

# Edita Eduard Nadiryan

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## Research Institute of Biology

Signal transduction and experimental pathology research group from  
Junior Researcher

## Education

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| <b>Institution</b> | Yerevan State University  |
| <b>Faculty</b>     | Faculty of Biology, Chair of Biochemistry, Microbiology and Biotechnology |
| <b>Date</b>        | 2021 - 2023   |
| <b>Degree name</b> | Masters   |

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| <b>Institution</b> | Yerevan State University  |
| <b>Faculty</b>     | Faculty of Biology, Chair of Biochemistry, Microbiology and Biotechnology |
| <b>Date</b>        | 2017 - 2021   |
| <b>Degree name</b> | Bachelor  |

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## Language skills

Русский English

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## Work experience

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| <b>Institution</b>    | Yerevan State University, Research Institute of Biology, Laboratory of Basic and Pathological Biochemistry |
| <b>Period of time</b> | 2024 till now  |
| <b>Rank/degree</b>    | Junior Researcher  |

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| <b>Institution</b>    | Yerevan State University, Research Institute of Biology, Laboratory of Basic and Pathological Biochemistry |
| <b>Period of time</b> | 2022 - 2024  |
| <b>Rank/degree</b>    | Senior laboratory assistant  |

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| <b>Institution</b>    | Yerevan State University, Chair of Biochemistry, Microbiology and Biotechnology |
| <b>Period of time</b> | 2021 - 2024   |
| <b>Rank/degree</b>    | Senior laboratory assistant   |

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## Scientific interests

- Biochemistry

- Medical Biochemistry
- Cancer Biochemistry
- Biochemistry of cell signaling
- Diabetes mellitus

## Participation in international conferences and seminars

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| <b>05/07/2025 -<br/>09/07/2025</b> | 49th FEBS Congress<br>Turkey  |
| <b>29/06/2024 -<br/>03/07/2024</b> | 48th FEBS Congress - 'Mining biochemistry for human health and well-being'<br>Italy                                   |
| <b>08/07/2023 -<br/>12/07/2023</b> | 47th FEBS Congress, Together in bioscience for a better future<br>France  |
| <b>12/06/2023 -<br/>15/06/2023</b> | EACR 2023 Congress: Innovative Cancer Science<br>Italy  |
| <b>09/07/2022 -<br/>14/07/2022</b> | ,The Biochemistry Global Summit (25th IUBMB Congress, the 46th FEBS Congress and the 15th PABMB Congress)<br>Portugal |

## Publications

*Article*

### **Tissue remodeling during high-altitude pulmonary edema in rats: Biochemical and histomorphological analysis**

Ruzanna A. Shushanyan, Hasmik M. Karapetyan, Edita E. Nadiryan, Nikolay V. Avtandilyan, Anna V. Grigoryan, Anna F. Karapetyan

Tissue and Cell 2025 102727

*Article*

### **5-fluorouracil and Rumex obtusifolius extract combination trigger A549 cancer cell apoptosis: uncovering PI3K/Akt inhibition by in vitro and in silico approaches**

Mikayel Ginovyan, Hayarpi Javrushyan, Svetlana Hovhannisyanyan, Edita Nadiryan, Gohar Sevoyan, Tigran Harutyunyan, Smbat Gevorgyan, Zaruhi Karabekian, Alina Maloyan, Nikolay Avtandilyan

Scientific Reports 2024 1-16

*Article*

### **Royal Jelly-Mediated Silver Nanoparticles Show Promising Anticancer Effect on HeLa and A549 Cells Through Modulation of the VEGFa/PI3K/Akt/MMP-2 Pathway**

Meri Kocharyan, Syuzan Marutyan, Edita Nadiryan, Mikayel Ginovyan, Hayarpi Javrushyan,

Seda Marutyan, Nikolay Avtandilyan

Applied Organometallic Chemistry 2024 1-11

*Article*

**THE CYTOTOXIC PROPERTIES OF ALCHEMILLA SMIRNOVII EXTRACT ON THE HELA CANCER CELLS VIA DOWNREGULATION OF ARGINASE ACTIVITY**

