

# Curriculum Vitae

Emiliia A. Domina

## PERSONAL RECORDS



Sex F

### Emiliia A. Domina

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Sex : F

Date of birth 20/01/45

Nationality UKRAINE



Department of Ecology and  
Sorptions Toxicology

Academic degree (degree, speciality)	Doctor of biological studies, 03.00.01 «Radiobiology»
Academic title	Professor, 091-biology
Position	Chief Researcher
Laboratory	Department of Ecology and Sorptions Toxicology
Institute	R.E. Kavetsky Institute of Experimental Pathology, Oncology and Radiobiology, National Academy of Sciences of Ukraine (IEPOR NAS of Ukraine); Kyiv, Ukraine

## Academic disciplines in which she has taught:

In the current year	"Radiation medicine with the basics of clinical radiobiology" speciality 222 "Medicine", 3rd year, 5th semester (lectures, seminars and practical classes)
In previous years	"Radiation medicine with the basics of clinical radiobiology" speciality 222 "Medicine", 3rd year, 5th semester (lectures, seminars and practical classes)

## EXPERIENCE IN RESEARCH AND SCIENTIFIC AND PEDAGOGICAL WORK

Period	Phase
Since 2025	Position: Chief Researcher of Department of Ecology and Sorptions Toxicology IEPOR NAS of Ukraine, 45, Vasylykivska str, Kyiv-03022, Ukraine, <a href="https://www.iepor.site/">https://www.iepor.site/</a>
	Teaching and research activities: a series of lectures, seminars and practical classes for graduate students", scientific supervision of courses and diploma projects of undergraduate students and graduate students, research activities
	Field of activity or sector: Education and science
From 2016 to 2024	Position: Head of the Department of biological effects of ionizing and non-ionizing radiation IEPOR NAS of Ukraine, 45, Vasylykivska str, Kyiv-03022, Ukraine, <a href="https://www.iepor.site/">https://www.iepor.site/</a>
	Teaching and research activities: a series of lectures, seminars and practical classes for graduate students", scientific supervision of courses and diploma projects of undergraduate students and graduate students, research activities
	Field of activity or sector: Education and science
From 2003 to 2016	Position: Senior researcher, radiobiology department IEPOR NAS of Ukraine, 45, Vasylykivska str, Kyiv-03022, Ukraine, <a href="https://www.iepor.site/">https://www.iepor.site/</a>
	Teaching and research activities: scientific supervision of courses and diploma projects of undergraduate students and graduate students, scientific activity
	Field of activity or sector: Education and science

From 1985 to 2003	Position: Senior researcher
	Institute of Oncology of the Medical Academy of Ukraine, 03022, Kyiv, str. Lomonosova 33/43
	Teaching and scientific activity: scientific activity
	Field of activity or sector: Education and science

## EDUCATION

Period	Stage
2003	Dissertation for obtaining the scientific degree of Doctor of Biological Sciences in the speciality 03.00.01 "radiobiology" on the topic: "Radiogenic cytogenetic effects in participants in the liquidation of the accident at the Chernobyl NPP"
1984	Dissertation for the degree of candidate of biological sciences, speciality 03.00.01 "radiobiology" on the topic: "Effect of gamma rays and fast neutrons on human chromosomes depending on the stage of the mitotic cycle and post-radiation hyperthermia"
From 1968 to 1974	Taras Shevchenko Kyiv State University, Faculty of Biology
	Received qualifications: biologist-geneticist, teacher of biology and chemistry

