



# CV

### 1. Personal Information

Surname	CHACHUA
Name	MATRONA
Mail	m.chachua@seu.edu.ge

# 2. Position and specialty

Position:	Professor
Specialty	Medicine

3.Academic/Scientific degree

Tours and the second se		
Name of the higher education	Institute of Plant Biochemistry of the Academy of Sciences of	
institution	Georgia	
Direction/ Specialty	Biochemistry	
Enrollment date	March 22, 1996	
Dissertation defense date	08.12.1995	
qualification	Ph.D.	
Title of the discontation tonic	Isolation, purification and physico-chemical characterization of	
Title of the dissertation topic	lectin-like protein pH 3 (40) in rat brain	
Conductor of the theme	Prof. N.Aleksidze, Corresponding Member of the Georgian	
	Academy of Sciences	

### 4. Other education

I			
Name of the higher education	Iv. Javakhishvili Tbilisi State University		
institution	•		
Faculty / Specialty	Biology / Biochemistry and Biotechnology		
Data of the annual mant / Conduction	Beginning (yy)	End (yy)	
Date of the enrollment/Graduation	1987	1989	
Qualification	Master		
II			



Name of the higher education	Iv. Javakhishvili Tbilisi State University		
institution	·		
Faculty / Specialty	Biology / Biochemistry and Biotechnology		
Date of the enrollment/Graduation	Beginning (yy) End (yy)		
	1984	1987	

5. Professional experience

Date (mm/yy) -from -to		Employer	Position / duties	
		Employer		
2006	Today	Faculty of Exact and Natural Sciences	Senior Scientist, Invited teacher	
		Iv. Javakhishvili Tbilisi State University		
2006	2000	Laboratory of Biologically Active Compounds of the Chair of Biochemistry  Senior Scientist		
		Iv. Javakhishvili Tbilisi State University		
2000	1998	Laboratory of Biologically Active Compounds of the Chair of Biochemistry	Scientist	
		Iv. Javakhishvili Tbilisi State University		
1997	1993	Chair of Biochemistry	Senior Laboratory Assistant	
		Iv. Javakhishvili Tbilisi State University		
1993	1991	Chair of Biochemistry	Aspirant	
		Iv. Javakhishvili Tbilisi State University		
1990	1989	Chair of Biochemistry and Biotechnology	Laboratory Assistant	
		Iv. Javakhishvili Tbilisi State University		

# ${\bf 6.}\ Scientific\mbox{-pedagogical experience}$



Date (mm/yy)		Higher Education	Study course / Research	Learning step
-from	-to	Institutions	project	
2012	Today	Iv. Javakhishvili Tbilisi	General Biochemistry,	1
		State University	Nervous Tissue	
		,	Biochemistry,	
			Cardiovascular	
			Biochemistry, Respiratory	
		Biochemistry,		
		Genitourinary		
		Biochemistry, Digestive		
		System Biochemistry,		
		Endocrine System		
		Biochemistry - English		
			Language Program	
2008	Today	Iv. Javakhishvili Tbilisi	vili Tbilisi Neurochemistry,	
		State University		

7. scientific publications

Date	Topic of the working theme	Scientific Journal	Publisher
2017	Effect of exogenous creatine on blood lipid spectrum.	FEBS JOURNAL. 284, 347-348,	
2016	Long-lasting stress, quantitative changes in nitric oxide concentration and functional state of heart muscle cells	283, 382-382,	
2016	Mental stress disorders and calcium induced changes in nitric oxide levels in rat hippocampus.	FEBS JOURNAL. 283(): 64-65,	
2016	Investigation of brain creatine levels under the mental stress conditions	Journal of Stress Physiology & Biochemistry, 12, 4, 5-14,	
2015/07/01	Functional state of rat heart muscle cells and blood antioxidant system under psychoemotional stress: P10-012.	The FEBS Journal. 282():113, JUL 2015. Issn Print: 1742- 464X	
2015/07/01	Alterations in functional status of rat brain mitochondria under circadian rhythm disorders: P24-008.	The FEBS Journal. 282():298, JUL 2015 Issn Print: 1742-464X	
2015/07/01	Alterations of creatine levels in rat brain under stress conditions long-term social isolation: P29-020.	The FEBS Journal. 282():309–310, JUL 2015 Issn Print: 1742-464X	



2014	Changes in Activity of Hippocampus Creatine Kinase Under Circadian Rhythm Disorders	Biological Rhythm Research, 45, 5, 685-697 http://dx.doi.org/10.1080/09291 016.2014.888172	
2012	Long-lasting stress, quantitative changes in nitric oxide concentration and functional state of brain mitochondria	Acta Neurobiol Exp., 72, 1,40–50, www.ane.pl/pdf/7204.pdf.	

#### 8. Other activities

#### Research works presented at scientific conferences

- Burjanadze G, Dachanidze N, Menabde K, Chachua M, Koshoridze M, Koshoridze N. Stress related changes in Na<sub>+</sub>/K<sub>+</sub>-ATPase activity and way of action of creatine. In FEBS OPEN BIO 2018 Jul 1 (Vol. 8, pp. 363-363). 111 RIVER ST, HOBOKEN 07030-5774, NJ USA: WILEY.
- Effect of exogenous creatine on blood lipid spectrum. 42nd FEBS Congress. Jerusalem Israel, 10-14 September, 2017.
- Alterations of Creatine Levels in Rat Brain Under Stress Conditions Long-term Social Isolation.
   40th Congress of The Federation of the European Biochemical Societies, Berlin, Germany, July,
   2015.
- Surface changes in the erythrocyte membrane of rats under conditions of psycho-emotional stress. Ivane Javakhishvili Tbilisi State University, the 1st scientific conference in exact and natural sciences of the faculty 2013.
- Brain Mitochondria and Long-lasting Psycho-emotional stress. 11. 22nd YUBMB and 37th FEBS Congress Seville, Spain, 2012.

