



Georgian National Academy of Sciences



Personal Data (CV)

Surname	Mitagvaria	First Name	Nodar
Address (work)	Tbilisi, L. Gotua St., 14	Date and place of birth	January 29, 1941, Tbilisi
Citizenship	Citizen of Georgia	Contact phone number	599 304 104
E-mail	nodmit@gmail.com		

1. Education

Institution	Learning Time
Georgian Polytechnic Institute	1958-1963
Postgraduate studies at the I. Beritashvili Institute of Physiology	1967-1980

2. Scientific or Academic Degree and Rank

	Title of the thesis	Date of conferment
Ph.D. thesis	Mechanisms regulating cerebral blood flow	31.05.1971
Doctoral thesis	Analysis of metabolic activity in the brain. Awarded the degree of Doctor of Biological Sciences	17.05.1984
Academician Doctor		
Research Follow of the Academy		
Corresponding Member of the Academy		
Member of the Academy	Awarded the title of full member of the Academy	2013

3. Knowledge of Languages

Foreign languages	Level of language proficiency (fluent, intermediate, beginning with the help of a dictionary)
Russian	freely
English	freely

4. Work Experience (Including permanent positions abroad)

Date	Institution	Position
2021 - present	I. Beritashvili Experimental Biomedicine Center, Laboratory of Cerebral Blood Circulation and Metabolism	Chief Researcher
2012 – 2017	I. Beritashvili Experimental Biomedicine Center	Chairman of the Scientific Council
1991-2021	I. Beritashvili Experimental Biomedicine Center (former Institute of Physiology)	Head of the Department of Cerebral Circulation and Metabolism.
1971-1980	I. Beritashvili Institute of Physiology	Head of the Laboratory of Metabolic Support of Brain Functions.
1980-1991	I. Beritashvili Institute of Physiology	Deputy Director
1967-1971	I. Beritashvili Institute of Physiology	Postgraduate student and then research assistant.
2017-2019	BAO Health Resource Corporation (Tarzana, USA)	Scientific Advisor
2015-	Georgian National Academy of Sciences	Academician-Secretary of the Department of Physiology and Medicine
2010-2017	Federation of European Neuroscience Societies (FENS)	Member of the Governing Board
2010-2017	International Brain Research Organization (IBRO)	Member of the Governing Board
2010-2011	International Clinical Hyperthermia Society (ICHS)	President
1991-	Valley Cancer Institute (Los Angeles, USA)	Senior Consultant
1975-1978	International Organization for Oxygen Transport in Tissues (ISOTT)	Executive Director

4.1 Teaching Activity

Date	Institution	Position
From 2017 to present	A(A)IP - New Vision University	Professor of Cardiovascular Physiology

4.2 Work Abroad (Long-term visits to international universities or research centers)

Date	Place and Institution
1973	Warsaw (Poland) - Center for Clinical and Experimental Medicine
1975	Dortmund (Germany) - Max Planck Institute for Systems Physiology
1978	Buffalo (New York) - Roswell Park Memorial Institute
1983	Van Nuys (California) - Western Tumor Medical Group
1986	Los Angeles (California) - Pan Dynamics Medical Corporation
1990-1991	Los Angeles (California) - Valley Cancer Institute and Rollins College, Winter Park, Florida

5. Scientific Interests

<ol style="list-style-type: none"> 1. Mechanisms regulating cerebral blood flow; 2. Analysis of metabolic activity in the brain, 3. The role of the hormesis phenomenon under different levels of stress

6. Publications (Total number)

3 scientific monographs, 4 textbooks, more than 200 articles and abstracts, published in Georgian, Russian and English publications and collections of works.