## PERSONAL SKILLS

Title	Level
<b>Language Skills</b>	
Ukrainian	Native
Russian	Fluent
English	B1
<b>Communication skills</b>	Communication skills gained while working at the RE. Kavetsky Institute of Experimental Pathology, Oncology and Radiobiology of the National Academy of Sciences of Ukraine and the Institute of Oncology of the Academy of Medical Sciences of Ukraine, as well as in the course of activities as part of the organizing committees for holding conferences
<b>Organizational/managerial skills</b>	<ul style="list-style-type: none"> <li>- Management of the staff of the laboratory of cytogenetic examination, Institute of Oncology of the Academy of Medical Sciences of Ukraine;</li> <li>- Management of the department of biological effects of ionizing and non-ionizing radiation of the RE. Kavetsky Institute of Experimental Pathology, Oncology and Radiobiology named of the National Academy of Sciences of Ukraine;</li> <li>- Management of research works and projects, candidate theses, diplomas and master's theses;</li> <li>- Member of the National Commission for Radiation Protection of the Population of Ukraine, Verkhovna Rada of Ukraine;</li> <li>- The head of the examination committee for the admission exam in the academic discipline "Radiation medicine with the basics of clinical radiobiology", which is taught in the 3rd year of postgraduate studies (5th semester);</li> <li>- Member of the specialized academic council for the defence of candidate and doctoral theses in the speciality "genetics";</li> <li>- Member of organizing committees of congresses and scientific and practical domestic and international conferences;</li> <li>- Member of the Radiobiological Society of Ukraine;</li> <li>- Member of the editorial board of the collection of scientific works "Problems of radiation medicine and radiobiology";</li> <li>- Member of the Commission on Bioethics of the IEPOR of the National Academy of Sciences of Ukraine;</li> <li>- Expert in reviewing projects of NFDU (Ministry of Education and Science of Ukraine).</li> </ul>
<b>Computer skills</b>	Experienced user. Knowledge of Windows operating system, MS Office package ; work with different browsers (Mozilla Firefox, Opera, Google Chrome, etc.) ; use of ZOOM video conferencing services, e-mail and active user of various messengers ; knowledge of techniques for working with software products for processing and interpreting research results ; work with scientific bibliographic databases (Google Scholar, Scopus).
<b>Professional skills</b>	Cultivation of peripheral blood lymphocytes, cytogenetic analysis, modelling of human radiosensitivity depending on the dose and quality of radiation, stages of the cell cycle in normal and oncological pathology, mathematical processing of radiobiological data using linear, linear quadratic, and spline regression models
<b>Areas of professional interest</b>	Clinical and experimental radiobiology, radiation oncology, radiation medicine, biodosimetry/bioindication of radiation lesions, prevention of radiogenic cancer, radiomitigators and other means of increasing the effectiveness of radiation therapy for cancer patients, individual radiosensitivity of a person, including professionals involved in the field of action of ionizing radiation

