

RESPECT LIFE  
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LITHUANIAN UNIVERSITY  
OF HEALTH SCIENCES



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FACULTY OF MEDICINE

## CAREER OPPORTUNITIES



Biomedical Technicians with a track in Molecular Biology are primarily demanded by research and diagnostic laboratories in genetics in public (clinical, public health, forensic and law enforcement, environment protection sector, transplant and blood donor centers, fertility clinics), research and teaching institutions or commercial sectors (biotechnology companies, pharmaceutical and chemical industries, reference laboratories, the cosmetics or food industry).

## FURTHER STUDIES

Master degree programmes in various Lithuanian or foreign institutions that may be followed by PhD studies.



MORE INFORMATION AND ADMISSION INQUIRIES  
INTERNATIONAL RELATIONS AND STUDY CENTRE

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**MEDICAL AND  
VETERINARY  
GENETICS**

## MEDICAL AND VETERINARY GENETICS

### BACHELOR DEGREE

Duration – 3.5 years

Degree – Bachelor in Life Sciences

Qualification – Biomedical Technologist  
(track in Molecular Biology)

210 credits (ECTS)

### WHY STUDY MEDICAL AND VETERINARY GENETICS?

- Recognized diploma
- Erasmus+ and other exchange programmes and internships abroad for a semester or a year
- Small groups, up to 10 students
- Multicultural environment and student community: students from 76 different countries, nearly 20% of the total student body at LSMU
- Well-functioning student support programs: mentoring, tutoring and psychological counselling, etc.

### DISTINGUISHABLE FEATURES OF THE PROGRAMME

- Molecular Biology and Genetics – TOP future profession all around the world;
- Unique possibility to develop competences for understanding of the disease pathogenesis through Molecular Biology related subjects;
- Career in proximity with geneticists and clinicians contributing to further development of genetic knowledge;
- Theory and practice in genetic testing in clinical practice, such as cytogenetics, molecular cytogenetics, molecular genetics and biochemical analysis;
- Modern technologies for genome, transcriptome or proteome analysis and bioinformatics data interpretation;
- Labster Training – cutting-edge interactive lab simulations;
- Focus on practical activity and learning by doing. 8 weeks of obligatory practice and voluntary practice on-demand that can be initiated during the first year of study.
- Focus on training how to use information technology in genetic research;
- Close integration of theory and practice, additional experience in research execution, data analysis and interpretation.

### ANALYTICAL SKILLS

Graduates from Medical and Veterinary Genetics are trained or given at least basics skills in a number of analytical methods: DNA and RNA extraction, concentration and purity determination, PCR, electrophoresis, polymorphism analysis, bioinformatics data analysis, DNA methylation analysis, gene expression analysis, cytogenetic and molecular genetic analysis; basic cell culture techniques and methods; immunoassay methods. They know basic laboratory procedures for assurance of accuracy and precision of test results.