6.1 Citation Index

Scopus, h index- 6
 Google Scholar, h index-6
 Web of Science, h index-6

6.2 Monographs

Years	
1983	N. Mitagvaria - Maintaining cerebral circulatory stability
1995	Azini L, Klimini V, Mitagvaria - Regulatory mechanisms of cerebral cortex blood supply
2009	N. Mitagvaria, H. Beecher - Regulation of cerebral blood circulation

6.3 Principal Papers (no more than 50)

Years	
2024	Marina Devdariani, Babry Oren, Mariam Darbaidze, Nino Sikharulidze, Ia Kvachakidze, Marina Nebieridze, Lena Davlianidze, Lali Gumberidze, Tengiz Zaalishvili, Nodar Mitagvaria. Oxidative and Antioxidative Activity of Organism after Conditions of Hyperthermia-Induced Hormesis and its Disruptions by High Temperature. Bulletin of the Georgian National Academy of Sciences, vol.18, no.2
2023	Archil Chirakadze, Giorgi Chubinidze, Mayiukh Bose, Labanyamoyee Hatui, Nugzar Dvali, Nana Khuskivadze, Sudip Bhattacharyya, Rabina Pradhan, Marina Devdariani, Lali Gubmeridze, Lena Davlianidze, Nino Kostichuk. Selective Toxicity Testing of Gemcitabine, DMSO, Rubidium and Cesium Salts and Saline Solution Compositions in A549 and NHDF Cell Lines. Bulletin of the Georgian National Academy of Sciences, vol.17,no.3.
2023	Babry Oren, Marina Devdariani, Marina Nebieridze, Lena Davlianidze, Lali Gumberidze, Ia Kvachakidze, Nino Sikharulidze, Mariam Darbaidze, Nodar Mitagvaria. Antioxidat Effect of Herbal Preparations of Folium in the Cardiovascular and Cholesterol Systems Under Normal and Hyper-Termic Stress Effects on White Rats. Proc. Georgian Nat. Acad .Sci., Biomed. Series, vol 49, n.4-6
2021	Nodar Mitagvaria, Marina Devdariani, lena Davlianidze, Marina Nebieridze, Lali Gubmeridze, Ia Kvachakidze and Nino Sikharulidze.The main Mechanisms of Cerebral Blood Flow Autoregulation. Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia, 2021Nova Science Publishers,Inc. ISBN; 978-1-68507-113-4
2021	Archil Bhirakadze, Nodar Mitagvaria, David Jishiashvili, Marina devdariani, Gia Petriashvili, Lena Davlianidze, Nugzar Dvali, Ketevan Chubinidze, Alexander Jishiashvili, Zakaria Buachidze, Irina Khomeriki. Development and Testing of Nanoparticles for Treatment of cancer Cells by Curie Temperature Controlled Magnetic Hyperthermia. Bulletin of the Georgian National Academy of Sciences, vol.15.N1, 2021.
2021	AArchil Chirakadze, Nodar Mitagvaria, Nino Lomidze, Maia Ambokadze, Akaki Gigineishvili, Zakaria Buachidze, Marina Devdariani, lena Davlianidze, Lali Gumberidze, Marina Nebieridze, Nini Sikharulidze Development and Testing of New Combined Insecticides against the Brown Marmorated Stink bug (BMSB, Halyomorpha Halys) in Laboratory Conditions. Bulletin of the Georgian National Academy of Sciences, vol.15, n3
2019	ChikobavaN., Doreuli N., MitagvariaN. Changes in arterial reactivity to nodradrenaline under conditions of hyperhomocysteinemia. Georgian Medical News, #7-8 (292-293), 92-95.
2019	Devdariani. M, Davlianidze L, Nebieridze M, Darbaidze M, Gugushvili M, Sikharulidze N, Kekoshvili T, Mitagvaria N. Effects of High low doses of etanol, given to rats during the process of pregnancy, on the behavior and the blood rheological properties of their offsprings. Georgian Medical News, no 5(290)

