Curriculum Vitae

	Larysa Shlapatska
	Kyiv, Ukraine +380967582151 larisash70@ukr.net Date of birth: 01/08/1961 Citizenship: Ukraine

Academic degree (degree, speciality)	PhD, 14.01.07. – oncology
Position	Senior Research
Department	Functional genomics and cancer progression, Institute R.E. Kavetsky Institute of Experimental Pathology, Oncology and Radiobiology, NAS of Ukraine
ORCID ID	0000-0003-3671-9036
Scopus AuthorID	6508272785 https://www.scopus.com/authid/detail.uri?authorId=6508272785
GoogleScolar:	https://scholar.google.com.ua/citations?user=szU7RncAAAAJ&hl=uk
h-index	12
Citation	533

WORK EXPERIENCE

PERIOD	**DESCRIPTION**
From 1994 till present	**Position: Senior Research** **R.E. Kavetsky Institute of Experimental Pathology, Oncology and Radiobiology, NAS of Ukraine, Ukraine, 03022, Kyiv, 45 Vasylkivska st.**
From 1989 to 1994	**Position: researcher** **R.E. Kavetsky Institute of Experimental Pathol Oncology and Radiobiology, NAS of Ukraine, Ukraine, 03022, Kyiv, 45 Vasylkivska st.**

TEACHING ACTIVITY:

In the current year	***Basics of hematopoiesis, leukogenesis.*** PhD program, speciality 222 "Medicine"/22 "Health care"(lectures, seminars, practical work),

	Modern diagnosis of tumors of hematopoietic and lymphoid tissues PhD program, speciality 222 "Medicine"/22 "Health care" (lectures, seminars, practical work),
Last years	**Disciplines at the IEPOR NAS of Ukraine** ***Molecular and cellular pathobiology***, PhD program, speciality 091 "Biology"/09 "Biology" (lectures, practical work, seminars); ***Methodology, organization and technology of scientific research. Basics of academic integrity***, PhD program, speciality 091 "Biology"/09 "Biology" and 222 "Medicine"/22 "Health care"(lectures, seminars),

EDUCATION

1985 - biologist-virologist, T.G. Shevchenko Kyiv State University.
1989 – PhD, 14.01.07. – oncology. Thesis "Monoclonal antibodies IPO-10 and their use in the study of lymphoid forms of leukemia and lymphomas".

Scientific titles and awards:
1996 – scientific title senior researcher
1997 - Prize of the Committee on Science and Technology of Ukraine
2013 – certificate of the Presidium of the National Academy of Sciences of Ukraine on the occasion of the 95th anniversary of the National Academy of Sciences of Ukraine
2015 - State Prize of Ukraine in the field of science and technology
2018 – commemorative award in honor of the 100th anniversary of the National Academy of Sciences of Ukraine

Professional skills:
Laboratory methods: methods of working with primary and permanent cell cultures *in vitro* (cultivation, cloning, freezing of cells) and *in vivo*; isolation of cell subpopulations from tissues and biological fluids (peripheral blood, bone marrow, ascites fluid) using gradient buffer solutions and magnetic separation; cell transfection; obtaining monoclonal antibodies by the method of hybridoma technology, their development *in vitro* and *in vivo*, purification by chromatography and saturated salt solutions; immunophenotyping of cells by immunocytochemistry, immunohistochemistry and immunofluorescence using a flow cytofluorimeter, as well as fluorescence microscopy; methods of cell activation through surface receptors, modulation of induced signaling pathways through surface receptors; methods of assessing the level of proliferative activity of cells, their cell cycle, viability and apoptosis; determining the sensitivity of cells to the action of anticancer drugs.
Work in programs :
FCS Express V3 (DeNovo Software), CytExpert for DxFLEX, Graph Pad Prism, Statistica, FreeHand, Adobe Photoshop.

Scientific interests: establishment of biological significance and functional activity of markers of normal and malignantly transformed cells; elucidation of the role of receptor-mediated signaling cascades in the pathobiology of malignantly transformed cells**.**
Languages: Ukrainian,, English (intermediate).

