CURRICULUM VITAE

Name:	Alla B. Salmina, M.D., Ph.D., Dr. Med. Sci., Professor
Maiden Name:	Alla B. Egorova
Nationality:	Russia
Place of Birth:	Tolyatti, Samara region, Russia
Birth Date:	November 29, 1969
Sex:	Female
Marital Status:	Married, one daughter

Address: Krasnoyarsk State Medical University named after Prof. V.F.Voino-Yasenetsky,
P. Zheleznyaka str., 1, Krasnoyarsk, 660022, Russia

Telephone:	+7-391-228-07-69 (office)
	+7-913-192-06-24 (cell.)
Fax:	+7-391-220-10-71
e-mail:	allasalmina@mail.ru

Foreign Language:

English (fluently)

Educational Background and Degrees Awarded:

1992.6 M.D.	Krasnoyarsk State Medical Institute, Russia
1993.1. Ph.D.	Tomsk Research Institute for Pharmacology, Russia (*thesis on Pathophysiology, Pharmacology*) Supervisors: Prof. Valery V. Ivanov, Assoc. Prof. Lyudmila V. Fedyukovich
1998.5 Dr.Med.Sci	Siberian State Medical University, Russia (*thesis on Pathophysiology*) Supervisor: Prof. Valery V. Ivanov

Postdoctoral Training:

1993.1 1994.3 **Research Fellow** at the Department of Biophysics, Neuroinformation Research Institute, Kanazawa University School of Medicine, Japan (*Biophysics and Molecular Neurobiology*) Supervisor: Prof. Haruhiro Higashida

Professional Appointments:

1994.3 - 1997.7	**Assistant Professor** Department of Pathophysiology Krasnoyarsk State Medical Academy, Russia Head of the Dept.: Prof. Valery V. Ivanov
1997.7 - 1998.10	**Invited Lecturer** Department of Biophysical Genetics, Molecular Medicine and Bioinformatics Kanazawa University Graduate School of Medicine, Japan Head of the Dept.: Prof. Haruhiro Higashida
1998.10 - 2000.10	**Professor** Department of Pathophysiology Krasnoyarsk State Medical Academy, Russia
2000.10 - 2001.1	**Researcher (grant-supported)** Department of Biology, Biochemistry and Genetics, University of Torino Medical School, Italy Head of the Dept.: Prof. Fabio Malavasi
2001.2 - 2002.1	**Professor** Department of Pathophysiology Krasnoyarsk State Medical Academy, Russia
2002.1 till now	**Professor & Head** Department of Biochemistry, Medical, Pharmaceutical & Toxicological Chemistry Krasnoyarsk State Medical University, Russia
2005.2 - 2020.2	**Vice-Rector on Innovative Development and International Activity** Krasnoyarsk State Medical University named after Prof. V.F. Voino-Yasenetsky, Russia
2020.2 till now	**Advisor to the University Rector,** **Head of the Center of International Programs** Krasnoyarsk State Medical University named after Prof. V.F. Voino-Yasenetsky, Russia
2003.3 till now	**Head of the Research Institute of Molecular Medicine & Pathobiochemistry** Krasnoyarsk State Medical University named after Prof. V.F. Voino-Yasenetsky, Russia
2005.8 till now	**Head of the Research & Educational Center "Translational Medicine"** Krasnoyarsk State Medical University named after Prof. V.F. Voino-Yasenetsky, Russia

Honorary appointments:

2015.3 till now	**Collaborative Professor** Kanazawa University (Japan)
2017.1 till now	**Liaison Professor** Niigata University (Japan)

Educational Activity:

Courses on Biochemistry, Molecular and Translational Medicine (in Russian and English), Clinical Chemistry, Pathophysiology for undergraduate students (Krasnoyarsk State Medical University named after Prof. V.F. Voino-Yasenetsky), General Pathology for master students (Siberian Federal University), Advanced Biochemistry (in English) and Molecular Neuroscience (in English) for master students at the St. Petersburg ITMO National Research University.

