2014-2015
Vilnius University	Specialist	2011-2013
Vilnius University	Specialist	2010
Publications		
Study field	List of publications	Year
	After PhD thesis defense	
Biochemistry, N004	N. Urbelienė, R. Gasparavičiūtė, J. Vaitekūnas, R. Meškienė, U. Valantinaitė, P. Kruopis, R. Gudiukaitė , R. Meškys. A screening method for polyester films-degrading microorganisms and enzymes. Journal of Hazardous Materials, 137177, https://doi.org/10.1016/j.jhazmat.2025.137177	2025
Biology, N010	Čekuolytė K., Šapaitė D., Žemgulytė E., Gudiukaitė R. , Lastauskienė E. Induction of Apoptosis by Silver Nanoparticles Obtained Using Thermophilic Bacteria. Journal of Functional Biomaterials 15, no. 6: 142. https://doi.org/10.3390/jfb15060142	2024
Biology, N010 (80%), Agronomy, A 001 (20%)	Daunoras, J., Kačergius, A., Gudiukaitė, R. Role of Soil Microbiota Enzymes in Soil Health and Activity Changes Depending on Climate Change and the Type of Soil Ecosystem. Biology 2024, 13(2), 85. https://doi.org/10.3390/biology13020085	2024
Biology, N010	Malunavicius, V., Vaskevicius, L., Gusaite, A., Gudiukaite, R. Rational and random mutagenesis of GDEst-95 carboxylesterase: New functionality insights. Int J Biol Macromol. 2024, 256, 128331. https://doi.org/10.1016/j.ijbiomac.2023.128331	2024
Biology, N010	Malunavicius, V., Padaiga, A., Stankeviciute, J. Pakalniskis, A., Gudiukaite, R. Engineered <i>Geobacillus</i> lipolytic enzymes – attractive polyesterses that degrade polycaprolactones and simultaneously produce esters. Int J Biol Macromol. 2023, 253(8), 127656. https://doi.org/10.1016/j.ijbiomac.2023.127656	2023
Biology, N010 (20%), Agronomy, A 001 (80%)	Kačergius, A., Sivojienė, D., Gudiukaitė, R. , Bakšienė, E., Masevičienė, A., Žičkienė, L., Comparison of the structure of soil microbial communities of different ecosystems using microbiome sequencing approach, Soil Syst. 2023, 7(3), 70; https://doi.org/10.3390/soilsystems7030070	2023
Biology, N010	Vaskevicius, L., Malunavicius, V., Jankunec, M., Lastauskiene, E., Talaikis, M., Mikoliunaite, L., Maneikis, A., Gudiukaite, R. Insights in MICP dynamics in urease-positive <i>Staphylococcus</i> sp. H6 and <i>Sporosarcina pasteurii</i> bacterium, Environmental Research (2023), 234, 116588. https://doi.org/10.1016/j.envres.2023.116588 .	2023
Biology, N010	Venckus P, Endriukaiytė I, Čekuolytė K, Gudiukaitė R , Pakalniškis A, Lastauskienė E. Effect of Biosynthesized Silver Nanoparticles on the Growth of the Green Microalga <i>Haematococcus pluvialis</i> and Astaxanthin Synthesis. Nanomaterials. 2023; 13(10):1618. https://doi.org/10.3390/nano13101618	2023
Biology, N010	K. Cekuolyte, R. Gudiukaite , V. Klimkevicius, V. Mazrimaite, A. Maneikis, E. Lastauskiene. Biosynthesis of Silver Nanoparticles Produced Using <i>Geobacillus</i> spp. Bacteria. Nanomaterials 2023, 13(4), 702; https://doi.org/10.3390/nano13040702	2023

