

# Dr. Ielizaveta Gorodetska

*h-index* 9



<https://orcid.org/0000-0002-3512-0462>



<https://www.linkedin.com/in/ielizaveta-liza-gorodetska-597588151/>

22.11.1989, Kyiv, Ukraine

[Liza.Gorodetskaya@Oncoray.de](mailto:Liza.Gorodetskaya@Oncoray.de)

---

## WORK EXPERIENCE

Since 10/2020

Postdoctoral fellow  
Technische Universität Dresden,  
Universitätsklinikum Carl-Gustav-Carus Dresden,  
Faculty of Medicine and University Hospital Carl Gustav Carus,  
OncoRay – National Center for Radiation Research in Oncology  
Dresden.

Research Group: Biomarkers for Individualized Radiotherapy  
Supervisor: Prof. Dr. Anna Dubrovska

10/2016 – 10/2020

PhD Student  
Technische Universität Dresden,  
Universitätsklinikum Carl-Gustav-Carus Dresden,  
Faculty of Medicine and University Hospital Carl Gustav Carus,  
OncoRay – National Center for Radiation Research in Oncology  
Dresden.

Research Group: Biomarkers for Individualized Radiotherapy.  
Supervisor: Prof. Dr. Anna Dubrovska  
Project: "The interplay between BRCA and ALDH proteins in the  
regulation of prostate cancer radioresistance and stem cell  
properties".

01/2015 – 09/2016

Technical Assistant  
Taras Shevchenko National University of Kyiv,  
Educational and Scientific Center "Institute of Biology and  
Medicine", Department of General and Molecular Genetics.

Person in charge for hygiene control and consumables  
ordering; assistance with undergraduate students;  
maintenance and manipulation of *Drosophila melanogaster*  
(e.g. anaesthetizing flies, transferring flies from one vial to  
another, sexing flies).

2012 – 12/2014

Laboratory Assistant  
Taras Shevchenko National University of Kyiv,  
Educational and Scientific Center "Institute of Biology and  
Medicine", Department of General and Molecular Genetics.

Care, maintenance and manipulation of *Drosophila  
melanogaster* (e.g. anesthetizing flies, transferring flies from  
one vial to another, sexing flies).

03/2009 – 09/2016 Nurse-Anesthetist  
The Scientific and Practical Medical Center of Pediatric Cardiology and Cardiac Surgery of the Ministry of Healthcare of Ukraine, Intensive Care Unit (ICU).

Evaluate and monitor the patient's progress; identify sudden or subtle changes in a patient's medical condition; begin treatment and monitor doses; care for patient needs throughout their recovery in the ICU unit; maintain patient records.

## **EDUCATION**

2016 – 2020

Doctor rerum medicarum (Dr. rer. medic.) – Certificate with honor (Summa Cum Laude)

Supervisor: Prof. Dr. Anna Dubrovska

Thesis title: "The interplay between BRCA and ALDH proteins in the regulation of prostate cancer radioresistance and stem cell properties".

2013 – 2014

Specialist Diploma in Genetics – Certificate with honor.  
Taras Shevchenko National University of Kyiv,  
Educational and Scientific Center "Institute of Biology and Medicine", Department of General and Molecular Genetics,

Supervisor: Prof. Dr. Iryna Kozeretska

Diploma: "The frequency of *BRCA* mutations in cancer patients from Ukraine".

2009 - 2013

Bachelor's degree in Biology,  
Taras Shevchenko National University of Kyiv,  
Educational and Scientific Center "Institute of Biology and Medicine", Department of General and Molecular Genetics,

Supervisor: Prof. Dr. Iryna Kozeretska

Diploma: "Mobile genetic elements in oncological diseases".

