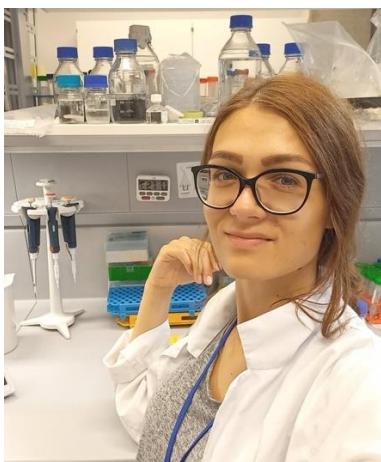


# Liepa GASIULĖ, PhD

(the former name – Stasė GASIULĖ  
(BUTKYTĖ))



## CONTACT INFO

Vilnius University,  
Institute of Biotechnology  
Saulėtekio Ave. 7, Vilnius LT-10257,  
Lithuania  
[liepa.gasiule@bt.vu.lt](mailto:liepa.gasiule@bt.vu.lt)  
+37067205704

## MAIN RESEARCH INTERESTS

Epigenetics, Molecular Biology,  
DNA methyltransferases,  
methionine adenosyltransferase,  
click chemistry

## Scientific Skills

- Primary, cancer cell, mouse embryonic cell line maintenance
- CRISPR/Cas 9 genome editing
- Transfection
- Electroporation
- Fluorescence microscopy
- Apoptosis and autophagy detection methods
- RNA, DNA, and protein isolation from cell lines, tumors, other tissues, and plasma
- RT-qPCR analysis
- Northern-blot analysis
- Western blot analysis
- Illumina sequencing
- Construction of plasmids
- Direct mutagenesis
- Protein purification
- SDS-PAGE analysis
- HPLC-MS analysis
- Click chemistry methods
- Methods for Investigation of methionine adenosyltransferase and methyltransferase activity

## Education

### 2020 – Ph.D. in Biochemistry, Vilnius university

Dissertation thesis: “Functional analysis of canonical and mirtronic miRNAs in thoracic ascending aortic aneurysm tissues and digestive system tumors”

### 2012 – Master’s degree in Biochemistry, Vilnius university

Master thesis: “Photosensibilisation induced hallmarks of cornification, apoptosis, and autophagy in primary keratinocytes HEKa and epidermoid carcinoma A-431 cells”

### 2010 – Bachelor’s degree in Biochemistry, Vilnius university

Bachelor thesis: “The use of cationic polymers in protein transfection”

## Scientific Work Experience

### 2020-present, Research Scientist

Life Sciences Center, Vilnius University, Institute of Biotechnology, Department of Biological DNA modification

### 2012–2020, Junior Research Scientist

Life Sciences Center, Vilnius University, Institute of Biotechnology, Department of Biological DNA modification

### 2012 Senior Specialist

National Cancer Institute

### 2011–2012 Senior Specialist

Life Sciences Center, Vilnius University, Institute of Biosciences, Department of Biochemistry and Molecular Biology

### 2008–2010 Technician

ThermoFisher Scientific Baltics

## Teaching and other commitments

### The commission member for evaluation of the student project defence

Medicine and Veterinary genetics studies, Lithuania University of Health Sciences

### Supervision of Bachelor’s and Master’s degree research projects for students

Biochemistry studies, Vilnius University

### Supervisor of Molecular Biotechnology laboratory course training

Vilnius University

### Reviewer of bachelor’ and Master’s degree student research projects

Biochemistry and Molecular Biology's studies, Vilnius University

### Participation in scientific dissemination

“Epigenetic mechanism of aortic wall remodeling” in the journal „Cardiology Practice”. Patamsytė V, Butkytė S, Stankevičius V, Žukovas G, Vilkaitis G, Lesauskaitė V

### Participation in broadcast on national (LRT) and private (TV3, LNK) TV news

Presentation of ERC Advanced Grant “Single-cell temporal tracking of epigenetic DNA marks - Epitrack”.