Biology, N010	Greicius A, Baliutavicius T, Lastauskiene E, Gudiukaite R. Application of Milk Permeate as an Inducer for the Production of Microbial Recombinant Lipolytic Enzymes. <i>Fermentation</i> . 2023, 9(1):27. https://doi.org/10.3390/fermentation9010027	2023
Biology, N010	Gudiukaite R. , Kumar Nadda A, Gricajeva A, Shanmugam S, Duc Nguyen D, Lam SS. Bioprocesses for the recovery of bioenergy and value-added products from wastewater: A review. <i>J Environ Manage.</i> 2021, 300, 113831. https://doi.org/10.1016/j.jenvman.2021.113831	2021
Biology, N010	Gricajeva A, Kumar Nadda A, Gudiukaite R. Insights into polyester plastic biodegradation by carboxyl ester hydrolases. <i>J Chem Technol Biotechnol.</i> 2022, 97(2), 359-380. DOI: 10.1002/JCTB.6745. First published 2021 April	2021
Biology, N010	Savickaite A, Sadauskas M, Gudiukaite R. Immobilized GDEst-95, GDEst-lip and GD-95RM lipolytic enzymes for continuous flow hydrolysis and transesterification reactions. <i>Int J Biol Macromol.</i> 2021, 173(15), 421-434. https://doi.org/10.1016/j.ijbiomac.2021.01.133	2021b
Biology, N010	Savickaite A, Druteika G, Sadauskas M, Malunavicius V, Lastauskiene E, Gudiukaite R. Study of individual domains' functionality in fused lipolytic biocatalysts based on <i>Geobacillus</i> lipases and esterases. <i>Int J Biol Macromol.</i> 2021, 168, 261-271. https://doi.org/10.1016/j.ijbiomac.2020.12.026	2021a
Biology, N010	Druteika G, Sadauskas M, Malunavicius V, Lastauskiene E, Statkeviciute R, Savickaite A, Gudiukaite R. New engineered <i>Geobacillus</i> lipase GD-95RM for industry focusing on the cleaner production of fatty esters and household washing product formulations. <i>World Journal of Microbiology and Biotechnology.</i> 2020, 36, 41. DOI: 10.1007/s11274-020-02816-3	2020b
Biology, N010	Kumar A, Gudiukaite R. , Gricajeva A, Sadauskas M, Malunavicius V, Kamyab H, Sharma S, Sharma T, Pant D. Microbial lipolytic enzymes – promising energy-efficient biocatalysts in bioremediation. <i>Energy.</i> 2020, 192, 116674. https://doi.org/10.1016/j.energy.2019.116674	2020
Biology, N010	Druteika G, Sadauskas M, Malunavicius V, Lastauskiene E, Taujenis L., Gegeckas A, Gudiukaite R. Development of a new <i>Geobacillus</i> lipase variant GDlip43 via directed evolution leading to identification of new activity-regulating amino acids. <i>Int J Biol Macromol.</i> 2020, 151, 1194-1204. https://doi.org/10.1016/j.ijbiomac.2019.10.163	2020a
Biology, 01B	Novickij V, Staigvila G, Gudiukaite R. , Zinkeviciene A, Girkontaitė I, Paškevičius A, Švedienė J, Markovskaja S, Novickij J, Lastauskienė E. Nanosecond duration pulsed electric field together with formic acid triggers caspase-dependent apoptosis in pathogenic yeasts. <i>Bioelectrochemistry</i> , 2019, 128:148-154.	2019
Biology, 01B	Stumbriene K., Gudiukaite R. , Semaskiene R., Svegzda P., Jonaviciene A., Suproniene S. Screening of new bacterial isolates with antifungal activity and application of selected <i>Bacillus</i> sp. cultures for biocontrol of <i>Fusarium graminearum</i> under field conditions. <i>Crop protection</i> , 2018, 113, 22-28.	2018
Biology, 01B	Malunavicius V., Druteika G., Sadauskas M., Veteikyte A., Matijosyte I., Lastauskiene E., Gegeckas A., Gudiukaite R. Usage of GD-95 and GD-66 lipases as fusion partners leading to improved chimeric enzyme LipGD95-GD66. <i>International Journal of Biological Macromolecules</i> , 2018, 118, 1594-1603.	2018