2018	Mitagvaria N., Davlianidze L., Devdariani M., Mantskava M., Nebieridze M., Momtselidze N., Gumberidze L., Kvachakidze I., Sikharulidze N. Analysis of the Mechanisms of Whole Body Hyperthermia-Induced Behavioral Disorders (Experimental Study). In: Systemic, Cellular and Molecular Mechanisms of Physiological Functions and Their Disorders (Edit.: Nodar Mitagvaria, Nargiz Nachkebia). Nova Science Publishers, NY, USA, , pp. 173-194
2018	Lazrshvili I., Bikashvili T., Mitagvaria N. The Effect of Patial Deprivation of External Noise on the Structural Alterations of the Medial Geniculate Body. In: Systemic, Cellular and Molecular Mechanisms of Physiological Functions and Their Disorders (Edit.: Nodar Mitagvaria, Nargiz Nachkebia). Nova Science Publishers, NY, USA, pp. 137-144.
2018	Mitagvaria N., Davlianidze L., Devdariani M., Nebieridze M., Gumberidze L., Kvachakidze I., Sikharulidze N. HYPERTHERMIA AS A TRIGGER FOR ACTIVATION OF HORMETIC MECHANISMS. Open Access Peer-reviewed Journal "Science Review", 3(10), March 2018, Vol.4, pp. 4-10.
2018	Mitagvaria N., Murtazashvili T. Study of ophthalmic safety of Camelin eye drops. In: ЛЕКАРСТВА - ЧЕЛОВЕКУ. СОВРЕМЕННЫЕ ПРОБЛЕМЫ ФАРМАКОТЕРАПИИ И НАЗНАЧЕНИЯ ЛЕКАРСТВЕННЫХ СРЕДСТВ. Материалы II Международной научно-практической конференции в двух томах. 28-29 марта, т.2, стр.15-16, Харьков
2017	N. Chikobava, M.Dekanosidze, N. Mitagvaria. Direct measurement of Contractility of Isolated Small Arteries Preparations. Bulletin of Georgian National Academy of Sciences, , vol 11,, #3, 146-150.
2017	Mitagvaria Nodar P. Fusion Pore: A Curious Case of Rediscovering Science. Discoveries, USA, 2017, April-June; 5 (2): e73.DOI: 10.15190/d.
2016	Lazrshvili I., T. Bikashvili, L.Gelazonia and N. Mitagvaria. Manganese loading induces mouse-killing behaviour in nonaggressive rats. Journal of Biological Physics and Chemistry, 16, 3, 137-141.
2015	Jojua N., Gongadze N., Mitagvaria N. The main types of stroke and pathophysiological mechanisms of their development. Proceedings of the Georgian Academy of Sciences, Biomedical Series, 2015, 41, 5-6, 241-252.
2015	Сагинадзе Н.А., Саканделидзе Р.В., Митагвария Н.П. Поведенческие эффекты оксидативного стресса. Georgian Medical News, , 240, 3, 78-82
2015	N.Mitagvaria, I. Lazrshvili, M.Devdariani, L. Davlianidze, M. Nebieridze, N. Saginadze, I.Kvachakidze, L. Gumberidze, N. Sikharulidze. Hormesis - a basis for homeostasis in the presence of stressors. An example of hyperthermic stress. Journal of Biological Physics and Chemistry, 15, 187-193.
2014	М. Манцкава, Г. Азикури, Н.Момцелидзе, Н. Митагвария. Гемореологический статус крови при обструктивном апное. Известия НАН Грузии, Серия биомедицина, 2014, т.40, 5-6, 314-319.
2013	N. Mitagvaria, J. Bicher, M. Devdariani, L. Davlianidze, M. Nebieridze, N. Momtselidze. Autoregulation of the brain temperature during whole body hyperthermia. Oncothermia Journal, 7, 62-68
2013	Mitagvaria N., Bicher J. Hormetic effect of whole body hyperthermia. Proceedings of 32 nd Annual Conference of t he International Clinical Hyperthermia Society (ICHS). Guangzhou, China, 107-116.
2012	Mitagvaria, J.Bicher, M. Devdariani, L. Davlianidze, M. Nebieridze and N. Momtselidze. Whole body hyperthermia and the phenomenon of temperature homeostasis in the rat brain. Journal of Biological Physics and Chemistry, 12, 133–137
2012	N. Mitagvaria, M. Devdariani, L. Davlianidze, M. Nebieridze. The problem of inversion of coupling "Function-Metabolism-Blood Flow" in the brain. Materials of the Conference "Physiological Mechanisms of Organisms' Functional Regulation". Erevan, Gitutun, 38, 217-221.
2011	Mitagvaria N., Darbaidze M., Kekoshvili T., Pitiuri N. Pathophysiology of Stroke. Proceedings of Conference "Modern Scientific Problems", Gori, 2011, 200-2011
2010	Mitagvaria N., Bicher H., Lazrshvili I., Devdariani M., Nebieridze M. The role of Nitric Oxide in development of local Hyperthermia-induced morphological changes in cerebral tissue – an experimental study on rats. Proceedings of XXIX Meeting of the International Clinical Hyperthermia Society (ICHS), Cologne, Germany, September,
2009	Mitagvaria N., Devdariani M., Gobechia L., Nebieridze M. Basal tone of cerebrovascular smooth muscles and their reactivity to metabolic factors. The Journal of Physiological Sciences, Proceedings of the XXXVI International Congress of Physiological Sciences (IUPS 2009), Kyoto Japan, Springer, P4AM-6-11.

