

# Hayarpi Gevorg Javrushyan

37493789269

hg.javrushyan@ysu.am



## Research Institute of Biology

Հիմնարար և ախտաբանական կենսաքիմիայի լաբորատորիա  
Researcher

## Education

Institution	YSU
Faculty	Biology/Biochemistry
Date	2008 - 2010
Degree name	Masters

Institution	YSU
Faculty	Biology/Biochemistry
Date	2004 - 2008
Degree name	Bachelor

## Scientific Rank/degree

Institution	YSU
Date	2014
Degree name	Postgraduate
Scientific Supervisor	Ph.D, Professor, M.A. Davtyan
Research Topic	Influence of NO on the urea cycle

## Language skills

English Русский

## Work experience

Institution	YSU
Period of time	2023 till now
Rank/degree	Yeseacher

Institution	YSU
Period of time	2016 - 2022
Rank/degree	Junior researcher

## Other information

## Publications

### Article

#### **Hypericum alpestre extract exhibits in vitro and in vivo anticancer properties by regulating the cellular antioxidant system and metabolic pathway of L-arginine**

Mikayel Ginovyan, Hayarpi Javrushyan, Hasmik Karapetyan, Izabela Koss-Mikołajczyk,

Barbara Kusznierevicz, Anna Grigoryan, Alina Maloyan, Agnieszka Bartoszek, Nikolay Avtandilyan

Cell Biochemistry and Function 2024 1-21

### Article

#### **Anti-cancer effect of in vivo inhibition of nitric oxide synthase in a rat model of breast cancer**

Nikolay Avtandilyan, Hayarpi Javrushyan, Mikayel Ginovyan, Anna Karapetyan, Armen Trchounian

Molecular and Cellular Biochemistry 2023 261-275

### Article

#### **Anti-cancer effect of Rumex obtusifolius in combination with arginase/nitric oxide synthase inhibitors via downregulation of oxidative stress, inflammation, and polyamine synthesis**

Mikayel Ginovyan, Hayarpi Javrushyan, Gayane Petrosyan, Barbara Kusznierevicz,

Izabela Koss-Mikołajczyk, Zuzanna Koziara, Monika Kuczyńska, Patrycja Jakubek, Anna Karapetyan,

Naira Sahakyan, Alina Maloyan, Agnieszka Bartoszek, Nikolay Avtandilyan

International Journal of Biochemistry & Cell Biology 2023 106396

### 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

### 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. Թիմիա և կենսաբանություն: 2023 238-247

### 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. Թիմիա և կենսաբանություն: 2023 248-257

### 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

*Article*

**The effects of NO on the urea cycle pathway in short-term intermittent hypobaric hypoxia in rats**

Hayarpi Javrushyan, Nikolay Avtandilyan, Armen Trchounian

Respiratory Physiology & Neurobiology 2021 103598

---

*Article*

**NEW THERAPEUTIC APPROACHES IN BREAST ANTICANCER TREATMENT USING ARMENIAN HERBAL EXTRACTS**

H.G. JAVRUSHYAN, N.V. AVTANDILYAN, M.M. GINOVYAN, A.H. TRCHOUNIAN

Biological Journal of Armenia 2021 32-38

---

*Article*

**The potential therapeutic effect of NG-hydroxy-nor-L-arginine in 7,12-dimethylbenz(a)anthracene-induced breast cancer in rats**

Nikolay Avtandilyan, Hayarpi Javrushyan, Anahit Mamikonyan, Anna Grigoryan, Armen Trchounian

Experimental and Molecular Pathology 2019 1-10

---

*Article*

**NG-ՀԻԴՐՕՔՍԻ-ՆՈՐ-Լ-ԱՐԳԻՆԻՆԻ ՀԱԿԱՌԻՈՒՑՔԱՅԻՆ ԱՉԴԵՑՈՒԹՅՈՒՆԸ 7,12-ԴԻՄԵԹԻԼԲԵՆՉԱՆԹՐԱՑԵՆՆՈՎ ԽԹԱՆՎԱԾ ԱՌԵՏՆԵՐԻ ԿՐԵՔԱԳԵՂՁԻ ԶԱՂՑԿԵՐԻ ՓՈՐՁԱՐԱՐԱԿԱՆ ՄՈՂԵԼՈՒՄ**