Biology, 01B	Gegeckas A., Šimkutė A., Gudiukaitė R. , Čitavičius D. Characterization and application of keratinolytic peptidases from <i>Bacillus</i> spp. <i>International Journal of Biological Macromolecules</i> , 2018, 113, 1206-1213	2018
Biology, 01B	Gudiukaite R. , Gricajeva A. Microbial lipolytic fusion enzymes: current state and future perspectives. <i>World J Microbiol Biotechnol</i> , 2017, 33:216, 1-8	2017
Biology, 01B	Gudiukaite R. , Sadauskas M., Gegeckas A., Malunavicius V., Čitavicius D. Construction of a novel lipolytic fusion biocatalyst GDEst-lip for industrial application. <i>J Ind Microbial Biotechnol</i> , 2017, 44(6), 799-815.	2017
Before PhD thesis defense		
Biology, 01B	Gudiukaitė R. , Gegeckas A., Sadauskas M., Čitavičius D. Detection of Asp371, Phe375 and Tyr376 influence on GD-95-10 lipase using alanine scanning mutagenesis. <i>Appl Biochem Biotechnol</i> , 2016, 178(4), 654-69.	2016
Biology, 01B	Gegeckas A., Gudiukaitė R. , Debski J., Čitavicius D. Keratinous waste decomposition and peptide production by keratinase from <i>Geobacillus stearothermophilus</i> AD-11. <i>International journal of biological macromolecules</i> , 2015, 75, 158-165.	2015
Biology, 01B	Gegeckas A., Gudiukaitė R. , Čitavicius D. Keratinolytic proteinase from <i>Bacillus thuringiensis</i> AD-12. <i>International journal of biological macromolecules</i> , 2014, 69, 46-51.	2014
Biology, 01B	Gudiukaitė R. , Gegeckas A., Kazlauskas D., Čitavicius D. Influence of N- and/or C-terminal regions on activity, expression, characteristics and structure of lipase from <i>Geobacillus</i> sp. 95. <i>Extremophiles</i> , 2014, 18, 131-145	2014
Presentations at conferences		
Date	Most important last presentations at conferences (full list includes 72 presentations)	
2023	A.Padaiga, V. Malūnavičius, R. Gudiukaitė . Geobacillus lipolytic enzymes – attractive biocatalysts for the decomposition of polycaprolactones. 5th Congress of Baltic Microbiologists 2023, October 11-13, Vilnius, Lithuania. Poster presentation.	
2023	Malūnavičius V., Gudiukaitė R. Research of Geobacillus lipases and esterases – new insights and possible applications. 5th Congress of Baltic Microbiologists. October 11-13, Vilnius, Lithuania. Oral presentation.	
2023	I. Lenkaitė, J. Daunoras, R. Gudiukaitė . In silico analysis of novel microbial lipolytic and lipolytic-like enzymes. 5th Congress of Baltic Microbiologists 2023, October 11-13, Vilnius, Lithuania. Poster presentation.	
2022	V. Malūnavičius, A. Gusaitė, S. Pronckutė, R. Gudiukaitė . <i>Geobacillus</i> sp. 95 esterase: analysis of important amino acids for substrate binding and activity. FEBS3+2022 Conference of Estonian, Latvian and Lithuanian Biochemical Societies, 15 June – 17 June 2022, Estonia, Tallinn. Poster presentation.	
2022	Greičius A., Adomaitis L., Gudiukaitė R. Activity and functionality analysis of Streptomyces and Arthrobacter bacterial cutinases. FEBS3+2022 Conference of Estonian, Latvian and Lithuanian Biochemical Societies, 15 June – 17 June 2022, Estonia, Tallinn. Poster presentation.	
2022	Greičius A., Savickaitė A., Gudiukaitė R. Analysis of site-directed mutant (Asp94Ala) of <i>Streptomyces scabiei</i> 87.22cutinase. 65th International conference for students of physics and natural sciences Open Readings 2022, 15 March – 18 March. Poster presentation. Best poster presentation award.	

2021	Savickaitė A, Gudiukaitė R. Linker's influence on the catalytic behaviour of fused microbial lipolytic enzymes. 15th International Symposium on Biocatalysis and Biotransformations (BioTrans 2021), July 19-22, 2021. Graz, Austria. Worldwide online. Poster presentation
2020	Malūnavičius V., Gudiukaitė R. Protein engineering of <i>Geobacillus</i> lipolytic enzymes – from enzyme fusions to directed evolution. The COINS International conference of Life sciences 2020, 25 February – 27 February. Vilnius, Lithuania. Oral presentation. Best oral presentation award.
2020	Savickaitė A., Malūnavičius V., Druteika G., Gudiukaitė R. Physicochemical characterization of immobilized lipolytic GD-95RM, GDEst-95 and GDEst-lip enzymes. The COINS International conference of Life sciences 2020, 25 February – 27 February. Vilnius, Lithuania. Poster presentation. Best Poster Award.
2020	Malūnavičius V., Savickaitė A., Peleckas R., Gudiukaitė R. Functionality analysis of organic solvents tolerant carboxylesterase from <i>Geobacillus</i> sp. 95. Vita Scientia 2020, 03 January 2020, Vilnius, Lithuania. Poster presentation. Best Poster Award.
2019	Gudiukaite R. , Druteika G., Malunavicius V., Lastauskiene E. New lipolytic biocatalysts designed via protein engineering strategies: characterization of GD-95RM and GDEst-lip lipases. 14th International symposium on Biocatalysis and Biotransformations BioTrans 2019, 2019 07 7-11, Groningen, The Netherlands. Poster presentation.
2019	Malūnavičius V., Maneikis A., Gegeckas A., Lastauskienė E., Gudiukaitė R. Analysis into the possible biomineralisation using <i>Staphylococcus</i> sp. H6 and <i>Arthrobacter</i> sp. G7 strains. The COINS International conference of Life sciences 2019, 26 February – 28 February. Vilnius, Lithuania. Poster presentation. 1 st place in poster presentation session of The COINS 2019.
Experience in projects	
Period	Project title, position
2024 07 01 – 2024 08 31	"Development of scientific competence of scientists, other researchers, students through practical scientific activities", measure "Student research during the summer". Project "Functionality research of DEst-95 esterase", No. P-SV-24-118; project leader.
2024 02 – 2024 03	Research "Determination of micromycetes on plywood panels", Scientific research contract with UAB "Actona Lithuania", No. (1.57) 15600-INS-34; responsible researcher.
2023 10 01 – 2024 04 31	"Development of scientific competence of scientists, other researchers, students through practical scientific activities", Funding for student's research projects. Project "Development and analysis of cysteine as catalytic amino acid containing lipolytic enzymes from <i>Geobacillus</i> bacteria", P-ST-23-21; project leader.
2023 04 20 – 2025 03 31	Colorectal adenoma-carcinoma sequence rediscovered: interaction of intestinal microbiota and local immune system in health and carcinogenesis (MIMICA-1), proposal registration No. P-MIP-22-38; senior researcher.
2022 07 01 – 2022 08 31	"Development of scientific competence of scientists, other researchers, students through practical scientific activities", measure "Student research during the summer". Project "Use milk permeate as an alternative inducer for the synthesis of recombinant biocatalysts", No. P-SV-22-160; project leader.
2021 11 17 – 2022 02 17	Research "Investigation of the effectiveness of robots for disinfection", Scientific research contract with UAB "R and R Technology", No. (1.57) 15600-INS-180; responsible researcher.
2021 10 13 – 2021 11 13	Research of microbiological cleanliness "Assessment of microbial cleanliness of parcel machines"; Research contract with UAB "Berta And", no. (1.57) 15600-INS-152; responsible researcher.

