

# Anzhela Ashot Sargsyan

## Faculty of Biology

Chair of Genetics and Cytology  
Senior laboratory assistant

45-16  
(060) 71-05-16

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## Education

<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Faculty of Biology, Department of Genetics and Cytology
<b>Date</b>	2016 - 2020
<b>Degree name</b>	PhD student

<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Faculty of Biology, Department of Genetics and Cytology
<b>Date</b>	2014 - 2016
<b>Degree name</b>	Masters

<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Faculty of Biology
<b>Date</b>	2010 - 2014
<b>Degree name</b>	Bachelor

## Language skills

Հայերեն English Русский

## Work experience

<b>Institution</b>	Yerevan State University, Faculty of Biology, Research Institute of Biology, Laboratory of General and Molecular Genetics
<b>Period of time</b>	2024 till now
<b>Rank/degree</b>	Specialist of Laboratory

<b>Institution</b>	Yerevan State University, Faculty of Biology, Department of Genetics and Cytology
<b>Period of time</b>	2021 till now
<b>Rank/degree</b>	Lecturer

<b>Institution</b>	Yerevan State University, Faculty of Biology, Department of Genetics and Cytology
<b>Period of time</b>	2020 - 2023
<b>Rank/degree</b>	Head of Educational Laboratory

<b>Institution</b>	Yerevan State University, Faculty of Biology, Department of Genetics and Cytology
<b>Period of time</b>	2016 till now
<b>Rank/degree</b>	Senior Specialist of Laboratory

## **Scientific interests**

- Genetics
- Cell Biology
- Molecular cytogenetics
- Mutagenesis
- Ecogenotoxicology
- Genotoxicology and cytotoxicology
- Epigenetics

## **Participation in international conferences and seminars**

<b>25/06/2023 -</b>	72nd Lindau Nobel Laureate Meeting
<b>30/06/2023</b>	Council for the Lindau Nobel Laureate Meetings Germany
<b>27/03/2023 -</b>	Armenian meeting – 2023. Climate changes: adaptation
<b>28/03/2023</b>	A. Alikhanyan National Science Laboratory Armenia
<b>04/07/2022 -</b>	The 3rd International Workshop on “Ultrafast Beams and Applications”
<b>08/07/2022</b>	"CANDLE" synchrotron research institute Armenia
<b>05/10/2021 -</b>	Fifth International Conference, Dedicated to N. W. Timofeeff-Ressovsky and His
<b>10/10/2021</b>	Scientific School “Modern Problems of Genetics, Radiobiology, Radioecology, and Evolution” Nor Amberd International Conference Centre of the Yerevan Physics Institute Armenia
<b>09/03/2021 -</b>	1st DNAQUA International Conference
<b>11/03/2021</b>	COST Action DNAqua-Net, Online France
<b>11/04/2016 -</b>	“Nobel days in Yerevan: Be inspired and create”
<b>16/04/2016</b>	Yerevan State Medical University after Mkhitar Heratsi Armenia
<b>23/06/2015 -</b>	III International Scientific Conference of Young Researchers
<b>26/06/2015</b>	"Armbiotechnology" Scientific and Production Center of NAS RA Armenia

**16/06/2015 -** "Science from the first hands. Epigenetic" Young scientist school  
**17/06/2015** Yerevan State University  
Armenia

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**07/11/2022 -** Business trip, Invited researcher  
**05/12/2022** Institute of Human Genetics  
Germany

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**01/10/2019 -** Business trip, Invited researcher  
**10/11/2019** Institute of Human Genetics  
Germany

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**09/03/2018 -** Business trip, Invited researcher  
**08/05/2018** Institute of Human Genetics  
Germany

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**01/09/2017 -** Business trip, Invited researcher  
**30/11/2017** Institute of Human Genetics  
Germany

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## Publications

### *Article*

#### **EVALUATION OF GENOTOXIC EFFECTS IN COVID-19 PATIENTS AS A POTENTIAL MARKER OF VIRUS-HOST ADAPTATION**

Tigran Harutyunyan, Anzhela Sargsyan, Nara Stepanyan, Galina Hovhannisyan, Rouben Aroutiounian