2009	Bicher H., Mitagvaria N., Kvachakidze I., Shukakidze A., Lazrishvili I., Arabuli M/. Khomeriki. Main factors in development of local hyperthermia-induced morphological changes in cerebral tissue of the rat. Proceedings of Tbilisi State Medical University,, XLIII, 17-18
2009	Sukhishvili E., Janelidze M., Bekaia T., Bekaia G., Mitagvaria N. Calcitonin gene related peptide inhibits contractile activity of miometrium. First International Conference “Healthy Woman”, Tbilisi, 2009, 5.
2008	Читаишвили Н.Т., Митагвария Н.П. Механизмы регуляции сократимости гладких мышц артерий головного мозга. Georgian Medical News, 10, 163, 76-79.
2007	Bicher H., Mitagvaria N., Nebieridze M., Tabatadze M. Effect of blood viscosity and free radicals on severity of morphological changes, induced in cerebral tissue by local hyperthermia (Experimental Study). Proc. Georgian Acad. Sci. Biol. Ser. A, 2007, 6, 329-340
2007	H.I.Bicher, N.P.Mitagvaria. The physiological effects of hyperthermia treatment. Proc. Georgian Acad. Sci., Biol. Ser. A, , 33, 3, 153-168
2006	Саришвили А., Митагвария Н., Азикури Г., Цинцадзе Т., Лазришвили И. Изменения эмоционального состояния и нарушения процесса обучения у крыс при экспериментальной печеночной энцефалопатии. Georgian Medical News, 6, 135, 134-139.
2006	Шенгелия Д., Никурадзе Н., Митагвария Н., Бекая Г. Определение нижнего предела ауторегуляции кровоснабжения диска зрительного нерва в эксперименте. Georgian Medical News, 3, 132, 113-115.
2004	Митагвария Н., Джикия М. Анализ особенностей функционирования метаболического звена регулирующей системы тонуса кровеносных сосудов головного мозга и языка. Известия АН Грузии, Серия биол., , 30, 5, 673-683.
2004	Bicher HI MD, Mitagvaria NP PhD, Nebieridze MI MD. Local Hyperthermia treatment results in significant morphological changes in rats’ brain tissue. Proceedings of the XXVI ICHS Shenzhen, China, September 10th-12th,
2002	Николайшвили Л., Гобечия Л., Митагвария Н. Эффекты фентанила и морфина на местный кровоток и уровень напряжения кислорода в фронтальной области коры и прилежащем ядре головного мозга белых крыс. Российский физиол. журн. им. И.М. Сеченова., т. 88, №12, с. 1505 – 1511.
2001	Небиеридзе М.И., Митагвария Н.П. Теоретические предпосылки использования экспериментальной модели фотодинамического инфаркта коры головного мозга. № Д-26906, рукопись депонирована в ГЦНМБ 12.10.
2001	Mitagvaria N., Nebieridze M., Kakabadze T., Erkomaishvili I. Sildenafil citrate (viagra) aggravates development of cerebral infarction. Clinical Hemorheology and Microcirculation, , 24, 212-213
1999	Квривишвили Г., Митагвария Н. Современные представления о роли глутамата в ишемических повреждениях ткани головного мозга. Российский физиол. Ж. Им. Сеченова, 85, 12, 1489-1495.
1999	Mitagvaria N., Darbaidze M.,Shukakidze A., Bikashvili T. The learning disorders in rats exposed to chronic manganese intoxication. Proc. Georgian Acad. Sci., Biol. Ser., , 25, 4-6, 461-465.
1996	Митагвария Н., Небиеридзе М., Кацарова З., Азикури Г. Эффект плаферона-LB на формирование тромботического инфаркта коры большого мозга. Морфология, , 110, 6, 32-36
1996	Bicher, Haim I, Yarmoninko, Samuel, Wainson, Adolf, Surowiec, Irene, Mitagvaria, Nodar. Anticancer Effect of L-Glucose on Vivo-Potentiation of Hyperthermia. Southern Medical Journal: October 1995 – Volume 88 – Issue 10 – ppg S141. Conjoint Meeting with the American Society of Clinical Hyperthermic Oncology.
1995	Квачакидзе И., Митагвария Н., Хананашвили М. Местный кровоток в теменной коре (поле РА) головного мозга крыс в состоянии информационной патологии поведения. Известия АН Грузии, Серия биологическая. 1-6, 16-22 .
1994	Митагвария Н., Небиеридзе М.И. Морфологические изменения в коре головного мозга белых крыс, вызванные фотохимическим тромбозом мозговых сосудов. В сб. Колосовские чтения-94, Санкт-Петербург, 46-48.
1993	Bicher H., Yarmonenko S., Wainson, S., Surowiec I., Mitagvaria N. Specific inhibition of L-Glucose Cell Proliferation. Potentiation of Hyperthermia, Radiation and Chemotherapy Effects (Abstract). Proceedings of the 16 th ISCH. Kyoto, Japan, June 13-16
1992	Bicher HI, Mitagvaria N. Oxygen and pH in Human Tumors During Hyperthermia (Abstract). Proceeding of the XV International Symposium on Clinical Hyperthermia (ICHS). Lyon, France, May 19-22