2021 09 01 – 2022 03 31	The European Social Fund under the No 09.3.3-LMT-K-712 “Development of Competences of Scientists, other Researchers and Students through Practical Research Activities” measure, Grant No. 09.3.3-LMT-K-712-25-0030, Project “Research of fused biocatalysts containing GDEst-95, GD-95 and Kut-SP domains”, project leader.
2021 06 22 – 2021 07 20	"Research of microbiological cleanliness of surfaces"; Research contract with UAB Gravitas Partners, no. (1.57) 15600-INS-121; responsible researcher.
2021 07 01 – 2021 08 31	The European Social Fund under the No 09.3.3-LMT-K-712 “Development of Competences of Scientists, other Researchers and Students through Practical Research Activities” measure, Grant No. 09.3.3.-LMT-K-712-24-0002, Project “Activity analysis of recombinant bacterial cutinases and application for polyesters degradation”, project leader.
2021 03 22 – 2021 04 12	“Assessment of bacteriocidal effects”; Research contract with UAB BOD GROUP, Nr. (1.57) 15600-INS-44; responsible researcher.
2020 11 03 – 2021 04 30	The European Social Fund under the No 09.3.3-LMT-K-712 “Development of Competences of Scientists, other Researchers and Students through Practical Research Activities” measure, Grant No. 09.3.3-LMT-K-712-22-0074, Project “Functionality research of microbial cutinases”, project leader.
2020 05 12 – 2023 05 01	The European Social Fund under Investment Operational Program for 2014–2020 “Promotion of Competence Centers and Innovation and Technology Transfer Centers”, Priority 1 “Promotion of Research, Experimental Development and Innovation” project “New Generation Industrial Enzyme Engineering Center”, Grant No. 01.2.2-CPVA-K-703-03-0023, research fellow.
2019 10 11 – 2020 04 30	The European Social Fund under the No 09.3.3-LMT-K-712 “Development of Competences of Scientists, other Researchers and Students through Practical Research Activities” measure, Grant No. 09.3.3-LMT-K-712-16-0020, Project “The Development of a continuous system based on thermostable lipolytic enzymes for the synthesis and / or hydrolysis of fatty acid esters”, project leader.
2019 07 01 – 2020 06 31	By Science Promotion Fund of Vilnius University funded project “Design of new for industrial application attractive biocatalysts and more effective protein engineering methods development”. Grant No. MSF-JM-1, project leader/ research fellow.
2019 07 01 – 2019 08 31	Project: The European Social Fund under the No 09.3.3-LMT-K-712 “Development of Competences of Scientists, other Researchers and Students through Practical Research Activities” measure, Grant No. 09.3.3.-LMT-K-712-15-0028, Project “The research of activity and stability of bifunctional biocatalyst, fused through different peptidic linkers”, project leader.
2018 10 01 – 2019 04 30	Project: The European Social Fund under the No 09.3.3-LMT-K-712 “Development of Competences of Scientists, other Researchers and Students through Practical Research Activities” measure, Grant No. 09.3.3.-LMT-K-712-10-0028, Project “The research of fused lipolytic enzymes: structural and functional analysis”, project leader.
2018 07 01 – 2018 08 31	Project: The European Social Fund under the No 09.3.3-LMT-K-712 “Development of Competences of Scientists, other Researchers and Students through Practical Research Activities” measure, Grant No. 09.3.3.-LMT-K-712-09-0005, Project “The research of characteristics important for industrial application of new active and thermostable lipolytic biocatalyst GD-95RM”, project leader.

