

Ruzanna Arsen Shushanyan

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Research Institute of Biology

Laboratory of Human and Animal Integrative and Adaptive Physiology

Researcher

Education

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

Scientific Rank/degree

Institution	Yerevan State University
Date	2025
Degree name	Candidate
Specialty	Biological sciences
Scientific Supervisor	Anna Karapetyan
Research Topic	Assessment of morphofunctional changes in some organs of rats under acute hypobaric hypoxic conditions

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
Period of time	2019 till now
Rank/degree	Junior researcher

Scientific interests

- Neuroscience
- Neuroanatomy
- Neurochemistry
- Histology
- Human Physiology
- Science Communication & Policy

Participation in international conferences and seminars

06/10/2025 - 08/10/2025	9th Congress of the Serbian Neuroscience Society Serbia
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23/07/2025 - 26/07/2025	XXIX International Symposium on Morphological Sciences (ISMS 2025) Portugal
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12/06/2025 - 14/06/2025	Multifaceted Neuroscience:MFN 2025 Conference Georgia
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02/06/2025 - 08/06/2025	PROM – Short-Term Academic Exchange Program John Paul II Catholic University of Lublin Poland
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22/03/2021 - 04/04/2021	Best Practices for Biomedical Research Data Management Harvard Medical School United States of America (the)
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20/08/2022 - 09/09/2022	Online Summer School of Molecular Medicine University of Jena Germany
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21/10/2024 - 23/10/2024	The 1st International Conference for Young Neuroscientists “Brain and Neuroplasticity” Georgia
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29/06/2024 - 03/07/2024	The 48th FEBS Congress 'Mining biochemistry for human health and well-being' Italy
08/07/2023 - 12/07/2023	The 47th FEBS Congress 'Together in bioscience for a better future' France

Membership

Institution	FENS (Federation of European Neuroscience Societies)
Period of time	2025 till now
Institution	Society for Neuroscience SfN
Period of time	2025 till now
Institution	Federation of European Biochemical Societies
Period of time	2022 till now
Institution	BIO-SEE Society (Biomedical Imaging Organization for South East Europe)
Period of time	2022 - 2025

Publications

Article

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

Ruzanna A. Shushanyan, Hasmik M. Karapetyan, Editia E. Nadiryan, Nikolay V. Avtandilyan,

Anna V. Grigoryan, Anna F. Karapetyan

Tissue and Cell 2025 102727

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

Article

Investigating the interplay of immune response and redox homeostasis in hypoxic brain injury at high altitude

Ruzanna Shushanyan, Hasmik Karapetyan, Nona Adamyan, Anna Karapetyan

European Journal of Anatomy 2025 551-561

Article

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

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

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

Article

THE EVALUATION OF MAST CELLS, TNF- α 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

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

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

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

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

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

Article

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

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

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

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

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

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

Conference

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

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

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

Conference

Impact of Sea Buckthorn Oil and Dexamethasone on Hematological Parameters in Hypoxia-Exposed Rats

Anna Grigoryan, Ruzanna Shushanyan, Tamara Abgaryan, Milena Shahbazyan, Tatev Poghosyan,

Zarik Stepanyan, Nona Grigoryan, Anna Karapetyan

Conference

Liver Regeneration and Immune System Interactions: Evidence from Thymus and Bursa of Fabricius in Chickens

Tamara Abgaryan, Anna Grigoryan, Ruzanna Shushanyan, Milena Shahbazyan, Anna Karapetyan

Conference

The impact of high altitude hypoxia on brain and liver: histomorphological insights into hepatic-neurovascular interactions

R. Shushanyan, A. Grigoryan, T. Abgaryan, A. Karapetyan

Conference

MORPHOFUNCTIONAL CHANGES IN THE BURSA OF FABRICIUS DURING LIVER REGENERATION

T. Abgaryan, A. Grigoryan, R. Shushanyan, A. Karapetyan