## **GRANTS, FELLOWSHIPS, AWARDS:**

10/2024

Science Days 2024, 1<sup>st</sup> Flash Talk Award

10/2023

Junior Medical and Clinician Scientist Funding MeDDrive of the Medical Faculty Carl Gustav Carus, TU Dresden

06/2023

Travel Award from the Graduate Academy, TU Dresden

03/2022

Travel grant from the DKTK School of Oncology

12/2021

PhD Thesis award (Promotionspreis) from the Stiftung Hochschulmedizin Dresden und der Medizinischen Fakultät Carl Gustav Carus

01/2019 – 02/2019

Collaborative Developmental Scholarship,  
The Federation of European Biochemical Societies.

09/2017

Travel Grant from the European Radiation Research Society (ERRS) to attend the Joint meeting of ERRS and the "Gesellschaft für Biologische Strahlenforschung" (GBS; society for biological radiation research), Essen, Germany.

03/2017

Travel Grant for ESMO Symposium on Signaling Pathways in Cancer 2017, Sitges, Barcelona, Spain.

24/04/2017 – 05/05/2017	Fellowship to attend radiobiological course "The CONCERT course 2017: CELOD: Cellular effects of ionizing radiation – introduction to radiation biology", Stockholm, Sweden.
10/2016 – 10/2018	German Academic Exchange Service (Deutscher Akademischer Austauschdienst), Research Grants - Bi-nationally Supervised Doctoral Degrees.
<b>CONFERENCES:</b>	
05/2024	The European Society Radiation Oncology (ESTRO) congress 2024, Glasgow, Scotland (talk).
06/2023	International Wolfsberg Meeting on Molecular Radiation Biology/Oncology (talk), Oslo, Norway (poster)
05/2022	The European Society Radiation Oncology (ESTRO) congress 2022, Copenhagen, Denmark (talk).
05/2021	Virtual Keystone symposia, Cancer Stem Cells: Advances in Biology and Clinical Translation (registration fee bursary, sci-talk).
09/2017	The Annual Meeting of The European Radiation Research Society and Deutschen Gesellschaft für Biologische Strahlenforschung, Essen, Germany (travel grant, poster).
03/2017	The European Society for Medical Oncology, Symposium on Signalling Pathways in Cancer, Sitges, Barcelona, Spain (travel grant).
11/2016	Molecular Diagnostics, Genomics and Epigenetics in Clinical Oncology, Rome, Italy.
11/2015	International Conference of Young Naturalists "From Biotechnology to Environmental Protection", University of Zielona Góra, Zielona Góra, Poland (first poster prize).
<b>ADVANCED TRAININGS:</b>	
09/2019	Course on Using Experimental Animals in Research (UEAR), Technische Universität Dresden, Dresden, Germany.
05/2019	Workshop: "Master Class Histopathology", Universitätsklinikum Schleswig-Holstein, Institut für Pathologie Lübeck, Lübeck, Germany.
04/2019	Workshop: "Cancer Metabolism and Radioresistance", OncoRay – National Center for Radiation Research in Oncology, Dresden, Germany.
24/04/2017 – 05/05/2017	Radiobiological course "The CONCERT course 2017: CELOD: Cellular effects of ionizing radiation – introduction to radiation biology", Stockholm, Sweden.
<b>PUBLICATIONS:</b>	
Review articles:	Püschel J, Dubrovskaja A, <b>Gorodetska I</b> . The Multifaceted Role of Aldehyde Dehydrogenases in Prostate Cancer Stem Cells. <i>Cancers</i> (Basel). 2021 Sep; 13(18): 4703. doi: 10.3390/cancers13184703
	Peitzsch C, <b>Gorodetska I</b> , Klusa D, Shi Q, Alves T, Pantel K, Dubrovskaja A. Metabolic regulation of prostate cancer heterogeneity and plasticity. <i>Semin Cancer Biol.</i> 2020; S1044-579X(20)30261-3. doi: 10.1016/j.semcancer.2020.12.002.

**Gorodetska I**, Kozeretska I, Dubrovskaya A. BRCA Genes: The Role in Genome Stability, Cancer Stemness and Therapy. *J Cancer*. 2019; 10(9):2109-2127. doi:10.7150/jca.30410.