2017 10 01 – 2018 05 01	The European Social Fund under the No 09.3.3-LMT-K-712 “Development of Competences of Scientists, other Researchers and Students through Practical Research Activities” measure, Grant No. 09.3.3.-LMT-K-712-03-0002, Project “The research of ureases produced by <i>Geobacillus</i> bacteria”, project leader.
2014-2015	High-level international research promotion, no. VPI-3.1-MES-10-V, “BIOKONVERSA” Selection and development of the biocatalysts for biogas production and utilization of biomass conversion process control”. Junior research associate.
2014-2015	National science programme “Healthy and safe food” project: “Chemotype composition, pathogenicity & control of trichothecene producing <i>Fusarium spp.</i> in cereals”. No. SVE-14023. Specialist.
2011-2013	Program “Development of industrial biotechnology in Lithuania 2011-2013”, project “Innovative tools for cosmetic industry (COSMETIZYM)”, Grant No. MITA 31V-18. Specialist.
Patent application	
R. Meskys, N. Urbeliene, R. Gasparaviciute, R. Gudiukaite; „A method for screening the polymer-degrading enzymes“; Application number EP23187384.5; Reference V83-110EP. Patent application submitted at 2023 July 24 to EPO	
Experience as an expert in research fields	
Expert of Vilnius University Life Sciences Center: Research interests – Protein/enzyme engineering; isolation of microorganisms from environmental samples; industrial microbiology and biotechnology; lipolytic enzymes in biocatalysis https://www.gmc.vu.lt/en/services/list-of-experts-at-lsc	
Experience in development of R&D solutions and innovations for industry	
https://www.vu.lt/en/business/innovations-and-research/inventions-technologies/r-d-solutions#new-engineered-geobacillus-lipase-gd-95rm-for-industry https://www.vu.lt/en/business/innovations-and-research/inventions-technologies/r-d-solutions#engineered-geobacillus-lipolytic-enzymes-for-decomposition-of-polyester-plastics	
Cooperation with business:	
Cooperation agreement (1.57) 15600-INS-86 with Energesman UAB Cooperation agreement (1.57) 15600-INS-38 with UAB BIOVALA Cooperation agreement (1.57) 15600-INS-31 with UAB VAATC Scientific research contract with Actona Lithuania UAB, (1.57) 15600-INS-34. Research contract with UAB "R and R Technology", (1.57) 15600-INS-180 Research contract with UAB "Berta And", (1.57) 15600-INS-152 Research contract with UAB Gravitats Partners, no. (1.57) 15600-INS-121 Research contract with UAB BOD GROUP, no. (1.57) 15600-INS-44	
Experience as supervisor or consultant of bachelor, master and PhD thesis	
Year	Title of thesis, study program. Only the thesis of the last five years are presented. Full list includes 19 thesis.
2019	Analysis of Structure-Function Relationship in <i>Geobacillus</i> Lipases and Design of Lipolytic Enzymes with Improved Characteristics via Different Mutagenesis Strategies. Vilnius University, Supervisor. Bachelor thesis, Microbiology and biotechnology
2019	Gram-positive bacteria application in biomineralisation: studies of recombinant and native systems. Vilnius University, Supervisor. Master thesis, Microbiology
2019	A Study of Antibacterial Compounds Produced by <i>Bacillus</i> and <i>Streptomyces</i> Bacteria. Vilnius University, Supervisor. Bachelor thesis, Microbiology and biotechnology
2020	Application of GD-95RM, GDEst-lip and GDEst-95 Lipolytic Enzymes for Hydrolysis of Lipid Substrates and Transesterification Reaction. Vilnius University, Supervisor. Bachelor thesis, Microbiology and biotechnology