## International Conferences

### 2021, 2022 – The COINS, Lithuania, Vilnius.

### 2018 – EMBO/EMBL Symposia: : The Complex Life of RNA

Heidelberg, Germany

### 2016 – EMBO/EMBL Symposia: Organoids

Heidelberg, Germany

### 2013 – EMBO/EMBL Symposia: The Non-Coding Genome

Heidelberg, Germany

## Projects

2019–2022 – Single-cell temporal tracking of epigenetic DNA marks – Epitrack  
European Research Council (ERC) Advanced Grant

2016–2018 – Age related remodeling of aorta and dilatative pathology of  
ascending aorta: search for epigenetic biomarker

Healthy aging program funded by Research Council of Lithuania

2015–2018 – Novel biomarkers for individualized therapy of colon cancer:  
proteomics, microRNomics and clinics

Healthy aging program funded by Research Council of Lithuania

2012–2014 – Splicing factors and miRNA as diagnostic biomarkers for cancer  
digestive system

National Research Programme "Non-infectious chronic diseases" funded by  
Research Council of Lithuania

## Awards

2009 - Eileen and Vincent Cadis Foundation Scholarship for outstanding academic  
achievements

2016- EMBO/EMBL Scholarship for an International Conference

2017-2018 - Lithuanian Science Council Scholarship for academic achievements  
for doctoral students

## List of publications

1. Stankevicius V, Gibas P, Masiulionyte B, **Gasiule L**, Masevicius V, Klimasauskas S, Vilkaitis G. Selective chemical tracking of Dnmt1 catalytic activity in live cells, *Molecular Cell*, 2022, 82, 1053–1065.

2. Daugelaviciene N, Grigaitis P, **Gasiule L**, Dabkeviciene D, Neniskyte U, Sasnauskienė A. Lysosome-targeted photodynamic treatment induces primary keratinocyte differentiation. *Journal of Photochemistry and Photobiology B: Biology*, 2021, 218:112183.

3. **Gasiulė, S.\***; Stankevičius, V.\*; Patamsytė, V.; Ražanskas, R.; Žukovas, G.; Kapustina, Ž.; Žaliaduonytė, D.; Benetis, R.; Lesauskaitė, V.; Vilkaitis, G. Tissue-Specific miRNAs Regulate the Development of Thoracic Aortic Aneurysm: The Emerging Role of KLF4 Network. *Journal of Clinical Medicine*. 2019, 8, 1609.

4. **Gasiulė, S.\***; Dreize, N.\*; Kaupinis, A.; Ražanskas, R.; Čiupas, L.; Stankevičius, V.; Kapustina, Ž.; Laurinavičius, A.; Valius, M.; Vilkaitis, G. Molecular Insights into miRNA-Driven Resistance to 5-Fluorouracil and Oxaliplatin Chemotherapy: miR-23b Modulates the Epithelial-Mesenchymal Transition of Colorectal Cancer Cells. *Journal of Clinical Medicine*. 2019, 8, 2115.

5. **Butkytė S**, Čiupas L, Jakubauskienė E, Vilys L, Mocevicius P, Kanopka A, and Vilkaitis G. Splicing-dependent expression of microRNAs of mirtron origin in human digestive and excretory system cancer cells. *Clinical Epigenetics*, 2016, 8:33.

6. Stankevicius V, Vasauskas G, Bulotiene D, **Butkytė S**, Jarmalaite S, Rotomskis R and Suziedelis K. „Gene and miRNA expression signature of Lewis lung carcinoma LLC1 cells in extracellular matrix enriched microenvironment“. *BMC cancer*, 2016.

7. Sasnauskienė A, Jonušienė V, Krištaponienė A, **Butkytė S**, Dabkevičienė D, Kanopienė D, Kazbarienė B, and Didžiapetrienė J. NOTCH1, NOTCH3, NOTCH4, and JAG2 protein levels in human endometrial cancer. *Medicina*, 2014, 50: 14-18.