

# Ruzanna Arsen Shushanyan

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## Research Institute of Biology

Laboratory of Integrative and Adaptive Physiology of Humans and Animals  
Researcher

## Education

Institution	Yerevan State University
Faculty	Faculty of Biology, Chair of Human and Animal Physiology
Date	2021 - 2024
Degree name	PhD student

Institution	Yerevan State University
Faculty	Faculty of Biology, Chair of Human and Animal Physiology
Date	2019 - 2021
Degree name	Masters

Institution	Yerevan State University
Faculty	Faculty of Biology, Chair of Zoology
Date	2015 - 2019
Degree name	Bachelor

## Language skills

Հայերեն English Русский

## Work experience

Institution	Yerevan State University, Research Institute of Biology
Period of time	2025 till now
Rank/degree	Researcher

Institution	YSU, Faculty of Biology, Department of Human and Animal Physiology
Period of time	2023 - 2025
Rank/degree	Senior Laboratory Assistant

Institution	Yerevan State University, Research Institute of Biology
Period of time	2021 - 2024
Rank/degree	Junior researcher

Institution	Institute for Informatics and Automation Problems NAS RA
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<b>Period of time</b>	2019 till now
<b>Rank/degree</b>	Junior researcher



## Scientific interests

- Neuroscience, Neuroanatomy, Neurochemistry, Histology, Physiology



## Participation in international conferences and seminars

<b>23/07/2025 - 26/07/2025</b>	XXIX International Symposium on Morphological Sciences (ISMS 2025) Portugal
<b>12/06/2025 - 14/06/2025</b>	Multifaceted Neuroscience:MFN 2025 Conference Georgia
<b>02/06/2025 - 06/06/2025</b>	PROM – Short-Term Academic Exchange Program John Paul II Catholic University of Lublin Poland
<b>22/03/2021 - 04/04/2021</b>	Best Practices for Biomedical Research Data Management Harvard Medical School United States of America (the)
<b>20/08/2022 - 09/09/2022</b>	Online Summer School of Molecular Medicine University of Jena Germany
<b>21/10/2024 - 23/10/2024</b>	The 1st International Conference for Young Neuroscientists “Brain and Neuroplasticity” Georgia
<b>29/06/2024 - 03/07/2024</b>	The 48th FEBS Congress 'Mining biochemistry for human health and well-being' Italy
<b>08/07/2023 - 12/07/2023</b>	The 47th FEBS Congress 'Together in bioscience for a better future' France



## Membership

<b>Institution</b>	Society for Neuroscience SfN
<b>Period of time</b>	2025 till now
<b>Institution</b>	Federation of European Biochemical Societies

Period of time 2022 till now

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Institution BIO-SEE Society (Biomedical Imaging Organization for South East Europe)

Period of time 2022 - 2025

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## Publications

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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

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Article

**Histomorphological assessment of T-2 toxin, ochratoxin A, and aflatoxin B1-induced renal damage in a rat model**

Anna Grigoryan, Tamara Abgaryan, Ruzanna Shushanyan, Ruzanna Adamyan, Marieta Mkhitarian,

Lyudmila Niazyan, Anna Karapetyan

Ukrainian Journal of Nephrology and Dialysis 2025 14-23

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Article

**Morphological abnormalities of peripheral blood cells among patients with COVID-19 disease**

Anna Karapetyan, Lyudmila Niazyan, Ruzanna Shushanyan, Tamara Abgaryan, Sevan Iritsyan,

Tehmine Galechyan, Sargsyan Knarik, Anna Grigoryan

Heliyon 2024 e24527

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Article

**The role of oxidative stress and neuroinflammatory mediators in the pathogenesis of high-altitude cerebral edema in rats**

Ruzanna A. Shushanyan, Nikolay V. Avtandilyan, Anna V. Grigoryan, Anna F. Karapetyan

