



Life Sciences Center



In 2024, more than 1,000 future scientists and innovators studied at the Life Sciences Center (GMC) of Vilnius University, which offered seven Bachelor, nine Master, and six doctoral study programmes. The fields of biophysics and molecular biology have earned international recognition, receiving accreditation for a maximum period of seven years. For the first time, a doctoral student was admitted to doctoral studies in biology and management, and a dissertation combining biochemistry and medical sciences was prepared. The Didactics Centre of the GMC was successfully launched – about 60 STEAM classes for pupils and five methodological lectures for teachers were organised.

The internationality of studies increased – 15 students from abroad studied on the GMC's Master programmes, the number of Erasmus+ students exceeded 30, and the share of international doctoral students reached 15 per cent. The GMC was actively involved in the activities of the ARQUS European University Alliance, where students and lecturers participated in various initiatives and deepened their knowledge at international schools. The 'Vilnius-Lithuania iGEM' team was ranked among the best, winning the 'Best Biomanufacturing Project' award and the gold medal. For the 18th time, the GMC's students organised the international conference on life sciences, 'The COINS'.

Research conducted by GMC scientists was published in prestigious journals: 'Nature' published a study on mutagenic exposures in kidney cancer genomes conducted by Prof. Sonata Jarmalaitė and Dr Rasa Sabaliauskaitė, as well as an article on the bacterial defence system Thoeis by Dr Giedrė Tamulaitienė. In CRISPR-Cas research, the GMC's scientists determined the structure of the 'protein scissors' found in bacteria, and the work was published in 'Molecular Cell'. The research on gene silencing without cutting DNA, which Dr Patrick Pausch led, was published in 'Nature Communications'. An article by the GMC's doctoral student, Solveiga Samulėnaitė, won 'GUT Top Paper 2024'.

The GMC's scientists attracted high-level international grants: Dr Patrick Pausch received EUR 1.5 million from the ERC for the project 'Jumbo Phages In Translational Enzyme Research', the Marie Skłodowska-Curie Postdoctoral Fellowship was awarded to Dr Miglė Gabrielaite for research on the spread, evolution, and adaptation of an emerging bacterial pathogen – Achromobacter, and the EMBO Installation Grant was awarded to Dr Stephen Knox Jones Jr's project on the profiling of nucleases and their application in the development of gene editing technologies.

The GMC is actively promoting science: it participated in the science festival 'Erdvėlaivis Žemė' ('Spaceship Earth'), the Alumni Festival, and its staff members delivered lectures at events 'Naktis universitete' ('Night at the University'), 'Student for a Day', and 'Jaunųjų biotechnologų savaitė' ('Young Biotechnologists' Week'). The GMC welcomed more than 400 pupils to its laboratories, and the Mobile Bioclassroom visited schools.

The first steps have been taken to establish the GMC's Translational Gene Technology Centre, which will combine the most advanced scientific equipment, promote scientific and business cooperation, and develop innovative solutions for the health sector with a special focus on oncological diseases.

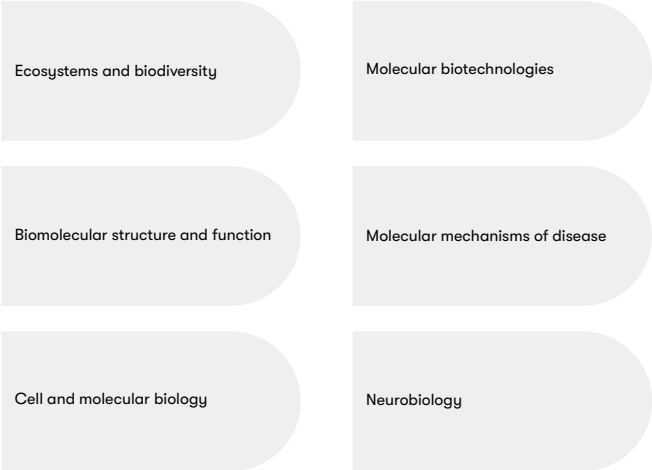
The GMC strengthened its membership in the European Molecular Biology Laboratory (EMBL), marking Lithuania's fifth membership anniversary and EMBL's 50th anniversary by holding a symposium and exhibition 'Explore and Create: Where Science Becomes Art'. Prof. Artūras Petronis became a member of the EMBO. For the first time in Lithuania, 'EMBO Solutions' courses were organised to strengthen the professional skills of scientists.