S.M. Hovhannisyan, E.E. Nadiryan, M.V. Qocharyan, G.H. Petrosyan, G.P. Sevoyan, Z.I. Karabekyan, H.G. Javrushyan, M.M. Ginovyan, N.V. Avtandilyan

ԵՊՀ գիտական տեղեկագիր. Քիմիա և կենսաբանություն: 2023 238-247

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*Article*

**REGULATORY EFFECTS OF RUMEX OBTUSIFOLIUS AND HYPERICUM ALPESTRE EXTRACTS ON THE QUANTITY OF IL-2 IN IN VITRO AND IN VIVO CANCER MODELS**

E.E. Nadiryan, S.M. Hovhannisyan, M. V. Qocharyan, G.H. Petrosyan, H.G. Javrushyan, M.M. Ginovyan, N.V. Avtandilyan

ԵՊՀ գիտական տեղեկագիր. Քիմիա և կենսաբանություն: 2023 248-257

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*Article*

**Antihyperglycemic activity of L-norvaline and L-arginine in high-fat diet and streptozotocin-treated male rats**

Hayarpi Javrushyan, Edita Nadiryan, Anna Grigoryan, Nikolay Avtandilyan, Alina Maloyan

Experimental and Molecular Pathology 2022 104763

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*Article*

**EVALUATION OF THE ANTIOXIDANT ACTIVITY AND THE ANTI-CANCER PROPERTIES OF ALCHEMILLA SMIRNOVII JUZ. EXTRACT ON THE HELA CANCER CELL LINE**

S. Hovhannisyan, E. Nadiryan, M. Qocharyan, G. Sevoyan, M. Ginovyan, N. Avtandilyan

СТУДЕНЧЕСКАЯ ГОДИЧНАЯ НАУЧНАЯ КОНФЕРЕНЦИЯ ЯРОССИЙСКО-АРМЯНСКИЙ УНИВЕРСИТЕТА 2022 40-46

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*Conference*

**Upregulation of nitric oxide quantity by L-norvaline and L-arginine in high-fat diet and Streptozotocin-treated male rats**

E. Nadiryan, H. Javrushyan, N. Avtandilyan, A. Maloyan

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*Conference*

**Anti-inflammatory and immunostimulatory effect of Hypericum alpestre combined with arginase and NOS inhibitors in the rat breast cancer model**

H. Javrushyan, E. Nadiryan, G. Petrosyan, M. Ginovyan, A. Maloyan, N. Avtandilyan

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*Conference*

**Acute brain edema associated with the elevated levels of oxidative stress mediators and TNF-alpha in rats: biochemical and immunohistochemical assessment**

R. Shushanyan, A. Grigoryan, E. Nadiryan, A. Karapetyan

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*Conference*

**ANTI-CANCER PROPERTIES AND POTENTIAL MOLECULAR MECHANISMS OF COMBINATIONS OF HERBAL EXTRACTS AND CHEMOTHERAPEUTIC AGENTS**

N. Avtandilyan, H. Javrushyan, H. Karapetyan, A. Grigoryan, E. Nadiryan, G. Sevoyan, M. Ginovyan,

A. Maloyan

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*Conference*

**Enhanced anti-inflammatory and antiproliferative effects of Inula helenium herbal extract and arginase inhibitor in breast cancer in vivo study**

E. Nadiryan, H. Javrushyan, N. Avtandilyan

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*Conference*

**Interconnection between hyperglycemia, cancer, and arginine metabolism: a unified therapeutic approach**

E.Nadiryan, H.Javrushyan, N.Avtandilyan

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*Conference*

**Phytochemicals and Chemotherapy: Present and Future Strategy**

Hayarpi Javrushyan, Edita Nadiryan, Nikolay Avtandilyan, Alina Maloyan

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*Conference*

**Modulating Bone Marrow Microenvironment in Breast Cancer: Impact of Combined Chemotherapy and Herbal Extracts**

Edita Nadiryan, Gayane Petrosyan, Nikolay Avtandilyan, Hayarpi Javrushyan

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*Conference*

**Hypoxia-Linked Alterations in Arginine Metabolism and Oxidative Stress in the Bone Marrow during Breast Cancer Progression and Treatment**

Hayarpi Javrushyan, Edita Nadiryan, Svetlana Hovhannisyan, Nikolay Avtandilyan

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