Membership in scientific societies: Ukrainian Biochemical Society, Ukrainian Society of Cell Biology.

Head of research projects supported by grants:

1. CRDF (U.S. Civilian Research & Development Foundation) USB 383 «Modulation of CD95-mediated apoptosis» (2000);
2. NAS of Ukraine «Creation of means for detection of medical markers based on fluorescently labeled monoclonals антитіл» (0117U001792, 2019-2021);
3. NAS of Ukraine «Experimental substantiation of the possibilities of using CD150 isoforms as diagnostic markers and targets for targeted therapy of malignant neoplasms» (0115U002970, 2019).

Responsible executor of research projects supported by international grants:

1. CRDF (U.S. Civilian Research & Development Foundation) Next Steps to Market Program grant program UB2-531 (2001-2003).
2. CRDF (U.S. Civilian Research & Development Foundation) Cooperative grants program UB2-2443-KV-02 (2003-2005).
3. CRDF (U.S. Civilian Research & Development Foundation) Cooperative grants program UKB2-2831-KV-06 (2006-2008).
4. INTAS grant 011-2382 (2002-2004).
5. INTAS grant 011-2118 (2002-2003).
6. Fogarty International Center Drant RO3TW007322-01 (2002-2004).

Responsible executor of research projects with the support of grants from the National Academy of Sciences of Ukraine:

1. «Development of a sensor system for the analysis of protein interactions using GST-fusion proteins»(за договором № 2.2.5.276, 2004-2006)
2. Innovative project №2.2.5.339 «Creation and preparation for introduction into medical practice of new domestic sets of monoclonal antibodies» (0110U005003, 2010).
3. «Development of the fundamental principles of differential regulation of the level of expression and activity of protein kinases of the PKD family in malignantly transformed cells» (0110U005757, 2010-2015)
4. «The role of the CD150 receptor (SLAM) in the regulation of transcriptional programs at different stages of B-lymphocyte differentiation» (0111U006580, 2011-2012)
5. «CD150/SLAM family receptors: regulation of cellular functions and possible clinical application» (0113U001436, 2013-2014)
6. «Identification of selective medicinal substances capable of inhibiting the functions of protein kinase D (PKD) - new targets for anticancer therapy» (0113U004301, 2013-2014).
7. « Experimental substantiation of the possibilities of using CD150 isoforms as diagnostic markers and targets for targeted therapy of malignant neoplasms» (0117U001792, 2015-2018).
8. « Creation of means for detection of medical markers based on fluorescently labeled monoclonal antibodies» (0117U001792, 2017-2018).

Responsible executor of research projects with the support of grants from the Ministry of Education and Culture of Ukraine

1. «Analysis of the manifestation of the proliferative activity of tumor cells using MKAT IPO38 and CD150 expression for choosing treatment tactics and predicting the clinical course of the disease» (0105U008831, 2005).
2. Ukrainian-French project "Role of CD150-mediated signaling cascades in immunosuppression caused by the measles virus " (№ M/91-2007, 2007-2009**)**
3. «The role of the CD150 receptor (SLAM) in the regulation of transcriptional programs at different stages of B-lymphocyte differentiation» (№ Ф40/32-2011, 2011-2012).
4. «Cellular and molecular mechanisms of measles virus-induced immunosuppression» (№ M/376-2011, 2011-2012).
5. «Determination of the degree of malignancy of tumors of different histogenesis using domestic monoclonal antibodies» (0112U007360, 2012).
6.

Co-author of 164 publications

SELECTED PUBLICATIONS:

Pinchouk, V.G., S.P. Sidorenko, D.F. Gluzman, E.P. Vetrova, A.G. Berdova, **L.N. Shlapatskaya**. Monoclonal antibodies IPO-3 and IPO-10 against human B cell differentiation antigens. *Anticancer Research* 8:1377-1380, 1988.