The most important community achievements were the following: The Birnstiel Award was given to Dr Irmantas Mogila, and the Scholarship for Young Scientists by the Lithuanian Academy of Sciences was granted to Dr Jūratė Skerniškytė. Dr Inga Matijošytė became the Chairperson of the OECD Advisory Commission. Dr Stephen Knox Jones Jr. was awarded the Life Sciences Progress Award, Tautvydas Kojus' Master thesis was the best in the field of technology, and the President of Lithuania awarded Dr Milda Narmontė for the best dissertation. Brigita Duchovska won the Japanese 'MIRAI' programme internship, Rokas Bertašius interned at NASA Research Center, and Eimina Dirvelytė won first place in the international conference 'Translational Research'. The Federation of European Biochemical Societies Scholarship was awarded to Ashwinipriyadarshini Megur for innovative ideas for solving health problems.

Dr Arvydas Lubys, Director

KEY FACTS AND FIGURES

Areas of research interest

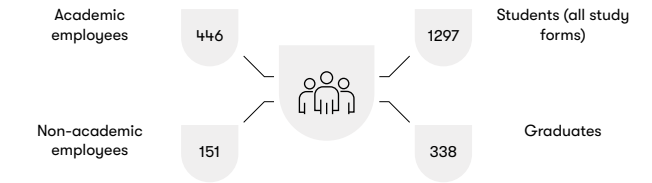


Study portfolio in 2024

	Bachelor studies	Master studies
Total number of programmes implemented	7	9
Programmes implemented in a foreign language	-	3
	Doctoral studies	
Number of science fields	6 (Biochemistry, Biology, Biophysics, Ecology and Environmental Protection, Zoology, Chemistry Engineering)	

The figures for the study programmes are based on the data of 1 October.

Number of employees, students, and graduates in 2024

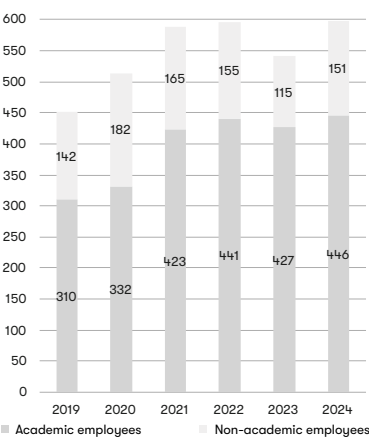


Number of foreign nationals employed in 2023–2024

	Academic employees	Non-academic employees	Total
2024	27	2	29
2023	21	2	23

Based on the data of 31 December.

Changes in the number of employees, 2019–2024



Based on the data of 31 December.

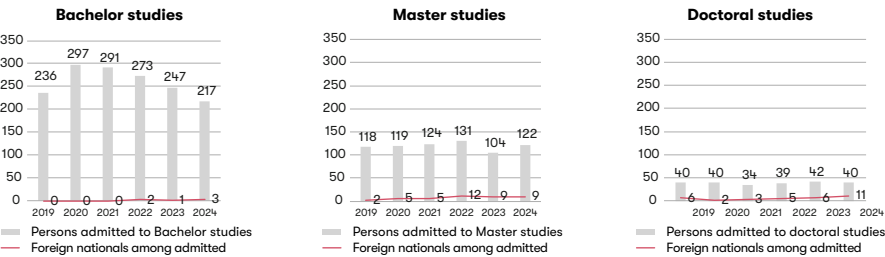
Change in the number of non-academic employees in 2024 compared to the average of 2019–2023

-0.53 %

Change in the number of academic employees in 2024 compared to the average of 2019–2023

15.36 %

Admissions to studies, 2019–2024



Change in the number of admitted persons by study cycle in 2024 compared to the average of 2019–2023

-19.27 %

2.35 %

2.56 %

The first cycle and the second cycle indicators were calculated on the basis of the data of 1 October, and the third cycle indicators were calculated on the basis of the data of 31 December.

Number of admitted students who received the highest evaluation in their matura exams in 2023–2024

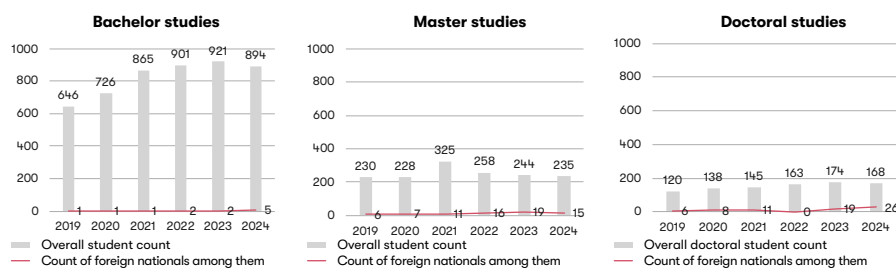


This accounted for **6.97 per cent** of the total number of students admitted to VU who received the highest evaluation in their matura exams

This accounted for **5 per cent** of the total number of students admitted to VU who received the highest evaluation in their matura exams

Based on the data of 1 October.