1991	Bicher NI, Mitagvaria, N. Oxygen and pH in Human Tumors During Hyperthermia (Abstract). Proceeding of the 1991 International Society on Oxygen Transport to Tissue Meeting (ISSOT). Willemstad, Curaco, Netherlands Antilles, August 24-30
1989	Митагвария Н.П. Нейрогенный механизм регуляции мозгового кровообращения и сопряженность «кровоток-метаболизм-функция». Физиол. Ж. СССР, 75, 11, 1473-1478
1988	L. Nikolaishvili, N. Mitagvaria. Microflow dynamics in brain structures in sleep-wake cycle. In: Neurobiology of Sleep-Wakefulness Cycle (Ed.: T. Oniani). Tbilisi, Metsniereba, 315-22.
1987	Л. Николаишвили, Н. Митагвария, Л. Гобечия. Динамика напряжения кислорода в различных областях гипоталамуса в цикле бодрствование – сон. Физиол. Ж. СССР, LXXIII, 1, 3-7.
1986	И. Бараташвили, Н. Митагвария. Перераспределение местного кровотока в коре головного мозга белых крыс при функц. Нагрузках. Известия АН ГССР, , Ежегодное приложение «Актуальн. Вопр. Эксп. Биол. И медиц.» 23-32.

6.4 Textbooks, Additional Manuals, and other Methodological Literature and Training means

Years	
2013	Human Physiology for Everyone. Tbilisi, 2013. (Co-authors - G. Bekaia, L. Machavariani).
2012	Fundamentals of Human Anatomy and Physiology, a textbook for secondary vocational schools of medical and pharmaceutical profile, "Parnavazi", Gori, 2012 (co-author - T. Kekoshvili).
2004	Biology, 7th grade textbook, "Education", Tbilisi, 2004, revised edition, (co-authors - G. Tumanishvili, I. Lazrishvili, I. Korkia, G. Ghvaladze, S. Tsagareli);
1998	Biology, 7th grade textbook, "Education", Tbilisi, 1998 (co-authors - G. Tumanishvili, I. Lazrishvili, I. Korkia, G. Ghvaladze, S. Tsagareli);