## ADDITIONAL INFORMATION

Title	(titles of publications, presentations, projects, conferences, seminars, titles of awards and prizes, membership in academies, professional and scientific associations, etc.)
Publications	<p><b>Monographs</b></p> <ol style="list-style-type: none"> <li><b>Domina E.A.</b> Radiation-induced instability of the human genome during low-dose irradiation. Chapter in monograph «Heritage of European science 2024», 16 p. Karlsruhe, Germany.</li> <li>Hrynevych Y.A., <b>Domina E.A.</b> Immune and cytogenetic effects of dense and rare ionizing radiation; under ed. A.A. Yarilina, 2nd ed., revised. Kyiv: VD "Avicena", 2021. 384p.</li> <li><b>Domina E.A.</b> Chernobyl accident: early and long-term medical and biological effects. LAP Lambert Academic Publishing, Saarbrücken, Germany. - 2016. - 106 p.</li> <li><b>Domina E.A.</b> Radiogenic cancer: epidemiology and primary prevention. Kyiv: "Scientific thought". - 2016. - 196 p.</li> <li><b>Domina E.A.</b>, Pylynskaya M.A., Petunyn Yu.I., Klyushin D.A. Radiation cytogenetics. Russian-English reference dictionary. Kyiv: Zdorovya, 2009. – 368 p.</li> <li><b>Domina E.A.</b>, Chapter in monograph «Scientific thought development», series «European Science» 2024, Book 31. Part 4. P. 131-141. Karlsruhe, ScientificWorld-NetAkhatAV, Germany ISBN 978-3-98924-056-8. DOI: 10.30890/2709-2313.2024-31-04</li> <li><b>Domina E.A.</b>, Chapter in monograph «Heritage of European science 2024», Karlsruhe, Germany. (International scientific symposium: "Erbe der europäischen Wissenschaft / Heritage of European science '2024", February, 2024, Part 4, p. 88-101 Karlsruhe, Germany). doi.org/10.30890/2709-2313.2024-27-03</li> <li></li> </ol> <p><b>Selected Publications</b></p> <ol style="list-style-type: none"> <li>Ivankova V.S., <b>Domina E.A.</b>, Khruleno T.V., Makovetska L.I., Baranovska L.M., Glavin O.A. "Prediction of radiation complications by studying blood oxidative processes in cervical cancer patients during chemoradiation treatment" Ukrainian radiological and oncological journal, 2024, No. 1. P. 56-69. <a href="https://doi.org/10.46879/ukroj.1.2024.56-69">https://doi.org/10.46879/ukroj.1.2024.56-69</a></li> <li><b>Domina E.A.</b> Kopylenko O.L. Chekhun V.F. Evaluation of the current factors of radiation-associated carcinogenesis. Exp Oncol 2023. Vol.45, № 2. P. 15-24. <a href="https://doi.org/10.15407/exp-oncology.2023.02.015">https://doi.org/10.15407/exp-oncology.2023.02.015</a></li> <li><b>Domina E.A.</b> Experience of experimental research on radiation oncology at R.E. Kavetsky Institute of Experimental Pathology, Oncology and Radiobiology NAS of Ukraine. Exp Oncol 2023. Vol. 45, № 3. P. 275–281. doi: <a href="https://doi.org/10.15407/exp-oncology.2023.03.275">https://doi.org/10.15407/exp-oncology.2023.03.275</a></li> <li>Ivankova V.S., <b>Domina E.A.</b>, Khrulenko T.V., Baranovska L. M., Glavin O.A. Role of contemporary imaging methods in radiotherapy planning and monitoring of gynecological cancer patients (review). Problems of Radiation Medicine and Radiobiology. 2023; Vol. 28. P. 486-503. doi: 10.33145/2304-8336-2023-28-468-503</li> <li><b>Domina E.A.</b>, Y.V. Dumanskyi Medical and radiobiological aspects of radiation complications in patients with an oncogynecological profile. Oncology, 2023. Vol. 25, No. 1. P. 9–15. <a href="https://doi.org/10.15407/oncology.2023.01.009">https://doi.org/10.15407/oncology.2023.01.009</a></li> <li><b>Domina E.A.</b> A modern view of the problem of radiation carcinogenesis: a lecture. Oncology, 2023 No. 2. P. 139–149. <a href="https://doi.org/10.15407/oncology.2023.02.139">https://doi.org/10.15407/oncology.2023.02.139</a></li> <li><b>Domina E.A.</b> Radiation diagnostics of oncological diseases in modern conditions. Oncology, 2023 No. 2. P. 104–107. <a href="https://doi.org/10.15407/oncology.2023.02.104">https://doi.org/10.15407/oncology.2023.02.104</a></li> <li>Mikhailenko V.M., <b>Domina E. A.</b>, Ivankova V. S., Makovetska L.I., Glavin O.A., Khrulenko T. V. Features of oxidative metabolism and genetic disorders in peripheral blood lymphocytes of primary cervical cancer patients. Exp Oncol 2022. Vol.44, № 3. P. 227-233. DOI: 10.32471/exp-oncology.2312-8852.vol-44-no-3.18486</li> <li><b>Domina E.A.</b>, Kopylenko O.L. Minimizing the occurrence of stochastic effects during radiation incidents. Exp Oncol 2022. Vol.44, № 3. P. 186-189. DOI: 10.32471/exp-oncology.2312-8852.vol-44-no-3.18530</li> <li><b>Domina E.A.</b>, Makovetska L.I., Druzhyna M. O. Relevant biochemical indices of blood radiosensitivity in gynecological cancer patients Problems of Radiation Medicine and Radiobiology. 2022; Vol. 27. P. 216–233. doi: 10.33145/2304-8336-2022-27-216-233.</li> <li>Ivankova V. S., <b>Domina E. A.</b>, Khrulenko T. V., Baranovska L. M., Glavin O. A. Contemporary approaches to prognostication and management of pelvic radiation injuries in gynecological cancer patients. Problems of Radiation Medicine and Radiobiology. 2022; Vol. 27. P. 455–473. doi: 10.33145/2304-8336-2022-27-455-473.</li> <li><b>Domina E.</b> Possible effects of the exposure to ionizing radiation on the patients recovered from COVID-19. ScienceRise: Biological Science. 2022, № 1(30), P. 4-7. DOI: <a href="https://doi.org/10.15587/2519-8025.2022.254881">https://doi.org/10.15587/2519-8025.2022.254881</a></li> <li>Chekhun V.F., <b>Domina E.A.</b> A modern view of the stochastic effects of ionizing radiation (to</li> </ol>

the 36th anniversary of the Chernobyl disaster). *Oncology*, 2022. Vol. 24, No. 1. P. 5-10. DOI: 10.32471/oncology.2663-7928.t-24-1-2022-g.10339

14. Chekhun V.F., **Domina E.A.** Can SARS-CoV-2 change individual radiation sensitivity of the patients recovered from COVID-19? (Experimental and theoretical background). *Exp Oncol* 2021. Vol.43, № 3. P. 277–280. doi: 10.32471/exp-oncology.2312-8852.vol-43-no-3.16554
15. Domina E.A., Pathogenesis of radiation complications in normal tissues surrounding an irradiation tumor (review). *Problems of radiation medicine and radiobiology*, 2024, Vol 29. P. 34-43.
16. Domina E.A., The role of repair processes in the formation of radiosensitivity of healthy and tumour cells in human. *Онкологія*, 2024, Т 26, № 3. С. 222-226.
17. Дьоміна Е.А., Думанський Ю.В., Маковецька Л.І., Главін О.А., та співавт. Променева терапія хворих на рак шийки матки: погляд радіобіологів. *Онкологія*, 2024, Т 26, № 2. С. 85-94.