2020	Screening of New Biological Control Agents Against <i>Fusarium</i> sp. Vilnius University, Supervisor. Bachelor thesis, Microbiology and biotechnology
2021	Synthesis Optimization of Recombinant Lipolytic Enzymes. Vilnius University, Supervisor. Bachelor thesis, Microbiology and biotechnology
2021	A Study of Nitrate Reductase Produced by <i>Geobacillus</i> Bacteria. Vilnius University, Supervisor. Master thesis, Microbiology
2022	Analysis of <i>Streptomyces scabiei</i> 87.22 cutinase by using different enzyme engineering strategies. Vilnius University, Supervisor. Master thesis, Microbiology
2022	Analysis of chimeric RecGEOker GDEst 95/GD 95 fusion proteins. Vilnius University, Supervisor. Master thesis, Microbiology
2023	Analysis and synthesis optimization of the cutinase enzyme from <i>Streptomyces scabiei</i> 87.22. Vilnius University, Supervisor. Bachelor thesis, Molecular biotechnology
2023	Selection of new polyesterase producers. Vilnius University, Supervisor. Bachelor thesis, Microbiology
2023	Research of cutinase from <i>Arthrobacter</i> sp. SLBN-53 strain. Vilnius University, Supervisor. Master thesis, Microbiology
Present	Supervisor of four bachelor thesis
Present	Supervisor of PhD thesis <ol style="list-style-type: none"> 1. “The uncharacterized or low characterized microbial lipolytic and lipolytic-like enzymes: analysis of substrate specificity and thermostability”, Biology (N010). 2022-2026 2. “Screening and characterization of new bacterial polyesterases”, Biology (N010). 2022-2026

Experience in PhD studies

Defended PhD thesis:

1. “*Geobacillus* lipolytic enzymes: structure-function research and application in polycaprolactone recycling”, Biology (N010), 2019-2024; defended at 2024-08-27, PhD student – Vilnius Malūnavičius.

Reviewer and/or member of the defense committee of the PhD thesis:

1. "Investigation of the characteristics and dynamics of the spread of pathogenic microorganisms from the perspective of molecular epidemiology" (Natural sciences, Biology (N 010))
2. “Chemoenzymatic synthesis of nucleoside 5'-monophosphates” (Natural sciences, Biochemistry (N 004))

Coordinator of PhD course:

- Industrial microbiology, <https://www.gmc.vu.lt/en/doctoral-school/phd-studies/73-doctoral-school/1711-industrial-microbiology>
- Microbiology, <https://www.gmc.vu.lt/en/doctoral-school/phd-studies/73-doctoral-school/1718-microbiology>
- Environmental Microbiology, <https://www.gmc.vu.lt/en/doctoral-school/phd-studies/73-doctoral-school/1684-environmental-microbiology>

Educational activities

Industrial microbiology	Virtual course „Pramoninė mikrobiologija” (GMC30498); https://emokymai.vu.lt
System biology	Virtual course „Sistemų biologija” (GMC42964); https://emokymai.vu.lt
Microbiology and Biotechnology	Virtual course “Mikrobiologija ir biotechnologija” (GMC54594); https://emokymai.vu.lt
Microbiology and Microorganisms in Industrial Processes	Virtual course “Mikrobiologija ir mikroorganizmai pramoniniuose procesuose” (GMC57334); https://emokymai.vu.lt
Microbiology	Virtual course “Mikrobiologija” (GMC703_18759); https://emokymai.vu.lt

Microbiology	Virtual course “Mikrobiologija” (GMC703_18096); https://emokymai.vu.lt
Administrative work experience	
Year	Activities
From 2024	Member of the Board of the Lithuanian Microbiological Society (LMD); Secretary of the Lithuanian Microbiological Society
2023	Head of the Microbiology study program development group (Vilnius University)
2021-2022	Head of the Microbiology study field Self-Evaluation Group (Vilnius University)
From 2021	Head of the Microbiology bachelor and master study program committees (Vilnius University)
From 2017	Member of the Microbiology and biotechnology bachelor and master study program committees (Vilnius University)
Qualification Improvement, Certificates	
2024 10 08, 2024 10 15 Training organized by the VU Educational Competences Center "Pedagogical Competence Development Program for Teachers "Communication Skills". 8 hours.	
2023 09 – 2023 12 Improvement of Qualification in Project "Digital Education Transformation (EdTech). Certificate no. 16200-SPK-14. C1 level training program "Digital Competences Training for Teachers", 62 hours, organized in a group manner. Training organized by VU Educational Competence Center "Pedagogical Competence Development Program for Teachers "Communication Skills".	
2022 11 08 Seminar: The needs of students with mental health difficulties in academic life	
2021 12 09 Seminar: Students with autism spectrum and their needs in higher education	
2021 09 30 Seminar: What is needed for a visually impaired student. Practical Advice Session	
2021 07 01 Seminar: Preparation and management of research projects, Lithuanian Science Council	
2020 10 30 Seminar: People with psychosocial disabilities in academic life	
Most important public education and science dissemination activities	
Year	Social activities
From 2013	Member of Lithuanian Biochemical Society
From 2015	Member of Lithuanian Microbiological Society
2016-2020	Lectures and practical works for the “School of Young Biochemists”
2016	Membership in the Organizing committee of 3 rd Congress of Baltic Microbiologists (CBM2016)
2017	Human practices of project SynORI (iGEM, Vilnius, 2017)
2017 - 2018	Participation in promoting activities for educating the public about science on national television, Channel 3 (TV3) News reports, activities in Health day of VU Life Sciences Center
2018 09 17	Membership in Organizing committee of International Day of Microorganisms 2018
2018 -2022	Contributing to the activity “Student for one day” in Vilnius University.
2019 - 2020	Participation in the International Study and Career Planning Exhibition “STUDIES 2019”, “STUDIES 2020” by representing Vilnius University https://www.youtube.com/watch?v=rjTH_6SpCQE ; https://www.youtube.com/watch?v=ERJSE6DOOCY
2019 - 2023	Contributed to the international conference The COINS 2019/2020/2021/2022/2023 Workshops and laboratory works for high school students.
2019 09 17	Membership in Organizing committee of International Day of Microorganisms 2019. Interactive presentations „Amazing world of microorganisms“ and Lecture „Bacteria – infectious agents or bioelement producers?“

