

# Svetlana Marat Hovhannisyan

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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>	Yerevab State University
<b>Faculty</b>	Faculty of Biology, Charir of Biochemistry, Microbiology and Biotechnology
<b>Date</b>	2020 - 2022
<b>Degree name</b>	Masters

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<b>Institution</b>	Yerevab State University
<b>Faculty</b>	Faculty of Biology, Charir of Biochemistry, Microbiology and Biotechnology
<b>Date</b>	2016 - 2020
<b>Degree name</b>	Bachelor

## Language skills

Русский Deutsch English

## 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>	2023 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 - 2023
<b>Rank/degree</b>	Senior laboratory assistant

## Scientific interests

- Enzymology
  - Medical biochemistry
  - Cancer biochemistry
  - Toxycology
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*Article*

**ALTERATIONS IN ARGINASE ACTIVITY, NITRIC OXIDE, AND MDA LEVELS IN BONE MARROW DURING DMBA-INDUCED BREAST CANCER IN RATS**

Svetlana M. Hovhannisyanyan, Aqsana S. Hakobyan, Arpine N. Hakobyan, Astghik A. Mkrtchyan,

Hayarpi G. Javrushyan

Proceedings of the YSU B: Chemical and Biological Sciences 2025 113-121

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*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

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*Article*

**RABBITS ARGINASE I AND II: ACTIVITY AND pH SENSITIVITY OF SELF-FORMATION POLYPEPTIDES**

S. M. HOVHANNISYAN, E. K. BARSEGHYAN, N. V. AVTANDILYAN

Proceedings of the YSU B: Chemical and Biological Sciences 2024 35-43

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*Article*

**Screening revealed the strong cytotoxic activity of Alchemilla smirnovii and Hypericum alpestre ethanol extracts on different cancer cell lines**

Mikayel Ginovyan, Svetlana Hovhannisyanyan, Hayarpi Javrushyan, Gohar Sevoyan, Zaruhi Karabekyan,

Narine Zakaryan, Naira Sahakyan, Nikolay Avtandilyan

AIMS Biophysics 2023 12-22

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*Article*

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

S.M. Hovhannisyanyan, 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. Hovhannisyanyan, 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*

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

S. Hovhannisyanyan, 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

**Hypericum alpestre combined with arginase and NOS inhibitors shows antiproliferative activity in the rat breast cancer model**

H.Javrushyan, N.Avtandilyan, S.Hovhannsiyan, M.Qocharyan, M.Ginovyan, A.Maloyan

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Conference

**The combination of herbs and chemotherapeutic agents inhibits tumor progression via down-regulation of the TNF $\alpha$ -VEGF $\alpha$ /PI3K/Akt/NOS/COX-2-MMP-2 pathway in DMBA-induced breast cancer in rats**

N. Avtandilyan, M. Kocharyan, S. Hovhannsiyan, S. Gevorgyan, H. Javrushyan, M. Ginovyan, A. Maloyan

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Conference

**Investigating the anticancer advantages of pairing Rumex obtusifolius herb extract with 5-fluorouracil against breast cancer in vivo**

S. Hovhannsiyan, M. Ginovyan, N. Avtandilyan

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Conference

**Bee Venom as a Source of Novel Antimicrobial Agents: A Regional Study from Armenia**

Inesa Semerjyan, Melanya Grigoryan, Svetlana Hovhannsiyan, Nikolay Avtandilyan, Peter Vandamme,

Inga Bazukyan

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Conference

**Emodin inhibits HIF-1 $\alpha$  expression in MDA-MB- 231 cells via suppression of the PI3K/Akt/mTOR pathway**

S. Hovhannsiyan, M. Ginovyan, N. Avtandilyan

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Conference

**Hypericum alpestre Extract and L-NAME Suppress PI3K/Akt Pathway and Enhance Apoptosis in Lung and Breast Cancer Cells**

Svetlana Hovhannsiyan, Gayane Petrosyan, Hayarpi Javrushyan, Mikayel Ginovyan, Nikolay Avtandilyan

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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 Nadiyan, Svetlana Hovhannsiyan, Nikolay Avtandilyan

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