Number of students, 2019–2024

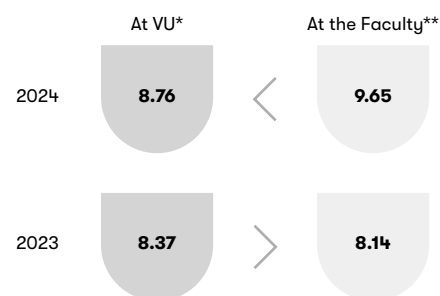


Change in the number of students by study cycle in 2024 compared to the average of 2019–2023



The first cycle and the second cycle indicators were calculated on the basis of the data of 1 October, and the third cycle indicators were calculated on the basis of the data of 31 December.

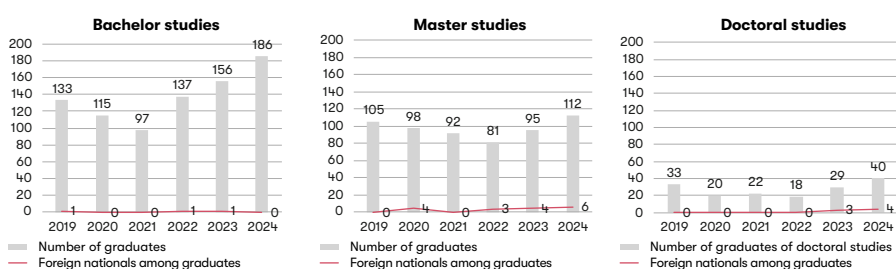
Student–faculty ratio, 2023–2024



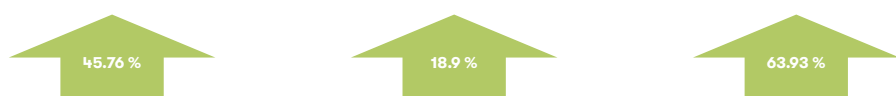
* Calculated by dividing the total number of VU students in the first cycle, second cycle, integrated, and professional (pedagogy) studies on 1 October by the total number of VU teaching staff on 31 December.

** Calculated by dividing the total number of Faculty students in the first cycle and second cycle on 1 October by the number of Faculty teaching staff on 31 December.

Number of graduates, 2019–2024

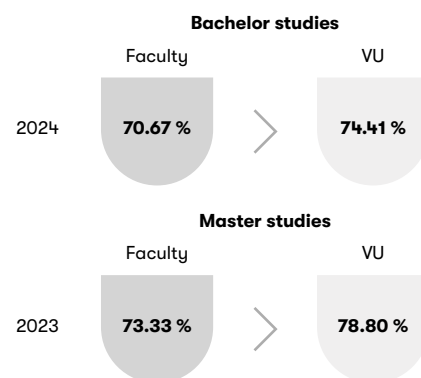


Change in the number of graduates by cycle in 2024 compared to the average of 2019–2023