2019 09	Interviews during the national broadcaster (LRT) radio show 10–12. The Spaceship Earth Festival tells the story of how disease-causing bacteria can be useful in creating biocement.
2019 09	Interview for the national broadcaster (LRT) LRT Plus show "Curiosity Gene", Topic - Microorganism Training or Genetic Modification - a method used in industries that can solve the plastic problem. https://www.lrt.lt/mediateka/irasas/2000082913/smalsumo-genas-mikroorganizmu-dresura-arba-genetinis-modifikavimas-pramones-sakose-naudojamas-ir-plastiko-problema-galintis-isspresti-budas
2019 09	Workshop for high school students and lecture “Microorganisms in production of organic acids” at BiotechWeek 2019 event.
2021	Human practices of project AmeBye (iGEM, Vilnius, 2021) https://2021.igem.org/Team:Vilnius-Lithuania/Attributions
2021 01 28	Interview: In the field of microbiologists' research - worlds invisible to the naked eye https://naujienos.vu.lt/mikrobiologu-tyrimu-lauke-plika-akimi-nematomi-pasauliai/
2021 04-07	Project: Smartphone hygiene. https://www.lrt.lt/naujienos/mokslas-ir-it/11/1442197/pirmasis-lietuvoje-ismaniju-higienos-tyrimas-nustebino-ant-telefono-daugiau-bakteriju-nei-ant-viesojo-tualetoklozeto-dangcio https://www.lrt.lt/mediateka/irasas/2000157898/ismaniju-higienos-tyrimas-priverte-susirupinti-ant-telefono-gali-buti-daugiau-bakteriju-nei-ant-viesojo-tualetoklozeto-dangcio https://www.lrytas.lt/it/laboratorija/2021/06/30/news/pirmasis-lietuvoje-ismaniju-higienos-tyrimas-nustebino-bakteriju-ant-telefono-daugiau-nei-lifte-19926317/
2021 09 17	Lecture „The little extremophiles and their daily life“, International Day of Microorganisms 2021.
2021 11 19	Presentation “Microbiology today: from enzyme engineering to bacteria found on the screen of smartphones” at VU Innovation Day 2021. https://www.youtube.com/watch?v=e9QPsQtlc5A
2021 11 24	Evaluation of microbial cleanliness of parcel machines https://www.15min.lt/verslas/naujiena/mokslas-it/mokslininke-istryre-pastomatu-pavirsius-perspeja-kad-didzioji-ju-dalis-perpildyta-mikrobais-1290-1601424 https://venipak.lt/naujienos/2021-11-23/mokslininke-istryre-pastomatu-pavirsius-perspeja-kad-didzioji-ju-dalis-perpildyta-mikrobais/
2022 01 06	Lab works for the National Student Academy
2022 03 10, 03 17	Lectures for High school teachers: 1. “We are in the world of microorganisms”; 2. On the safety of mold “Mold: destroy, cannot be left to remain”. Lectures were part of initiative “Training for the improvement of the competences of teachers in the field of natural sciences”. https://www.facebook.com/mokslastau/photos/a.102689245127208/348379380558192/
2022 06 13	STEAM activity for schoolchildren from Ferdinand Rusčicas high school (Rudamina, Vilnius region)

