Oleksandra Lykhova Gvardiyska st., 41, Kyiv, Ukraine, Mobile phone: + 380634248112 E-mail: AlexxDNA@gmail.com

PERSONAL INFORMATION

Name: Oleksandra
Surname: Lykhova **Gender:**
female
Date of birth: 25.06.1986
Place of birth: Yenakiieve, Donetsk region, Ukraine
Nationality: Ukrainian
Marital status: not married

Scientific profiles

Scopus: 52164073600
ORCID: 0000-0003-3622-0489
Google Scholar profile: dTjwi0wAAAAJ

EDUCATION AND SCIENTIFIC QUALIFICATION

2015	Ph.D., specialty 14.01.07 - "Oncology"; R.E.Kavetsky Institute of Experimental pathology, oncology and radiobiology, Kyiv, Ukraine. Dissertation topic: *Phenotypic characteristics of tumor cells in vitro and in vivo after their transduction by interferon-beta gene in recombinant baculovirus vector.*
2013-2015	Postgraduate studies at the R.E.Kavetsky Institute of Experimental pathology, oncology and radiobiology, Kyiv, Ukraine.
2003-2009	Faculty of Biology, Taras Shevchenko National University of Kyiv, (Kyiv, Ukraine). Master Degree of Biology, specialty - immunology, microbiology and virology.

WORKING EXPIRIENCE

Position:

2018	The Senior Researcher of Tumor Monitoring and Therapy Design Department, R.E.Kavetsky Institute of Experimental pathology, oncology and radiobiology NASU,Kyiv, Ukraine.

Previous positions:

2017-2018	The Researcher of Model systems of experimental oncology Department, R.E.Kavetsky Institute of Experimental pathology, oncology and radiobiology NASU, Kyiv, Ukraine.

2015-2017 The Junior Researcher of Model systems of experimental oncology Department, R.E.Kavetsky Institute of Experimental pathology, oncology and radiobiology NASU, Kyiv, Ukraine

2012-2013 The Junior Researcher of Model systems of experimental oncology Department, R.E.Kavetsky Institute of Experimental pathology, oncology and radiobiology NASU, Kyiv, Ukraine

2009-2012 The Senior Engineer of Model systems of experimental oncology Department, R.E.Kavetsky Institute of Experimental pathology, oncology and radiobiology NASU, Kyiv, Ukraine

SCIENTIFIC RESEARCH PROJECT (SRP) / GRANTS / SCIENTIFIC PROGRAMS

During the last 10 years she has participated in the implementation of 5 international scientific andtechnical projects and projects funded by the Ukrainian side.

Title of the research work	№ registration in UkrINTEI (RK)	Years of implementation	Supervisor / performer
Novel composites based on cerium oxide nanoparticles and carbon enterosorbents for acute radiation sickness therapy. NATO grant "Science for Peace and Security".	G5683	2020-2023	performer
Functional activity of phagocytic cells as a predictor of the effectiveness of doxorubicin antitumor action. Grant of the NAS of Ukraine for research work of young scientists.	0119U102416	2020	Supervisor
The role of epithelial-mesenchymal transition in the mechanisms of drug resistance formation in human prostate cancer cells. Grant of the NAS of Ukraine for research work of young scientists.	0117U006124	2017-2018	Supervisor
Creation of a new integrated cell system for studying the mechanisms of interaction of tumor cells and their microenvironment in vitro. Grant of the NAS of Ukraine for research work of young scientists.	0113U004653	2013-2014	performer
Inhibition of metastatic potential in tumor cells due to exogenous interferon or genetic constructs containing the interferon gene. Grant of the President of Ukraine for gifted youth.	№11/2011	2011	Supervisor

ADVISORY AND EXPERT ACTIVITIES

From 2021	Member of the expert council (temporary) for approbation of dissertations of R.E.Kavetsky Institute of Experimental pathology, oncology and radiobiology NASU, Kyiv, Ukraine
From 2019	Scientific editor and reviewer of the "Experimental oncology" journal
From 2012	Member of the conferences organizing committee in the R.E.Kavetsky Institute of Experimental pathology, oncology and radiobiology NASU, Kyiv, Ukraine

EDUCATIONAL ACTIVITIES AND TRAINING OF SCIENTIFIC PERSONNEL

From 2018 until now I teach a special course for graduate students: "Cell culture in oncology" on the basis of R.E.Kavetsky Institute of Experimental pathology, oncology and radiobiology NASU.
Under my leadership, 25 course and qualification works of students of Taras Shevchenko National University of Kyiv and National university of food technologies were successfully prepared and defended.