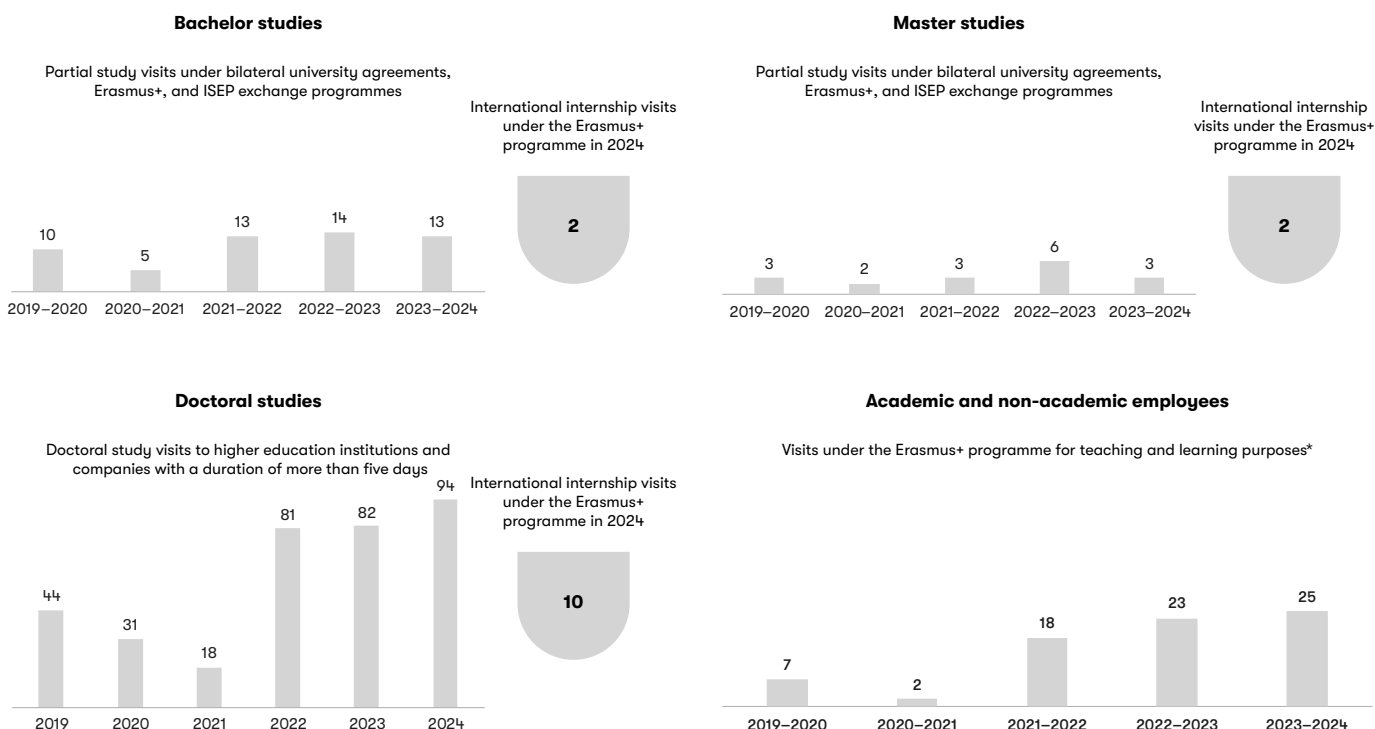
The first cycle and the second cycle indicators were calculated on the basis of the data of 1 September, and the third cycle indicators were calculated on the basis of the data of 31 December.

Graduate career success in 2024



Target outcome → the level of highly qualified graduates and/or graduates continuing their studies in a higher cycle growing at least 1 per cent annually, but no lower than 60 per cent. Based on the data of 1 October.

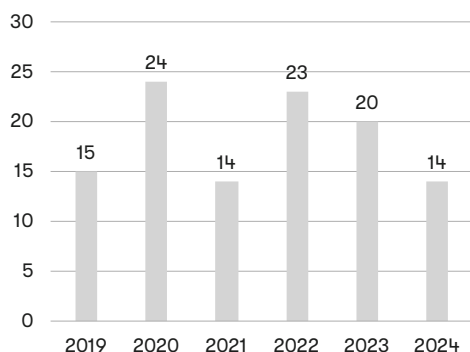
Mobility of students, doctoral students and employees, 2019–2024



Based on the data of 31 December.

*The statistics on employee mobility do not include secondments and work placements carried out under mobility forms and programmes other than Erasmus+.

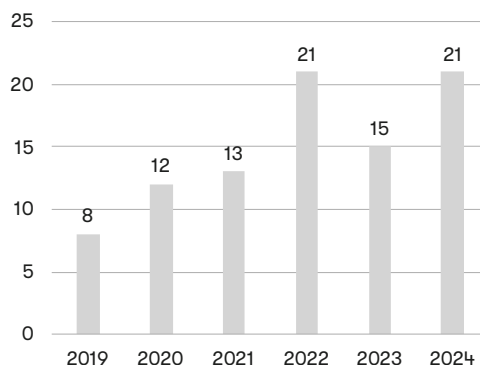
Successfully defended dissertations,



The total number of successfully defended dissertations during the period of 2019–2024 is 110

Based on the data of 31 December.

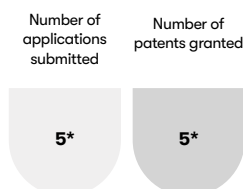
Number of postdoctoral trainees at the University, 2019–2024



Average number of postdoctoral trainees per year is 15

Based on the data of 31 December.