Projects	<ol style="list-style-type: none"> <li>1. Head of the NDR « Investigation of the effect of combined radiation therapy and chemotherapy on genetic and metabolic changes in peripheral blood lymphocytes of cervical cancer patients » (state registration number 0121U113837) (2022-2025).</li> <li>2. Head of the NDR « Determination of predictors of radiosensitivity of peripheral blood lymphocytes of patients with endometrial cancer in vitro and under the action of a protector ex vivo » (state registration number 0118U005466) (2019-2021)</li> <li>3. Responsible for the execution of the NDR, which is carried out as part of the targeted scientific program of the National Academy of Sciences of Ukraine « Molecular-biological factors of heterogeneity of malignant cells and variability of the clinical course of hormone- dependent tumors » (state registration number 0117U002034) (2017–2021)</li> <li>4. Head of the project DZ MON Ukraine № ДЗ / 27 - 2017 «Radiological explanation of individual primary prevention of radiation-associated cancer» (2017-2018)</li> <li>5. Co-head of the project «Metal nanocrystals for highly sensitive detection of biochemical agents» , implemented within the framework of the NATO program «Science for Peace and Security» (NUKR. SFPP 984702) (2014-2018)</li> <li>6. Head of the UNTSC project «Development of equipment for obtaining ion and X-ray microbeams using electrostatic accelerators and research of radiation damage to cells during adron therapy: study of the biological effectiveness of X-ray and proton microbeams» (Contract № 5728) (2012- 2014).</li> </ol>
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Conferences	<ol style="list-style-type: none"> <li>1. 3rd International Scientific and Practical Internet Conference, March 2-3, 2023. Dnipro, Ukraine.</li> <li>2. 8th Congress of the Radiobiological Society of Ukraine, August 21–25, 2023, Zhytomyr, Ukraine</li> <li>3. Scientific and practical conference of the Ukrainian Society of Radiation Oncologists (UTRO) with the participation of international experts "Current issues of radiation oncology in Ukraine" offline / online, September 21-22, 2022, Lviv, Ukraine.</li> <li>4. General meeting of the National Academy of Medical Sciences of Ukraine with international participation "Thirty-five years of the Chernobyl disaster: existing and future studies of radiological and medical consequences", April 14-15, 2021, Kyiv, Ukraine.</li> <li>5. VIII Congress of the Ukrainian Society of Radiation Oncologists (UTRO), September 21- 23, 2021, Kherson, Ukraine.</li> <li>6. XIV congress of oncologists and radiologists of Ukraine, September 30 - October 2, 2021, Kyiv, Ukraine</li> <li>7. Scientific and practical conference of the Ukrainian Society of Radiation Oncologists (UTRO) with the participation of international specialists "Current issues of radiation oncology in Ukraine", September 16-17, 2020, Odesa</li> <li>8. Scientific and practical conference with international participation "Effects of radiation and other xenobiotics on the reproductive system and organism", October 4-7, 2016, Dolyna.</li> <li>9. Вимір якості життя хворих на шпальтах видань експериментальної і клінічної онкології: виклики і можливості. Науково-практична конференція з міжнародною участю 3-4 жовтня 2024, м. Київ. Experimental oncology, 2024, Vol 46, № 4.</li> </ol>
Prizes, awards	<p>Laureate of the award named after R.E. Kavetskyi of the National Academy of Sciences of Ukraine, 2021 for scientific work</p> <p>"Radiogenic cancer: epidemiology and primary prevention"</p> <p>"Certificate of gratitude" for high professionalism and solving important problems of human health protection, improving the quality of the environment. Radiobiological Society of Ukraine, 2014.</p>
Membership in Organizations and Scientific Societies	<ol style="list-style-type: none"> <li>1. Academic Council of IEPOR RE. Kavetsky at the National Academy of Sciences of Ukraine</li> <li>2. Specialized Academic Council D 26.562.02 for the defence of theses in the speciality "genetics" at the State University "National Scientific Center of Radiation Medicine of NAMNU"</li> <li>3. National Commission for Radiation Protection of the Population of Ukraine under the Verkhovna Rada of Ukraine</li> <li>4. The examination commission of the National Research Fund of Ukraine at the CMU</li> <li>5. Editorial board of the collection of scientific works "Problems of radiation medicine and radiobiology"</li> <li>6. Member of the Commission on Bioethics of the IEPOR of the NANU</li> <li>7. Member of the Radiobiological Society of Ukraine</li> </ol>
Websites	<a href="https://orcid.org/0000-0002-9313-8185">https://orcid.org/0000-0002-9313-8185</a> <a href="https://scholar.google.com/citations?user=JC65ur8AAAAJ&amp;hl=fr">https://scholar.google.com/citations?user=JC65ur8AAAAJ&amp;hl=fr</a>
Citation	h-index 12, citations - 1653