MEMBERSHIP IN SCIENTIFIC SOCIETIES

Member of the Ukrainian Biochemical Society (from 2018 to present).
Member of the Ukrainian Society of Cancer Researchers

AWARDS AND DISTINCTIONS

2018-2019	Scholarship of the President of Ukraine for young scientists of the National Academy of Sciences of Ukraine
2010-2011	Scholarship of the National Academy of Sciences of Ukraine for young scientists

PUBLICATION ACTIVITY

The list of publications includes 119 scientific papers: 26 articles in leading professional Ukrainian journals, 19 articles in international journals (including 3 Q1 article and 4 Q2 publications), 1 patent,73 abstracts presented at national and international conferences.

Selected publications:

1. Yuliia Shlapa, Serhii Solopan, Veronika Sarnatskaya, Katarina Siposova, Ivana Garcarova, Katerina Veltruska, Illia Timashkov, **Oleksandra Lykhova**, Denis Kolesnik, Andrey Musatov, Vladimir Nikolaev, Anatolii Belous. Cerium dioxide nanoparticles synthesized via precipitation at constant pH:Synthesis, physical-chemical and antioxidant properties. Colloids and Surfaces B: Biointerfaces, Vol. 220, 2022, 112960. **Q1**

2. Lykhova O, Zavelevich M, Philchenkov A, Vidasov N, Kozak T, Lozovska Y, Andrusyshyna I, Bishayee A, Borikun T, Lukianova N, Chekhun V. Does insulin make breast cancer cells resistant to doxorubicin toxicity? Naunyn Schmiedebergs Arch Pharmacol. 396(11), 2023, 3111-

3122. **Q2**

3. Veronika Sarnatskaya, Yuliia Shlapa, **Alexandra Lykhova**, Olga Brieieva, Igor Prokopenko, Alexey Sidorenko, Serhii Solopan, Denis Kolesnik, Anatolii Belous, Vladimir Nikolaev. Structure and biological activity of particles produced from highly activated carbon adsorbent. Heliyon, Vol. 8(3), 2022, e09163. **Q1**

4. A. Lykhova, Yu.Kudryavets, L.Strokovska, N.Bezdenezhnykh, N.Semesiuk, I.Adamenko, J.Zaharuk, A.Vorontsova. (2015). Suppression of proliferation, tumorigenicity and metastasis of lung cancer cells after their transduction by interferon-beta gene in baculovirus vector. Cytokine, 71(2): 318-26. **Q2**

5. N.Bezdenezhnykh, N.Semesiuk, **O.Lykhova**, V.Zhylchuk, Yu.Kudryavets. (2014). Impact of stromal cell components of tumor microenvironments on epithelial-mesenchymal transition in breastcancer cells. *Experimental Oncology*, 36(2): 72-78. **Q2**

6. N Semesiuk, A Zhylchuk, N Bezdenezhnykh, **A Lykhova**, A Vorontsova, V Zhylchuk, Yu Kudryavets. (2013). Disseminated tumor cells and enhanced level of some cytokines in bone marrow and peripheral blood of breast cancer patients as predictive factors of tumor progression. *Experimental Oncology*, 35(4): 295-302. **Q2**

7. Franco Venanzi, Victor Shifrin, Michael Y. Sherman, Vladimir Gabai, Oleg Kiselev, Andrey Komissarov, Mikhail Grudinin, Maria Shartukova, Ekaterina A. Romanovskaya- Romanko, Yuri Kudryavets, Natalya Bezdenezhnykh, **Oleksandra Lykhova**, Nadiia Semesyuk, Antonio Concetti, Anatoly Tsyb, Marina Filimonova, Victoria Makarchuk, Raisa Yakubovsky, Andrey Chursov, Vita Shcherbinina and Alexander Shneider. (2013). Broad-spectrum anti-tumor and anti-metastatic DNA vaccine based on p62-encoding vector. *Oncotarget*, 4(10): 1829- 1835. **Q1**

SCIENTIFIC INTERESTS

Study of tumor cell biology.
Possibilities of using gene therapy to inhibit the growth, invasive and metastatic activity of malignantcells of different histogenesis.
The role of epithelial-mesenchymal transition in the processes of malignant phenotype formation intumor cells of different histogenesis.
Features of the metabolic phenotype of tumor cells.