Respiratory Physiology and Neurobiology 2024 104286

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Article

**THE EVALUATION OF MAST CELLS, TNF- $\alpha$  EXPRESSION AND TUNEL-POSITIVE NEURONS IN THE BRAIN DURING INFLAMMATORY RESPONSE INDUCED BY ACUTE HYPOBARIC HYPOXIA**

R.A. Shushanyan

Proceedings of the YSU B: Chemical and Biological Sciences 2024 86-94

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Article

**Histopathological changes of mice tissues in course of the envenomation by the *Macrovipera lebetina obtusa* venom and the neutralizing effect of the ovine-derived experimental antivenom**

Gevorg Avagyan, Hasmik Yerosyan, Arsen Kishmiryan, Ruzanna Shushanyan, Arthur Melkonian,

Naira M. Ayvazyan

Toxicon 2024 107821

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Article

## **ASSESSMENT OF CHANGES IN HEART RATE VARIABILITY INDICES OF STUDENTS AFTER COVID-19 LOCKDOWN: A COHORT STUDY**

Emma Gevorkyan, Ruzanna Shushanyan, Karine Hovhannisyan, Marietta Karapetyan, Anna Karapetyan

Медицинские новости Грузии (Georgian medical news) 2024 199-204

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### *Article*

#### **Antioxidant effects of *Crataegus laevigata* on rat's brain under hypobaric hypoxia-induced oxygen deficiency**

Karapetyan M.A., Adamyan N.Yu., Shushanyan R.A., Karapetyan A.F.

Neurochemical Journal 2023 477-481

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### *Article*

#### **Cardiovascular Adaptability of Young Adults under Physical Activity during the Post-COVID-19 Period**

E. S. Gevorkyan, K. V. Baghdasaryan, R. A. Shushanyan, A. F. Karapetyan

Human Physiology (Физиология человека) 2023 562-572

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### *Article*

#### **Histological and cytochemical analysis of the brain under conditions of hypobaric hypoxia-induced oxygen deficiency in albino rats**

Ruzanna Shushanyan, Anna Grigoryan, Tamara Abgaryan, Anna Karapetyan

Acta Histochemica 2023 152114

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### *Article*

#### **HYPOBARIC HYPOXIA CAUSES HISTOMORPHOLOGICAL ALTERATIONS IN THE DIFFERENT PARTS OF THE RAT'S BRAIN**

R. A. SHUSHANYAN, A. V. GRIGORYAN, A. F. KARAPETYAN

Proceedings of the YSU B: Chemical and Biological Sciences 2022 266-274

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### *Article*

#### **ASSESSMENT OF COLLABORATION PATTERNS IN THE FIELD OF BIOLOGY IN ARMENIA DURING 2007-2020: A BIBLIOMETRIC OVERVIEW**

R. A. Shushanyan, M. J. Ohanyan

Biological Journal of Armenia 2022 93-100

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### *Article*

#### **The role of socio-economic and scientometric indicators in the cancer mortality rate**

Shushanik Sargsyan, Parandzem Hakobyan, Ruzanna Shushanyan, Aram Mirzoyan, Viktor Blaginin

Upravlenets (The Manager) 2022 54-68

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### *Conference*

#### **Assessment of NO level and histological alterations in the rats brain during high altitude cerebral edema induced by hypobaric hypoxia**

R. Shushanyan, A. Karapetyan, A. Grigoryan

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### *Conference*

#### **Cytotoxic effect of the of SARS COV-2 on peripheral blood cells in the pathogenesis of COVID-19 disease**

A. Karapetyan, A. Grigoryan, L. Niazyan, R. Shushanyan, T. Abgaryan, T. Galechyan, S. Iritsyan,

K. Sargsyan

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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*

**Assessment of long-term cardiovascular complications of SARS-COV-2 in young adults**

E. Gevorkyan, R. Shushanyan, K. Hovhannisyan, A. Karapetyan

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*Conference*

**The morphofunctional changes in rat's liver under conditions of 7, 12-DMBA-induced breast cancer after NG-Nitro-L-arginine methyl ester treatment**

A. Grigoryan, R. Shushanyan, N. Avtandilyan, A. Karapetyan

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