Sidorenko, S.P., E.P. Vetrova, O.V. Yurchenko, A.G. Berdova, **L.N. Shlapatskaya**, D.F. Gluzman. Monoclonal antibodies of IPO series against B cell differentiation antigens in leukemia and lymphoma immunophenotyping. *Neoplasma* 39: 3-9, 1992.

Sidorenko, S.P., **L.N. Shlapatskaya**, E.P. Vetrova, A.G. Berdova, O.V. Yurchenko, T.T. Klenova, S.V. Michalap, I.V. Abramenko, and D.F. Gluzman. Monoclonal antibodies IPO-38 against nuclear antigen of proliferative cells. *Exp. Oncol.* 16:145-150, 1994.

Chekhun, V.F., Yu.Shishova., O.V.Yurchenko, **L.N. Shlapatskaya**, S.V.Mikhalap, A.G.Berdova, Sidorenko, S.P., G.I.Kulik., D.F.Gluzman. Synergistic cytotoxic effect of cisplatin and monoclonal anti-FAS IPO-4 antibodies on human epidermoid carcinoma cell line KB. *Exp. Oncol.* 20:210-217, 1998.

Mikhalap, S.V., **L.N. Shlapatskaya**, A.G. Berdova, C.-L. Law, E.A. Clark. and **S.P. Sidorenko**. CDw150 associates with Src-homology 2-containing inositol phosphatase and modulates CD95-mediated apoptosis. J.Immunol. 162: 5719-5727, 1999.

Sidorenko, S.P., O.V.Yurchenko, **L.N. Shlapatskaya**, S.V.Mikhalap, A.G.Berdova, T.J.Yun, K.E.Nichols, E.A.Clark. CDw150 is a signaling molecule that modulates CD95-mediated apoptosis. *Exp. Oncol.* 22(Suppl.2): 27-35, 2000.

Mikhalap, S.V., **L.N. Shlapatskaya**, A.G. Berdova, O.V.Yurchenko, Lopes F., Lukyanova N.Y., and S.P. Sidorenko. Monoclonal antibody IPO-38 in evaluation of proliferative activity of tumor cells. *Exp. Oncol.* 22(Suppl.2): 36-38, 2000.

Shlapatska, L.M., S.V. Mikhalap, A.G. Berdova, O.M Zelensky., T.J.Yun, K.E. Nichols, E.A. Clark. and S.P. Sidorenko. CD150 association with either the SH2-containing inositol phosphatase (SHIP) or SHP-2 is regulated by the adaptor protein SH2D1A. *J.Immunol*, 166:5480-5487, 2001.

Mikhalap, S.V., **L.N. Shlapatskaya**, A.G. Berdova, M.Y.Yurchenko, Clark E.A., Chekhun, V.F and S.P. Sidorenko. ERK and Akt activation via CD150: signal transduction studies on DT40 cell line model system. *Exp. Oncol.* 24:13-19, 2002.

O.V.Yurchenko, **L.M. Shlapatska**, M.V. Skryma, G.G.Berdova, L.M.Kovalevska, T.A. Tarasova, M.Y.Yurchenko, G.I. Kulik, and S.P.Sidorenko. Immunohistochemical studies of CD150 expression in some human tumors. *Exp. Oncol.* 25: 186-190, 2003.

Shlapatska, L.M., G.G. Berdova, L.M.Kovalevska, G.I.Kulik S.P. Sidorenko, G. Klein, and Chekhun, V.F Signal transduction pathways in Burkitt's lymphoma cell lines BL41 and DG75 with different sensitivity to doxorubicine. *Exp. Oncol.* 26:210-216, 2004.

Mikhalap SV, **Shlapatska LM,** Yurchenko OV, Yurchenko MY, Berdova GG, Nichols KE, Clark EA, Sidorenko SP. The adaptor protein SH2D1A regulates signaling through CD150(SLAM) in B cells. *Blood*, 104 (13): 4063-70, 2004.

M.Y.Yurchenko, E.V.Kashuba, **L.M.Shlapatska**, S.A.Sivkovich, S.P. Sidorenko The role of CD150-SH2D1A a association in CD150 signaling in Hodgkin's lymphoma cell lines. *Exp. Oncol.* 27:24-30, 2005.