Awards and Honors:

1996	Award for Young Scientists (Krasnoyarsk Scientific Foundation)
1999	Award and Gold Medal on Physiology for Young Scientists (Russian Academy of Sciences)
2008	Professor Award given by the Krasnoyarsk City Administration
2011	Russian Federation State Government Award for Achievements in Science and Technology for young scientists
2012	Award given by the Ministry of Public Health, Russian Federation
2016	Scopus Award Russia
2016	Letter of Gratitude given by the Governor of the Krasnoyarsk Region
2017	Diploma given by the Krasnoyarsk Regional Legislation Committee
2018	Letter of Gratitude given by the Governor of the Krasnoyarsk Region
2018	Letter of Gratitude given by the Rectors Council of the Krasnoyarsk Region

Major Research Interests:

1. Biochemistry, Neurochemistry & Cell Biology
2. Developmental Neuroscience: BBB development, perinatal brain injury, neurodevelopmental (autism) and neurodegenerative (AD, PD) diseases
3. Biophysics, Optical Biopsy
4. Molecular & Translational Medicine

Memberships in Editorial Boards and peer-reviewing activity:

2007 till now	Associate Editor of the journal “Siberian Medical Review” (RSCI, Russia)
2009-2010	Associate Editor of the “Journal of Alzheimer’s Disease” (Weo of Science, USA)
2015 till now	Member of the Editorial Board, “Frontiers in Vascular Physiology”

	(Web of Science, Switzerland)
2016 till now	Member of the Editorial Board, “Journal of Biochemistry” (, Web os Science, Scopus, RSCI, Russia)
2016 till now	Member of the Editorial Board, “Basic and Clinical Medicine” (RSCI, Russia)
2017 till now	Member of the Editorial Board, “Annals of Clinical & Experimental Neurology” (Scopus, RSCI, Russia)
2017 till now	Member of the Editorial Board, “Complex problems of cardiovascular diseases” (RSCI, Russia)
2018 till now	Editor-in-Chief, “Medical University” (DeGruyter)
Peer-reviewing	“Cellular and Molecular Neurobiology”, “Frontiers in Physiology”, “Frontiers in Neurology”, “Africa J. of Pharmacy and Pharmacological Research”, “Natural Science”, “Neuroscience and Neuroeconomics”, “American Journal of Alzheimer’s Disease & Other Dementias”, The Science Advisory Board, CurrentBioData, Alzheimer's Association, "Neuroscience Letters", "PLoS ONE", "Scientific Reports", "Nature Communications", “Genes and Cells’, “Cells”, etc.

H-index (2020): 24 (RSCI), 20 (Web of Science), 19 (Scopus), 28 (Google Scholar)

Research Funding Information:

1993	Japanese Ministry of Education and Science, Japan Fellowship on Neurobiology & Biophysics *Role of NAD+ metabolism and cADPR in neuronal cells (PI)*
1998	“Novartis” (Ciba-Geigy Foundation for the Promotion of Science), Japan *Changes in NAD+ metabolism in neuronal cells in oxidative stress (I)*
1999	Russian Foundation for Basic Research, Russia *Travel grant (PI)*
1999	Krasnoyarsk Scientific Foundation, Russia *Travel grant (PI)*
2000	Italian Ministry of Foreign Affairs and Landau-Network Centro-Volta Foundation, Italy Fellowship for Professors from Russian Federation *Apoptosis-associated changes in CD38 expression in lymphocytes (PI)*
2000-2002	Russian Foundation for Basic Research & Grant Program of the President of Russian Federation, Russia *Pathogenesis of plasma membrane blebbing in apoptosis (PI)*
2005-2007	Russian Ministry of Education

	Assessment of photophysical processes induced by laser radiation on endogenous photoacceptors for establishment of new diagnostic and therapeutic methods (PI)
2006	Russian Ministry of Science & Innovations *ADP-ribosyl cyclase/CD38 and cADPR in pathogenesis of ischemic neuronal cell damage and cognitive dysfunction (PI)*
2006	Ebewe Pharma Ges.m.b.H.Nfg.KG *Molecular mechanisms of Neuroprotection (I)*
2007-2008	Grant Program of the President of Russian Federation, Russia *ADP-ribosyl cyclase/CD38 in neuronal and glial cell damage in perinatal hypoxia/ischemia (PI)*
2008-2009	Grant of the Russian Foundation for Basic Research & Japan Society for the Promotion of Science *Molecular basis of neurodevelopmental pathology associated with alterations of social behavior (PI)*
2008-2009	Grant of the International Foundation "SM. Charity" *New technology based on modulation of neuron-glia interactions for improvement of motor function in experimental Parkinson's disease (PI)*
2009	Grant of the Russian Foundation for Basic Research *Molecular basis of resistance to steroids in severe asthma (PI)*
2010	Grant of the Krasnoyarsk Foundation for Support of Research *Laser spectrofluorimeter for optical biopsy of tissues (I)*
2010	Grant of the Krasnoyarsk Foundation for Support of Research *Novel molecular markers for diagnostics of endocrine infertility (I)*
2011-2012	Grant of the Federal Program "Prioritized areas of Research" *Aptamers as diagnostic tools for detection of Salmonella* (PI)
2012	Grant of the Krasnoyarsk Foundation for Support of Research *Development of the blood-brain barrier in vitro (PI)*
2012	Grant of the Krasnoyarsk Foundation for Support of Research *Molecular markers of endothelial dysfunction (I)*
2012-2014	Grant of the Ministry of Public Health, Russian Federation *Molecular markers of CNS pathology associated with aberrant social behavior (PI)*
2012-2013	Grant of the Federal Program "Scientific specialists" *Molecular mechanisms of neuron-glia interactions in neurodegeneration associated with alterations in social behavior (PI)*