ARMENIAN MEETING Climate Changes: Adaptation Yerevan, March 2728, 2023 ABSTRACTS PAPERS BY YOUNG SCIENTISTS  
2023 8-10

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### *Article*

#### **Increase in the Level of Doxorubicin-Induced DNA Damage in HeLa Cells with CRISPR/Cas9 Mediated HIST1H1B Gene Knockout**

E. T. Kuchukyan, A. A. Sargsyan, T. A. Harutyunyan

Physics of Particles and Nuclei Letters 2022 287-288

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### *Article*

#### **Application of land snail *Helix lucorum* for evaluation of genotoxicity of soil pollution**

Anzhela Sargsyan, Galina Hovhannisyan, Anna Simonyan, Marine Arakelyan, Meri Arzumanyan,

Rouben Aroutiounian

MUTATION RESEARCH - GENETIC TOXICOLOGY AND ENVIRONMENTAL MUTAGENESIS 2022 503500

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### *Article*

#### **Increased Yield of Residual γH2AX Foci in p53-Deficient Human Lung Carcinoma Cells Exposed to Subpicosecond Beams of Accelerated Electrons**

N. Yu. Vorobyeva, N. S. Babayan, B. A. Grigoryan, A. A. Sargsyan, L. G. Khondkaryan, L. S. Apresyan, A. K. Chigasova, E. I. Yashkina, D. V. Guryev, S. M. Rodneva, A. A. Tsishnatti, Yu. A. Fedotov, R. M. Arutyunyan, A. N. Osipov

*Article*

**IDENTIFICATION OF CYTOGENETICALLY VISIBLE mtDNA IN INTERPHASE NUCLEI OF HUMAN BLOOD LYMPHOCYTES EXPOSED TO DOXORUBICIN**

T. A. HARUTYUNYAN, G. G. HOVHANNISYAN, A. A. SARGSYAN, T. LIEHR, A. AL-RIKABI,

R. M. AROUTIOUNIAN

Proceedings of the YSU B: Chemical and Biological Sciences 2020 63-67

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*Article*

**Doxorubicin-induced translocation of mtDNA into the nuclear genome of human lymphocytes detected using a molecular-cytogenetic approach**

Tigran Harutyunyan, Ahmed Al-Rikabi, Anzhela Sargsyan, Galina Hovhannisyan, Rouben Aroutiounian,

Thomas Liehr

International Journal of Molecular Sciences 2020 1-11

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*Article*

**Оценка повреждений ДНК с применением метода ДНК-комет в двух природных популяциях дождевых червей *Lumbricus terrestris***

A. A. Саргсян

Доклады НАН РА 2020 206-213

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*Article*

**Analysis of copy number variations induced by ultrashort electron beam radiation in human leukocytes *in vitro***

Tigran Harutyunyan, Galina Hovhannisyan, Anzhela Sargsyan, Bagrat Grigoryan, Ahmed H. Al-Rikabi,

Anja Weise, Thomas Liehr, Rouben Aroutiounian

Molecular Cytogenetics 2019 18 (1-6)

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*Article*

**Application of the comet assay, micronucleus test and global DNA methylation analysis in *Darevskia lizards* as a sentinel organism for genotoxic monitoring of soil pollution**

Anzhela Sargsyan, Anna Simonyan, Galina Hovhannisyan, Marine Arakelyan, Rouben Aroutiounian

MUTATION RESEARCH - GENETIC TOXICOLOGY AND ENVIRONMENTAL MUTAGENESIS 2019 117-124

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*Article*

**DNA damage and micronuclei in parthenogenetic and bisexual *Darevskia* rock lizards from the areas with different levels of soil pollution**

Anna Simonyan, Galina Hovhannisyan, Anzhela Sargsyan, Marine Arakelyan, Seyran Minasyan,