L.M.Kovalevska, O.V.Yurchenko**, L.M.Shlapatska**, G.G.Berdova, S.V.Mikhalap, J.Van Lint, S.P. Sidorenko. Immunohistochemical studies of protein kinase D (PKD) 2 expression in human lymphomas. *Exp. Oncol.* 87:225-230, 2006.

M.Y. Yurchenko, L.M. Kovalevska, **L.M. Shlapatska**, G.G.Berdova, E.A, S.P. Sidorenko. Clark CD150 regulates JNK1/2 activation in normal and Hodgkin's lymphoma B cells. *Immunol Cell Biol.* 2010, 88: 565-574.

M.Y.Yurchenko, D.V.Ganshevskiy, **L.M.Shlapatska**, G.G.Berdova, E.V.Kashuba, V.V.Ushenin, S.P. Sidorenko. CD150-mediated Akt signaling in normal and malignant B cells. *Exp.Oncology.* 2011,32; 9-18.

M.Y. Shabelnik, M.Y. Yurchenko, L.M. Kovalevska, **L.M. Shlapatska**, Y. Rzepetsky, S.P. Sidorenko. Differential expression of PKD1 and PKD2 in gastric cancer and analysis of PKD1 and PKD2 function in the model system. *Exp Oncol*. 2011.- 33(4):206-11.

M.Yurchenko, **L.M. Shlapatska**, S.P. Sidorenko. The multilevel regulation of CD95 signaling outcome. *Exp Oncol*. 2012 ,34(3): 153-160.

L. Shlapatska, L. Kovalevska, I. Gordiienko and S. Sidorenko. Intrinsic defect in B-lymphoblstoid cell lines from patients with X-linked lymphoproliferative disease type 1: II. Receptor-mediated Akt/PKB and ERK1/2 activation and transcription factors expression profile. *Exp Oncol*. 2014, 36 (3):162-169.

L. Shlapatska, L. Kovalevska, I. Gordiienko and S. Sidorenko. Intrinsic defect in B-lymphoblstoid cell lines from patients with X-linked lymphoproliferative disease type 1: I. Cell surface phenotype and functional studies. *Exp Oncol*. 2014. 36 (1): 2-8.

I.M. Gordiienko, L.M. **Shlapatska, L.M.** Kovalevska, S.P. Sidorenko. Differential expression of CD150/SLAMF1 in normal and malignant B cells on the different stages of maturation. *Exp Oncol*. – 2016, 38(2): 101-107.

I. Gordiienko, **L. Shlapatska,** V. Kholodniuk, L. Sklyarenko, D. Gluzman, E. Clark, S. Sidorenko / The interplay of CD150 and CD180 receptor pathways contribute to the pathobiology of chronic lymphocytic leukemia B cells by selective inhibition of Akt and MAPK signaling // PLoS ONE. – 2017, 12(10): e0185940.

I.M. Gordiienko, **L.M. Shlapatska**, V.M. Kholodniuk, L.M. Kovalevska, T.S. Ivanivskaya, S.P. Sidorenko. CD150 and CD180 are involved in regulation of transcription factors expression in the chronic lymphocytic leukemia B cells. *Exp Oncol*. 2017. 39 (4): 291-298.

Shcherbina V., Gordiienko I., Shlapatska L., Ivanivska T., Sidorenko S. Sensitivity of chronic lymphocytic leukemia cells to chemotherapeutic drugs ex vivo depends on expression status of cell surface receptors. *Exp Oncol*. 2020. 42 (1): 16-24.

I.Gordiienko**, L. Shlapatska,** L. Kovalevska, S.P Sidorenko. SLAMF1/CD150 in hematologic malignancies: Silent marker or active player?. Clinical Immunology, 2019, 204: 14-22.

Shcherbina V., Gordiienko I., **Shlapatska L**., Ivanivska T., Sidorenko S. Sensitivity of chronic lymphocytic leukemia cells to chemotherapeutic drugs ex vivo depends on expression status of cell surface receptors. *Exp Oncol*. 2020. 42 (1): 16-24.