2013-2014	Grant of the Russian Foundation for Basic Research and Krasnoyarsk Foundation for Support of Research *Secretory phenotype and proliferative activity of cells within the blood-brain barrier (PI)*
2014-2015	Grant Program of the President of the Russian Federation “Leading Scientific Teams” *Molecular mechanisms of neuroinflammation in neurodegeneration (PI)*
2014	Grant of the Russian Foundation for Basic Research *Organization of the International Congress on Neuroscience, Krasnoyarsk (PI)*
2014-2016	Grant of the Ministry of Public Health, Russian Federation *Molecular mechanisms and functional brain imaging in autism spectrum disorders (Co-PI)*
2014-2016	Grant of the Russian Science Foundation *Molecular mechanisms of neurodevelopmental disorders: aberrant intercellular communications within the neurovascular unit and deregulation of development, permeability and repair of the blood-brain barrier (PI)*
2016-2017	Grant Program of the President of the Russian Federation “Leading Scientific Teams” *Molecular mechanisms of insulin resistance in neurodegeneration (PI)*
2018-2019	Grant Program of the President of the Russian Federation “Leading Scientific Teams” *Molecular mechanisms of BBB dysfunction and alterations in cerebral microcirculation in chronic neurodegeneration (PI)*
2018-2020	State Assingment ofr Research given by the Ministry of Public health, Russian Federation *Novel approaches to control neurogenesis and brain angiogenesis (PI)*
2020-2021	Grant Program of the President of the Russian Federation “Leading Scientific Teams” *Molecular mechanisms of mitochondrial injury and repair in neuronal and endothelial cells in chronic neurodegeneration” (PI)*
2020-2022	Grant of the Russian Faoundation for Basic Research *Brain plasticity provided by non-newly generated immature neurons in early life stress (PI)*

Collaboration within the International Programs:

2005 – till now – Program on Innovative Brain Research (Kanazawa University Graduate School of Medicine, Research Center for Child Mental Development, Kanazawa University, Japan)

2012 – till now – International Medical Education and Research Center (Niigata University, Niigata, Japan)

2015 – till now - International Education Program G-MedEx for career development of young students in Japan and Russia

2017 – till now – International Education Program Training Program for Japan-Russia Leaders of Tomorrow

Supervising of Ph.D. and Dr. Med. Sci. dissertations:

41 persons have been awarded with Ph.D. (31) or Dr. Med. Sci. (10) degrees under my supervision

Publications: total number is > 750 (>300 papers in Russian and international peer-reviewed journals, 23 patents), including:

1. Shabalova A.A., Linag M., Chong J., Huang Z., Tsuji C., Shnayder N.A., Lopatina O.L., Salmina A.B., Okamoto H., Yamamoto Y., Chong Z.G., Yokoyama S., Higashida H. Oxytocin and CD38 in the paraventricular nucleus plays a critical role in paternal aggression in mice // ***Hormones and Behavior.*** - 2020. - V.1. - №1. - P.104695-104700.
2. Higashida H., Hashii M., Tanaka Y., Matsukawa S., Higuchi Y., Gabata R., Tsubomoto M., Seishima N., Teramachi M., Kamijima T., Hattori T., Hori O., Tsuji C., Cherepanov S., Shabalova A.A., Gerasimenko M.N., Minami K., Yokoyama S., Munesue S., Harashima A., Yamamoto Y., Salmina A.B., Lopatina O.L. CD38, CD157 and RAGE as molecular determinants for social behavior // ***Cells.*** - 2019. - V.8. - №2. - P.1-10.
3. Morgun A.V., Osipova E.D., Boytsova E.B., Shuvaev A.N., Komleva Yu.K., Trufanova L.V., Vais E.F., Salmina A.B. Astroglia-mediated regulation of cell development in the model of neurogenic niche in vitro treated with Abeta1-42 // ***Biochemistry Moscow-Supplement Series B-Biomedical Chemistry.*** - 2019. - V.65. - №5. - P.366-373.
4. Lopatina O.L., Malinovskaya N.A., Komleva Yu.K., Gorina Ya.V., Shuvaev A.N., Olovyannikova R.Ya., Belozor O.S., Belova O.A., Higashida H.., Salmina A.B. Excitation/inhibition imbalance and impaired neurogenesis in neurodevelopmental and neurodegenerative disorders // ***Reviews in the Neurosciences.*** - 2019. - V.1. - №1. - P.1-10.
5. Sena IF.G., Paiva A.E., Prazeres PH.DM., Azevedo P.O., Lousado L., Bhutia S.K., Salmina A.B., Mintz A., Birbrair A. Glioblastoma-activated pericytes support tumor growth via immunosuppression // ***Cancer Medicine***. - 2018. - 2. - 2018. - P.1-5.
6. Malinovskaya N.A., Morgun A.V., Lopatina O.L., Panina Yu.A., Volkova V.V., Gasymly E.L., Taranushenko T.E., Salmina A.B. Early life stress: Consequences for the