#### Participate at international forums

1	International Scientific Conference, Actual Problems of Biol. and Medicine, Georgia,
	Tbilisi, 218-220, 2005.
	Activity of NaK-ATPase in Various Rat Tissues in Norm and under Stress
2	Int. Conference on Fundamental Questions of Neuroscience, Georgia, Tbilisi, 13-16
	October, 2010
	Activity of pro-and antioxidant system in under stress under stress caused by izolation and
	violation of diurnal cycle.



3	European XXVI National Congress of Cardiology (EBAC), P.257, 2010		
	Pro-and antioxidant system in cardiac histiocytes and blood under stress caused by izolation and violation of diurnal cycle.		
4	3rd Annual International Conference, Athens, Greece, 2010		
	Insecticidal Action of Chitin-binding Lectin (MChbL) from European Mistletoe (Viscum album L.) Against Lepidoptera Pests		
5	8th World Congress of Neuroscience, 2011		
	Functional Status of Brain Mitochondria under Psycho-Emotional Stress		
6	11. 22nd YUBMB and 37th FEBS Congress, 2012		
	Brain Mitochondria and Long-lasting Psycho-emotional stress		
7	40 <sup>th</sup> Congress of The Federation of the European Biochemical Societies, 2015		
	Alterations of Creatine Levels in Rat Brain Under Stress Conditions Long-term Social Isolation		
8	42nd FEBS Congress. Jerusalem Israel, 10-14 September, 2017.		
	Effect of exogenous creatine on blood lipid spectrum P.5.4-003		

# Current research interests (research / projects / grants)

 Metabolic changes in the hippocampus and prefrontal cortex caused by chronic psychoemotional stress.

### **Received Grants**

	Years	Role in the	Name of the Project	Donor Organization
		Project		
1	2014-2017	Main Staff	Impact of Psycho-Emotional	Shota Rustaveli National
			Stress on Brain Energy	Science Foundation
			Metabolism among Naturally	
			Aggressive Animals	



2	2009-2012	Project	Isolation and Violated	Shota Rustaveli National
		Manager	Diurnal Cycle Stress-Induced	Science Foundation(Grant
			Changes in Energy	GNSF/ST08/2-375)
			Metabolism and Possibilities	
			for Prevention Thereof.	
3	2009-2010	Main Staff	Development of a New Type	Shota Rustaveli National
			of Plant Entemotoxic	Science Foundation
			Biopesticydes for the Control	
			of the Pests of Lepidoptera	
			Order	
4	2005	Main Staff	Lectins in Norm and	Ministry of Education
			Pathology (Biomedical	and science of Georgia.
			Aspects)	Research Support
				Program. Project "18"
5	1998	Main Staff	Discovery, Purification,	Ministry of Education of
			Physical and Chemical	Georgia. Grant Program of
			Characteristics and Use in	Georgian Universities,
			Practical Medicine of	03.00.04, (Grant #37)
			Biologically Active	
			(Immunomodulator,	
			anticarcinogenic,	
			Antimicrobial, Growth	
			Stimulating, etc.) New	
			Compounds	

### Professional development

- Workshop "Learning, Teaching and Assessment", Tbilisi, 10-11 July, 2019
- 2nd International School of Applied Biosciences and Biotechnology"1-5 Aril, 2019
- Training "Problem Based Learning (PBL)", Tbilisi, February, 2019
- Workshop "Teaching and Assessment Methods in Medical Education". Tbilisi, October, 2018.
- Training session "Problem Based Learning in Medical Education". Tbilisi, May 2018.
- Workshop on Molecular Life Sciences Education. Federation of European Biochemical Societies. Tbilisi, October, 2013,
- iEARN (International Educational and Resource Network).

### Supervisor of thesis/reviewer

• Peer reviewing of a Ph.D. thesis: Doctoral student Malkhaz Vakhania; the title of the doctoral thesis: "Isolation of lectins from Aloe aristata organs, physical and chemical characterization and function". Section of biological sciences of the Dissertation



- Council of the School (Faculty) of Informatics, Mathematics and Natural Sciences; Saint Andrew the First-Called Georgian University of the Patriarchate of Georgia, 2016.
- Peer reviewing of a Ph.D. thesis: Doctoral student Maia Khurtsidze; the title of the
  doctoral thesis: "Study of the biochemical properties, physiological roles and biological
  activities of the chitin specific lectins of Chelidonium majus". Section of biological
  sciences of the Dissertation Council of the School (Faculty) of Informatics, Mathematics
  and Natural Sciences; Saint Andrew the First-Called Georgian University of the
  Patriarchate of Georgia, 2017.
- Peer reviewing of a Ph.D. thesis: Doctoral student Nino Dumbadze; the title of the doctoral thesis: "Study of the biochemical properties, physiological roles and biological activities of the mannose specific lectins of the Georgia's endemic plant Polygonatum obtusifolium Miscz.". Section of biological sciences of the Dissertation Council of the School (Faculty) of Informatics, Mathematics and Natural Sciences; Saint Andrew the First-Called Georgian University of the Patriarchate of Georgia, 2017.

#### Membership of academic / public organization

- Since 2002 Member of the Georgian Association of Biochemists
- Since 2007 Member of the Federation of the European Associations of Biochemists