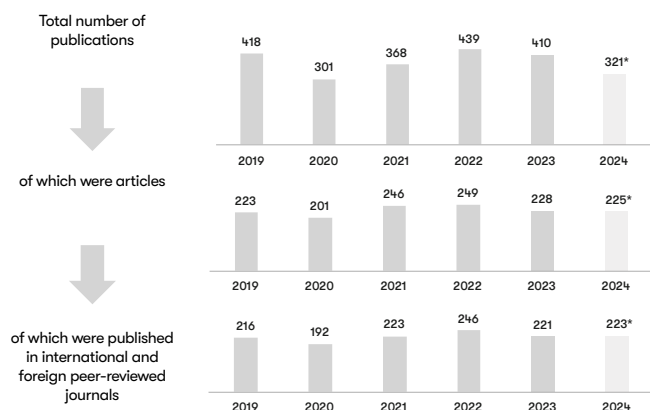
Number of patents in 2024



* 1 of which was acquired in collaboration with another academic unit.

Data of 31 December.

Number of publications, 2019–2024



* The publication figures for 2024 are based on the data of 10 February 2024 and are not exhaustive, as the registration of publications was still ongoing at that time. The publication figures for 2024 are not included in the calculations.

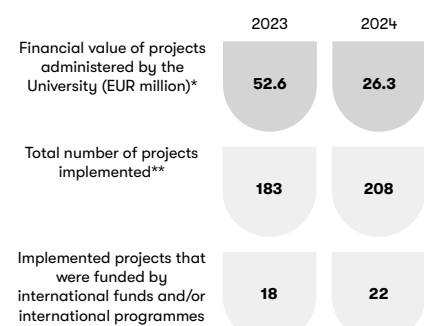
Change in 2023 compared to the average of 2019–2022

7.47 %

-0.76 %

0.80 %

Projects, 2023–2024



* The value of projects implemented in a given year is presented.

** The total number of projects include projects whose activities were in the implementation phase during the given year. In the case of internal partnership at VU, i.e. when several faculties participated in one project, the project was accounted only once and assigned only to the unit that owned the project.

Key projects in 2024

Programme of Excellence of the Life Sciences Center

The total value of the project amounts to EUR 5,500,000. The project is funded by the Ministry of Education Science and Sport/Research Council of Lithuania under the programme 'Universitety ekselencijos iniciatyva' ('University Excellence Initiative') (Project No. S-A-UEI-23-10). Project manager – Prof. Dr Saulius Klimašauskas.

Misijomis grįstų mokslo ir inovacijų programų įgyvendinimas, Inovacijos sveikatai – Genų technologijų centro (kompetencijų centro) steigimas (TRACEGET) (Implementation of Mission-Driven Science and Innovation Programmes, Innovations for Health – Establishment of the Gene Technology Center (Competency Center) (TRACEGET))

The value of the project administered by the University is EUR 3,332,106.82. The project is funded by the Ministry of Education, Science and Sport/Ministry of Economy and Innovation under the Recovery and Resilience Facility instrument (Project No. 2023/2-11190 and No. PVT-679-(171 E)). Project manager – Daumantas Gudelis.

Jumbo Phages In Translational Enzyme Research (JUPITER)

The total value of the project amounts to EUR 1,499,124. The value of the project administered by the University is EUR 1,499,124. The project is funded by the European Union, the Horizon Europe programme (Project No. 101163749). Project manager – Research Prof. Dr Patrick Pausch.

Profile Nucleases and Repurpose Off-Targets to Expand Gene Editing (PROTEGE)

The value of the project administered by the University is EUR 1,141,779. The project is funded by the European Union, the Horizon Europe programme (Project No. 101078247). Project manager – Research Prof. Dr Stephen Knox Jones Jr.

Žmogaus ligos: chronoepigenominė vystymosi-senėjimo trajektorija (Human Diseases: Chronoepigenomic Trajectory of Development-Ageing)

The value of the project administered by the University is EUR 1,000,000. The project is funded by the charity and support foundation Future Biomedicine Foundation (Project No. (1.90 E) 14900-RPF-369). Project manager – Prof. Dr Artūras Petronis.

Improving Mental Health, Wellbeing, and Resilience of Healthcare Workers in Changing Environments (APOLLO2028)

The value of the project administered by the University is EUR 495,306.25. The project is funded by the European Union, the Horizon Europe programme (Project No. 101137144). Project manager – Prof. Dr Osvaldas Rukšėnas.

Pan-European Network for Neuroscience Research Infrastructure and Strengthening of Support Capacities (PANERIS)

The value of the project administered by the University is EUR 351,650. The project is funded by the European Union, the Horizon Europe programme (Project No. 101160180). Project manager – Prof. Dr Daiva Baltrikienė.

Micro-Capsules for Versatile Multiplexed Cytometry (Micro-Capsules for VMC)

The value of the project administered by the University is EUR 308,794. The project is funded by the NIH Grants, Cancer Biology Research programme (Project No. 151847.5123626.0002). Project manager – Prof. Dr Linas Mažutis.