development of the brain // ***Neuroscience and Behavioral Physiology***. - 2018. - V.48, №2. - P.233-250

7. Higashida H., Furuhara K., Yamauchi A.M., Deguchi K., Harashima A., Munesue S., Lopatina O.L., Gerasimenko M.N., Salmina A.B., Zhang J.S., Kodama H., Kuroda H., Tsuji C., Suto S., Yamamoto H., Yamamoto Y. Intestinal transepithelial permeability of oxytocin into the blood is dependent on the receptor for advanced glycation end products in mice // ***Scientific Reports***. - 2017. - 7(1):7883.- P.1-15.

8. Salmin V.V., Komleva Yu.K., Kuvacheva N.V., Morgun A.V., Hilazheva E.D., Lopatina O.L., Pozhilenkova E.A., Shapovalov K.A., Uspenskaya Yu.A., Salmina A.B. Differential roles of environmental enrichment in Alzheimer type of neurodegeneration and physiological aging // ***Frontiers in Aging Neuroscience.***- 2017. - 9.- P.1-12.

9. Tohidpur A., Morgun A.V., Boytsova E.B., Malinovskaya N.A., Martinova G.P., Hilazheva E.D., Kopilevich N.V., Gertsog G.E., Salmina A.B. Neuroinflammation and infection: molecular mechanisms associated with dysfunction of neurovascular unit // ***Frontiers in Cellular and Infection Microbiology.*** - 2017. - 7.- P.1-17.

10. Salmin V.V., Morgun A.V., Hilazheva E.D., Pisareva N.V., Boytsova E.B., Lavrentev P.V., Sadovsky M.G., Salmina A.B. Secret life of tiny blood vessels: lactate, scaffold and beyond // ***Lecture Notes in Computer Science***. - 2017. - 10208.- P.591-601.

11. Lopatina O.L., Furuhara K., Ishihara K., Salmina A.B., Higashida H. Communication impairment in ultrasonic vocal repertoire during the suckling period of CD157 knockout mice: transient improvement by oxytocin // ***Frontiers in Neuroscience***. - 2017. - 11.- P.266-275.

12. Pozhilenkova E.A., Lopatina O.L., Komleva Yu.K., Salmin V.V., Salmina A.B. Blood-brain barrier-supported neurogenesis in healthy and diseased brain // ***Reviews in the Neurosciences.*** - 2016.- P.1-10.

13. Malinovskaya N.A., Komleva Yu.K., Salmin V.V., Morgun A.V., Shuvaev A.N., Panina Yu.A., Boytsova E.B., Salmina A.B. Endothelial progenitor cells physiology and metabolic plasticity in brain angiogenesis and blood-brain barrier modeling // ***Frontiers in Physiology.*** - 2016. - 7.- P.1-18.

14. Sadovsky M.G., Morgun A.V., Salmina A.B., Kuvacheva A.V., Khilazheva E.D., Pozhilenkova E.A. Enriched environment affects positively a progression of neurodegeneration: elastic maps-based analysis // ***Lecture Notes in Computer Science***. - 2016. - 9656.- P.505-514.

15. Salmina A.B., Kuvacheva N.V., Morgun A.V., Komleva Y.K., Pozhilenkova E.A., Lopatina O.L., Gorina Y.V., Taranushenko T.E., Petrova L.L. Glycolysis-mediated control of blood-brain barrier development and function // ***The International Journal of Biochemistry and Cell Biology.***- 2015.- 64.- P.174-184.