2023	Membership in Organizing committee of CBM2023 – 5th Congress of Baltic Microbiologists; https://cbm2023.com/committees
From 2023 11	Member of mentors group for students: https://www.idialogue.lt/lt/mentors/renata-gudiukaite-6650
2023	Member of the judging panel of the science popularization contest organized by the science popularization show "Science Soup" together with the astrophysics blog "Konstanta42" http://mokslosriuba.lt/kartumesgalime/mokslo-populiarinimo-konkursas-2023/
2023 03 15	Event: Laboratories - who, where, how and when? Discussions: "From a student to an intern - what happens behind closed doors?" speaker. https://www.facebook.com/photo/?fbid=667163158746900&set=gm.1632595283847220&idortvanity=1628725607567521
2023 03 30-31	Participation in the International Study and Career Planning Exhibition “STUDIES 2023”, by representing Vilnius University
2023 04 24-25; 2023 10 27; 2024 04 22, 2024 04 23	Contributing to the activity “Student for one day” in Vilnius University.
2023 09 18	Lab works in International Day of Microorganisms 2023.
2024 01 18 2024 02 09 2024 03 28-29	Participation in the International Study and Career Planning Exhibition “STUDIES 2024”, by representing Vilnius University in Vilnius, Kaunas and Klaipeda
2024 02 01	Lecture for the “School of Young Biochemists”
2024 02 09	Presentation of research activities: https://www.linkedin.com/feed/update/urn:li:activity:7161699086549655552/
2024 06 27	Steam lab works for methodical teachers https://mikrobiologija.lt/mokymai-steam-centru-metodininkams
2024 06 21	Conference Digi Green 2024. „The Science for a Cleaner Future: Deploying Engineered Enzymes Against Polyester Pollution“ https://www.gmc.vu.lt/apie-gmc/naujienos/3723-vu-gyvybes-mokslu-centro-mokslininkai-digigreen-2024-konferencijoje-pristate-inovatyvus-sprendimus-plastiko-tarsai-mazinti https://naujienos.vu.lt/vu-gmc-mokslininkai-digigreen-2024-konferencijoje-pristate-fermentus-poliesteriniams-plastikams-skaidyti/
2024 08 01	Interview for LRT radio show "10-12" about fermentation and its importance. https://www.lrt.lt/mediateka/irasas/2000352960/rauginimo-patarimais-pasidalinusi-mokslininke-gerai-paruostas-produktas-gali-zudyti-ligas https://www.lrt.lt/naujienos/gyvenimas/13/2332100/mokslininke-apie-rauginta-maista-valgome-mikroorganizmu-pasalintus-produktus?utm_source=facebook&utm_medium=komentarai&utm_campaign=may&fbclid=IwY2xjawEe1zxleHRuA2FlbQIxMQABHaKrLmq5-Y8Fq12LZF88HDX8uivQ5erjJth77sb8_OJBjCkPPez-m06btA_aem_wCiqRQne-BToWyZKtLNjtQ
2024 08 09	Discussion participant at the science popularization festival SynFolk "Rūgūtis" organized by the iGEM2024 team. https://www.facebook.com/photo/?fbid=808588034593323&set=gm.421934830891050&idortvanity=409413135476553&locale=lt_LT

2024 09 04	Publication of science dissemination: https://www.lrytas.lt/it/laboratorija/2024/09/03/news/archejos-ypatingos-mikroorganizmu-pasaulio-atstoves-34011294 https://www.mokslofestivalis.eu/archejos-ypatingos-mikroorganizmu-pasaulio-atstoves/
2024 09 17	Lab works in International Day of Microorganisms 2024. https://www.mokslofestivalis.eu/renginys/2024/mikroorganizmai-is-arciau-2/ https://www.mokslofestivalis.eu/xxi-mokslo-festivalis-erdvelaivis-zeme-pristato-doc-dr-renata-gudiukaite/
2024 09 28	Science dissemination activity at Vilnius University Alumni festival.
2025-02-07	Participation in the International Study and Career Planning Exhibition “STUDIES 2025”, by representing Vilnius University in Klaipeda
Scholarships, other grants and activities (in the last five years)	
Year	Activity
2023-2024	Co-editor, Special Issue: Recent Advance in Soil Health: Influence of Organic Carbon and Microbiota. Biology-Basel (MDPI, Q1, IF 5,168).
2021	Recipient of the Rector's Award for young scientists (2021)
2021	Recipient of The best lecturer of the VU LSC award (2021)
2019	Grant for participation in BioTrans 2019. Supported by the European Social Fund under No 01.2.2-LMT-K-718/09.3.3-LMT-K-712. Grant No. 09.3.3.-LMT-K-712-13-0003.