Rouben Aroutiounian

Ecotoxicology and Environmental Safety 2018 13-18

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*Article*

**Application of Crayfish *Astacus Leptodactylus* for the Analysis of Water Genotoxicity in the Lake Sevan Basin**

A. E. Simonyan, A. A. Sargsyan, G. G. Hovhannisyan, N. S. Badalyan, S. H. Minasyan

JOURNAL OF WATER CHEMISTRY AND TECHNOLOGY 2018 367-369

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*Article*

ԲԵՏԱՅԻՆ ՀԱԿԱՍՈՒՏԱԳԵԼԱՅԻՆ ՀԱՏԿՈՒԹՅՈՒՆՆԵՐԻ ԳԱԱԿԱՏՈՒՄԸ KCL - 22 ԲԳԻՉՆԵՐՈՒՄ ԴՆՁ -

**ԿՈՄԵՏ ՄԵԹՈԴՈՎ**

Անժելա Սարգսյան, Աննա Սիմոնյան, Գայլինա Հովհաննիսյան

ԵՊՀ ՈՒԳԸ գիտական հոդվածների ժողովածու 2017 137-141

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*Article*

**АНАЛИЗ ПОВРЕЖДЕНИЙ ДНК У ЯЩЕРИЦ DAREVSKIA RADDEI, ОБИТАЮЩИХ В ЗОНАХ С**

**РАЗЛИЧНЫМ УРОВНЕМ ЗАГРЯЗНЕНИЯ ПОЧВ, МЕТОДОМ ДНК-КОМЕТ**

А.Э. СИМОНЯН, А.Л. ГЕВОРКЯН, С.Г. МИНАСЯН, А.А. САРГСЯН, М.С. АРАКЕЛЯН

Հայաստանի կենսաբանական հանդես 2015 65-67

<http://www.flib.sci.am/eng/Biology/>

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*Conference*

**Photodynamic activity and structure/activity relationship of new porphyrins in vitro as potential photosensitizers for application in photodynamic therapy of cancer**

Angela A. Sargsyan, Sona V. Galstyan, Elen A. Hakobyan, Diana H. Vardanyan, Areg Galstyan,

Lusine H. Khondkaryan, Nelli S. Babayan

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*Conference*

**Assessment of aquatic genotoxicity of the Lake Sevan basin, Armenia using natural bioindicators**

Anzhela Sargsyan, Anna Simonyan, Galina Hovhannisyan, Bardukh Gabrielyan, Rouben Aroutiounian

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*Conference*

**APPLICATION OF BIOINDICATORS FOR ASSESSMENT OF HEAVY METALS' GENETIC AND EPIGENETIC EFFECTS IN DIFFERENT REGIONS OF ARMENIA**

Sargsyan A, Hovhannisyan G., Simonyan A., Arakelyan M., Minasyan S., Aroutiounian R.

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*Conference*

**DOXORUBICIN-INDUCED MTDNA INSERTIONS IN NUCLEAR GENOME OF HUMAN LYMPHOCYTES**

Aroutiounian R, Hovhannisyan G, Sargsyan A, Al-Rikabi A, Liehr T, Harutyunyan T

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*Conference*

**Genetic effects of ultrashort pulsed electron beam irradiation - 7 years of joint experience**

Rouben Aroutiounian, Tigran Harutyunyan, Andrean Osipov, Natalya Vorobyeva, Galina Hovhannisyan,

Anzhela Sargsyan, Bagrat Grigoryan, Samvel Haroutiounian, Thomas Liehr, Nelly Babayan

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*Conference*

**ԳԵԼԵՏԻԿԱԿԱՆ ԱՆԿԱՅՈՒԹՅԱՆ ԿԵՆՍԱՄԱՐԿԵՐՆԵՐԻ ԿԻՐԱՈՈՒՄԸ ՄԻԶԻՆ ԵՎ ԾԱՆՐ ԸՆԹԱՑՔՆ**

**COVID-19 ՀԻՎԱՆԴՆԵՐԻ ԽՄԲԵՐՈՒՄ**

Հարությունյան Ռ., Հովհաննիսյան Գ., Սարգսյան Ա., Ստեփանյան Ն., Ղուկասյան Լ., Առաքելյան Ա.,

Հարությունյան Տ.

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*Conference*

**GENOTOXICOLOGICAL AND MOLECULAR-GENETIC RESEARCH OF CORONAVIRUS IN ARMENIA**

Tigran Harutyunyan, Anzhela Sargsyan, Nara Stepanyan, Galina Hovhannisyan, Lilit Ghoukasyan,

Arsen Arakelyan, Rouben Aroutiounian