6.5 Participation in Scientific Symposiums, Conferences for the last 5 years

Years	Title	Name of Event
2025	Sikharulidze N, Devdariani M, Kvachakidze I, Nebieridze M, Davlianidze L, Gumberidze L, Oren B, Mitagvaria N. Oxidative and Antioxidative Activity of Organism after Conditions of Hyperthermia-induced Hormesis and its Disruption.	Multifaceted Neuroscience: Celebrating 140 Years of Ivane Beritashvili. June 12-14, Tbilisi, Georgia, 2025. Program, p-11.
2024	Marina Devdariani ¹ , Babry Oren ² , Marina Nebieridze ¹ , Lena Davlianidze ¹ , Mariam Darbaidze ³ , Nino Sikharulidze ¹ , Lali Gumberidze ¹ , Ia Kvachakidze ¹ , Nodar Mitagvaria ¹ . An experimental study of the phenomenon of hormesis induced by whole body hyperthermia.	International Multidisciplinary School Conference on Biomedicine Biomed 2024, May 12-14, Shekvetili, Georgia. Abstract Book, pp.12-13. Doi 10.5281/zenodo.10999046.
2023	Marina Devdariani [*] , Marina Nebieridze, Lia Davlianidze, Lali Gumberidze, Ia Kvachakidze, Nino Sikharulidze, Nodar Mitagvaria. Antioxidant Effects of Some Herbal Preparations	5 th International Symposium, Brain & neuroplasticity: Structural & Molecular Aspects, May 25-27, 2023, Tbilisi, Georgia. Abstract Book, p.13

7. Inventions (Author's Certificate, Patents)

Years	Name
2022	On June 23, 2022, the National Intellectual Property Center of Georgia "Sakpatenti" deposited the scientific paper "The level of individual biochemical constants of the brain of the Krushinsky-Molodkina (KM) inbred rat strain against the background of radon inhalation during epilepsy" by M. Nikolaishvili, Z. Nanobashvili, N. Mitagvaria and G. Chkadua Sakpatenti certification certificate 8663 submitted by Academician of the Georgian National Academy of Sciences, Professor Nodar Mitagvaria.

8. International and Local Scientific grants

Years	Name
2018-2020	STCU. Development and study of novel nanomaterials for self-regulated magnetic cell hyperthermia of cancer cells, <i>Head of Scientific Team</i>)
2012-2014	STCU. Analysis of the mechanisms of whole body hyperthermia-induced behavioral disorders (experimental study); <i>Scientific Supervisor and Manager</i>)
2009-2011	STCU. The role of blood rheology and free radicals in local hyperthermia-induced morphological changes in the brain; <i>Scientific Supervisor and Manager</i>)
2006	World Vision (GABSI-RV). Georgian tool for rapid assessment of adaptive behavior (<i>participant</i>)
1999-2004	ISTC. Novel methods for correction of brain functions in depression and after antidepressant treatment (<i>Head of the group</i>).
1998-1999	NATO Science Program. The study of mechanisms of ischemic-hypoxic disorders in the brain (jointly with the Department of Anatomy at Bristol University), <i>Head of the project from the Georgian side</i>)
1996	OSGF. Training of the specialists from the field of basic biomedical disciplines (<i>Manager</i>).
1997-2000	State Scientific-Technical Program - Development and introduction of new diagnostic and prevention tools. Experimental study of the pathogenesis, prevention and treatment of cerebral infarction (<i>team leader</i>);
1997-2000	Georgian National Academy of Sciences (GNAS) - Examining the role of the adjacent nucleus and, amygdala complex, in drug-dependent behavioral disorders using an experimental model of psychotropic self-injection (<i>team leader</i>);
2002-2004	GNAS. Cerebrovascular Age-Related Changes in Normal and Antihypertensive Drug Conditions (<i>Scientific Supervisor and Manager</i>);
2001	GNAS. Analysis of changes in morpho-functional and behavioral indices induced by Sildenafil Citrate (<i>Scientific Supervisor and Manager</i>);
2005	GNAS. Analysis of morphological and functional changes caused by local hyperthermia in the brain (<i>Scientific Supervisor and Manager</i>).

9. Scientific-Commercial Activity, Implementation

Years	Name

10. Other Activities

	Name	Years
Supervision of Theses work	40 PhD and 10 PhD (in the fields of medicine and biology)	
Participation in International, State and Regional Programs		

11. Membership in international scientific organizations

Years	Name
2010-present	International Brain Research Organization (IBRO) - Member
2010-present	Federation of European Neuroscience Societies (FENS) - Member
2020-present	SIGMA-Xi – Member of the International Scientific Research Society

12. Awards and Prizes

Date	Name of Awards, Prizes
2001	I. Beritashvili Prize
1991	First Prize and Honorary Diploma of the Department of Physiology of the USSR Academy of Sciences for conducting high-quality research on the “Cerebral Blood Circulation Program”
1991	International Order: “Merit for Life” (For service to life)

13. Honorary Title

Date	Honorary Title