Ավթանդիլյան Էլվիրա, Թովմասյան Մարիամ, Մամիկոնյան Անահիտ, Զավրուշյան Հայարպի ԵՊՀ ՌԻԳԸ գիտական հոդվածների ժողովածու 2019 114-121

---

*Article*

**The Involvement of Arginase and Nitric Oxide Synthase in Breast Cancer Development: Arginase and NO Synthase as Therapeutic Targets in Cancer**

Nikolay Avtandilyan, Hayarpi Javrushyan, Gayane Petrosyan, Armen Trchounian

BioMed Research International 2018 8696923,9

<https://www.hindawi.com/journals/bmri/2018/8696923/>

---

*Article*

**THE CHANGE OF POLYAMINES AND NITRIC OXIDE QUANTITIES IN HUMAN BLOOD SERUM OF PROSTATE AND BLADDER CANCER**

H. Javrushyan, N. Avtandilyan, A. Mamikonyan, A. Trchounian

Biological Journal of Armenia 2017 125-132

<http://biology.asj-oa.am/view/year/2017.html>

---

*Article*

**DIETHYLAMINE NONOate INFLUENCE ON RATS UREA CYCLE ENZYMES ACTIVITY AFTER AND BEFORE HYPOXIA**

H. G. Javrushyan, M. H. Khachatryan

Electronic Journal of Natural Sciences of NAS RA 2016 15-19

<http://ejns.sci.am>

---

*Article*

**EFFECT OF HYPOXIA ON THE ACTIVITY OF UREA CYCLE ENZYMES**

*Article*

**THE INFLUENCE OF NG -HYDROXY-L-ARGININE ON THE ACTIVITY OF THE UREA CYCLE ENZYMES**

H. G. JAVRUSHYAN  
Biological Journal of Armenia 2014 113-117  
<http://www.flib.sci.am/eng/Biology/>

---

*Conference*

**INHIBITION OF NOS ACTIVITY AS AN EFFECTIVE ANTICANCER THERAPY AGAINST 7,12-DMBA RAT MODEL OF BREAST CANCER**

Mamikonyan A., Avtandilyan N., Javrushyan H., Trchounian A.

---

*Conference*

**Arginase is an enzyme with real tricks in antitumor treatment of 7,12-dimethylbenz(a)anthracene induced breast cancer in rats**

G.Petrosyan, N. Avtandilyan, H. Javrushyan, A. Trchounian

---

*Conference*

**The change of polyamines and NO quantities in different stages of breast and prostate cancers**

H. Javrushyan, A. Trchounian

---

*Conference*

**Inhibition of breast cancer tumorigenesis by NG-Nitro-L-arginine methyl ester in rats**

H. Javrushyan, A. Trchounian

---

*Conference*

**Polyamines deprivation as a targeted therapy for mammary carcinoma in rats induced by 7,12-dimethylbenz[a]anthracene**

H. Javrushyan, A. Mamikonyan, A. Trchounian

---

*Conference*

**Effect of L-arginine catabolic enzymes inhibitors on 7,12-dimethylbenz(a)anthracene-induced mammary tumors in rats**

NIKOLAY AVTANDILYAN, HAYARPI JAVRUSHYAN, ANAHIT MAMIKONYAN, ARMEN TRCHOUNIAN

---

*Conference*

**Suppression of tumor progression by arginase and NO-synthase combined inhibition in 7,12-dimethylbenz(a)anthracene-induced breast cancer in rats**

A. Mamikonyan, H. Javrushyan, N. Avtandilyan, A. Trchounian

---

*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

---

*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

---

*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

---

*Conference*

**New therapeutic approach in breast anti-cancer treatment using a combination of Rumex obtusifolius extract and L-arginine pathway inhibitors**

N. Avtandilyan, H. Javrushyan, A. Karapetyan, M. Ginovyan

---

*Conference*

**Evaluation of immunostimulatory effect of combination of herbal extracts and chemotherapeutic drugs by quantitative alteration of interleukin-2**

H. Javrushyan, G. Sevoyan, M. Ginovyan, Z. Karabekian, N. Avtandilyan

---

*Conference*

**Adipose Tissue Dysfunction in the Offspring of Obese Mothers**

Hayarpi Javrushyan, Yem J Alharithi, Nolan Gregg, Sushil Kumar, Alina Maloyan

---