16. Salmina A.B., Komleva Yu.K., Szijarto I.A., Gorina Ya.V., Lopatina O.L., Gertsog G.E., Filipovic M.R., Gollasch M. H2S- and NO-signaling pathways in Alzheimer amyloid vasculopathy: synergism or antagonism? // ***Frontiers in Physiology***. - 2015. - 6.- P.361-365.

17. Zeidan-Chulia F., De Oliveira B.H.N., Salmina A.B., Casanova M.F., Gelain D.P., Noda M., Verkhratsky A., Moreira J.C.F. Altered expression of Alzheimer disease-related genes in the cerebellum of autistic patients: a model for disrupted brain connectome and therapy // ***Cell Death and Disease***. - 2014. – 5. doi: 10.1038/cddis.2014.227.

18. Salmina A.B., Morgun A.V., Kuvacheva N.A., Lopatina O.L., Komleva Yu.K., Malinovskaya N.A., Pozhilenkova E.A. Establishment of neurogenic microenvironment in the neurovascular unit: the connexin 43 story // ***Reviews in the Neurosciences.*** - 2014. - 25(1).- P.97-111.

19. Liu H-X., Lopatina O.L., Higashida C., Fujimoto H., Akther S., Inzhutova A.I., Liang M., Zhong J., Tsuji T., Yoshihara T., Sumi K., Ishiyama M., Ma W-J., Ozaki M., …Okamoto H., Cherepanov S.M., Salmina A.B., Hirai H., Asano M., Brown D.A., Nagano I., Higashida H. Displays of paternal mouse pup retrieval following communicative interaction with maternal mates // ***Nature Communications***, 2013, 6.- P.1-8.

20. Zeidán-Chuliá F., Rybarczyk-Filho J.L., Salmina A.B., de Oliveira B.H., Noda M., Moreira J.C. Exploring the Multifactorial Nature of Autism Through Computational Systems Biology: Calcium and the Rho GTPase RAC1 Under the Spotlight // ***Neuromolecular Med.*** 2013 Mar 2.

21. Akther S, Korshnova N, Zhong J, Liang M, Cherepanov SM, Lopatina O, Komleva YK, Salmina AB, Nishimura T, Fakhrul AA, Hirai H, Kato I, Yamamoto Y, Takasawa S, Okamoto H, Higashida H. CD38 in the nucleus accumbens and oxytocin are related to paternal behavior in mice // ***Mol Brain***. 2013 Sep 23;6:41. doi: 10.1186/1756-6606-6-41.

22. Salmina A.B., Lopatina O., Ekimova M.V., Mikhutkina S.V., Higashida H. CD38/Cyclic ADP-ribose System: A New Player for Oxytocin Secretion and Regulation of Social Behaviour // ***Journal of Neuroendocrinology***, 2010, 22, 5, 380-392.

23. Salmina A.B., Inzhutova A.I., Malinovskaya N.A., Petrova M.M. Endothelal dysfunction and repair in Alzheimer-type neurodegeneration: neuronal and glial control // ***J. Alzheimer's Disease,*** 2010, 22, 1, 17-36.

24. Salmina A.B. Neuron-glia interactions as therapeutic target in neurodegeneration // ***J. Alzheimer's Disease***, 2009, V. 16, N 4, p. 485-502.

25. Duo Jin, Hong-Xiang Liu, Hirokazu Hirai, Takashi Torashima, Taku Nagai, Olga Lopatina, …… Alla Salmina, Toshio Munesue, Nobuaki Shimizu, Sumiko Mochida, Masahide Asano & Haruhiro Higashida, CD38 is critical for social behavior by regulating oxytocin secretion // ***Nature***, 2007, V. 446, p. 41-45.

26. Salmina A.B., Olovyannikova R.Ya., Noda M., Higashida H. NAD+ metabolism and ADP-ribosyl cyclase as targets for central nervous system therapy // ***Current Medicinal Chemistry*** – 2006. - N 6.- P.193-210.

27. Fursov A.A., Provorov A.S., Salmin V.V., Salmina A.B., Stepanenko A.V., Sokolovich A.G., Lazarenko V.I., Rebenkova A.A., Popov A.Y., Testov A.A., Trusova E.Y., Mihutkina S.V., Lopatina O.L., Olovyannikova R.Ya. Pulsed gas lasers with longitudinal discharge and their application in medicine // ***Laser Physics*** - 2005. - Vol. 15, N 9.- P.1299-1302.