Shlapatska, L. M.; Gordiienko, I. M.; Kovalevska, L. M.; Sidorenko, S. P. The biological properties of HEK293T cell line transfected with mCD150 and nCD150 isoforms of CD150/SLAMF1 receptor. Biopolymers & Cell. 2020. 36 (2):99-109.

Shcherbina V, Gordiienko I**, Shlapatska L**, Gluzman D, Sidorenko S. CD150 and CD180 are negative regulators of IL-10 expression and secretion in chronic lymphocytic leukemia B cells. Neoplasma. 2021. DOI: 10.4149/neo_2021_210104n8.

Shlapatska L, Gordiienko I, Polishchuk A, Gluzman D. Profile of CD150 expression in bone marrow cells of patients with acute myeloid leukemia. Exp Oncol. 2022 Nov;44(3):198-207. doi: 10.32471/exp-oncology.2312-8852.vol-44-no-3.18307.

Gordiienko I, Shcherbina V, **Shlapatska L.** Soluble CD150 isoform level in plasma of chronic lymphocytic leukemia patients. Exp Oncol. 2024 Feb 3;45(4):457-462. doi: 10.15407/exp-oncology.2023.04.457

Shlapatska LM. Breast cancer cell lines as experimental tumor models. Oncology. 2024; 26(3):208-215.

Sections of monographs and collections of international scientific meetings

S.P.Sidorenko, E.P.Vetrova, **L.N. Shlapatskaya**, A.G. Berdova. Monoclonal antibodies against cell lineage-specific and differentiation antigens of hemopoietic and lymphoid tissues. In: Immunocytochemistry and monoclonal antibodies in oncohematology. Naukova Dumka, Kiev, pp.64-104, 1990.(Russian)

Mikhalap, S.V., **L.N. Shlapatskaya**, O.V. Yurchenko, A.G. Berdova, D.F. Gluzman, and S.P. Sidorenko. Monoclonal antibody IPO-38 recognizes a novel nuclear antigen of proliferating cells. In: *Leucocyte Typing VI* (ed. T. Kishimoto et al.), Garland Publishing, Inc., pp.609-610, 1997.

Mikhalap S.V., **L.M.Shlapatska**, G.G.Berdova, T.J.Yun, K.E.Nichols, E.A.Clark, S.P Sidorenko. CDw150 association with SHIP versus SHP-2 in B cells. *Leucocyte Typing VII*, Oxford University Press, pp.109-111, 2002.

Shlapatskaya, L.M., G.G.Berdova, S.V. Mikhalap, T.J.Yun, K.E..Nichols, E.A.Clark., S.P.Sidorenko. CDw150 modulates CD95-mediated apoptosis. *Leucocyte Typing VII*, Oxford University Press, pp.60-63, 2002.

Yurchenko, O.V., G.G.Berdova, **L.M.Shlapatska**, T.A. Tarasova, and S.P.Sidorenko. Expression of CD150 antigen in normal and tumour tissues. *Leucocyte Typing VII*, Oxford University Press, pp.107-108, 2002.

Sidorenko S.P., Mikhalap S.V., **Shlapatska L.M**., Yurchenko M.Y., Akimov Y.M.,Chekhun V.F. Signal transduction pathways initiated via cell surface receptor CD150: *in silico* and *in vitro* analysis. In: *Bioinformatics of Genome Regulation and structure* (ed. Kolchanov and Hofestaedt), Kluver Academic Publishers, Boston/Dortrecht/London. 203-210, 2004.

V. Chekhun, M.Zavelevich, A. Philchenkov, N. Lukianova, **L. Shlapatska,** D. Gluzman. Rezaei, N. (Ed.), Comprehensive Hematology and Stem Cell Research, vol. 5, pp. 344–353. US: Elsevier. 2024. pp.344 – 353. Hardback ISBN: 9780443157172 eBook ISBN: 9780443157189