Research articles  
(first or co-first author):

**Gorodetska, I.**, Offermann, A., Püschel, J., Lukiyanchuk, V., Gaete, D., Kurzyukova, A., Freytag, V., Haider, M.T., Fjeldbo, C.S., Di Gaetano, S., Schwarz, F.M., Patil, S., Borkowetz, A., Erb, H.H.H., Baniahmad, A., Mircetic, J., Lyng, H., Löck, S., Linge, A., Lange, T., Knopf, F., Wielockx, B., Krause, M., Perner, S., Dubrovskaya, A. (2024). ALDH1A1 drives prostate cancer metastases and radioresistance by interplay with AR- and RAR-dependent transcription. *Theranostics*, 14(2), 714-737. <https://doi.org/10.7150/thno.88057>.

**Gorodetska I**, Inomistova M, Khranovska N, Skachkova O, Michailovich Y, Rybchenko L, Bychkova A, Stefanovich A, Klimuk B, Poluben L, Klymenko S, Rossokha Z, Kyriachenko S, Popova O, Gorovenko N, Ponomarova O, Kozeretska I. The reduction of two BRCA1 gene mutations frequencies in ovarian cancer patients from Ukraine. *Meta Gene*. 2021; doi:10.1016/j.mgene.2021.100900. In Press, Journal Pre-proof.

Schulz A, **Gorodetska I**, Behrendt R, Fuessel S, Erdmann K, Foerster S, Datta K, Mayr T, Dubrovskaya A, Muders M. Linking NRP2 with EMT and chemoradioresistance in bladder cancer. *Front Oncol*. 2020. doi: 10.3389/fonc.2019.01461.

**Gorodetska I**, Lukiyanchuk V, Peitzsch C, Kozeretska I, Dubrovskaya A. BRCA1 and EZH2 cooperate in regulation of prostate cancer stem cell phenotype. *Int J Cancer*. 2019; doi: 10.1002/ijc.32323.

**Gorodetska I**, Serga S, Lahuta T, Ostapchenko L, Demydov S, Khranovska N, Skachkova O, Inomistova M, Kolesnik O, Svintsitsky V, Tsip N, Peresunko A, Kmit' N, Manzhura O, Rossokha Z, Popova O, Salomakhina H, Kyriachenko S, Kozeretska I. Prevalence of two BRCA1 mutations, 5382insC and 300T>G, in ovarian cancer patients from Ukraine. *Familial Cancer*. 2017; 16(4): 471-476. doi:10.1007/s10689-017-9978-9.

**Gorodetska I**, Serga S, Levkovich N, Lahuta T, Ostapchenko L, Demydov S, Anikusko N, Cheshuk V, Smolanka I, Sklyar S, Polenkov S, Boichenko O, Kozeretska I. The frequency of BRCA1 founder mutation c.5266dupC (5382insC) in breast cancer patients from Ukraine. *Hereditary Cancer in Clinical Practice*. 2015; 13:19. doi:10.1186/s13053-015-0040-3.

Co-author:

Seifert M, Peitzsch C, **Gorodetska I**, Börner C, Klink B, Dubrovskaya A. Network-based analysis of prostate cancer cell lines reveals novel marker gene candidates associated with radioresistance and patient relapse. *PLoS Comput Biol*. 2019 Nov 4;15(11):e1007460. doi: 10.1371/journal.pcbi.1007460. eCollection 2019 Nov.

Digomann D, Kurth I, Tyutyunnykova A, Chen O, Löck S, **Gorodetska I**, Peitzsch C, Skvortsova II, Negro G, Aschenbrenner B, Eisenhofer G, Richter S, Heiden S, Porrmann J, Klink B, Schwager C, Dowle AA, Hein L, Kunz-Schughart LA, Abdollahi A, Lohaus F, Krause M, Baumann M, Linge A, Dubrovskaya A. The CD98 Heavy Chain Is a Marker and Regulator of Head and Neck Squamous Cell Carcinoma Radiosensitivity.

