

**Name, Surname:** Ekaterine Bakuradze

**Date and Place of Birth:** 14/05/1979 Tbilisi, Georgia

**Address:** III blind alley of V.Sarajishvili Street 5, 0108, Tbilisi, Georgia

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**Education:**

**1998-2002** Bachelor's Degree, with Honors, Tbilisi State University (TSU), faculty of Biology.

**2002-2004** Master's Degree, with Honors Tbilisi State University (TSU), Faculty of Biology, Department of Cytology, Histology and Developmental Biology, supervisor: Prof. Diana Dzidziguri

**Scientific degree:** Candidate of biological sciences 03.00.11 # 005374

**Employment Experience:**

**2003 – 2006** – Lab. Researcher. Department of Cytology, Histology and Developmental Biology. Faculty of Biology Iv. Javakhishvili Tbilisi State University

**2006 – 2009** – Invited lector. Faculty of exact and natural sciences Iv. Javakhishvili Tbilisi State University

**2009-2015** Assistant professor; Faculty of exact and natural sciences Iv. Javakhishvili Tbilisi State University

**2015 - till now** – Associate Professor; Iv. Javakhishvili Tbilisi State University (TSU), Faculty of Exact and Natural Sciences, Department of Biology, Division of Morphology.

**Main Spheres of Interest:**

Cell Biology, Histology, Immunology, Modern laboratory investigations in cell and molecular biology, Regeneration of parenchymal organs, Growth factors.

**Lecturing commitment:**

Cell Biology, Histology.

**Participation in several Grant project:**

**2006-2009** International Grant “Influence of Orexinergic System on Epileptic Activity of the Brain” ISTC # G1318

**2010-2012** – Main staff. Effects of extracellular ubiquitin on alcoholic and nonalcoholic liver regeneration; Shota Rustaveli National Science Foundation (#09-616-2-160/1-2/54)

**2013-2014** - The influence of adult rats' endogenous thermostable protein complex on the morpho-functional activity of bone marrow Shota Rustaveli National Science Foundation (52/03)

**Membership of various conferences organizing committee:**

**2007** Joint Students and pupils I Symposia dedicated to Actual Problems of Biology and Medicine – “Gene Engineering – prospects and problems” (consultant)

**2008** Joint Students and pupils II Symposia dedicated to Actual Problems of Biology and Medicine – “Stem cells and transplantation problems” (consultant)

**2009** Joint Students and pupils III Symposia dedicated to Actual Problems of Biology and Nanotechnology in Biology and Medicine (consultant)

**2009** International Conference of Morphologists in memory of G. Tumanishvili – From Molecule to Organism (member of organising committee)

**2010** Joint Students and pupils IV Symposia dedicated to Actual Problems of Biology and Medicine cancer and perspectives for treatments (consultant) Tbilisi 2010, 12 June.

**2011** - Joint Students and pupils V Symposia dedicated to Actual Problems of Biology and Medicine "Yesterday, today tomorrow" Tbilisi, 2010 4-5 June.

**2012** Joint Students and pupils VI Symposia dedicated to Actual Problems of Biology and Medicine "Perspectives of Bioeffective technologies".

**2013** - Joint Students and pupils VII Symposia dedicated to Actual Problems of Biology and Medicine – "cellular mechanisms of pathologies".

**2014** – Joint Students and pupils VIII Symposia dedicated to Actual Problems of Biology and Medicine

**2015** - Joint Students and pupils IX Symposia dedicated to Actual Problems of Biology and Medicine

**2016** - Joint Students and pupils X Symposia dedicated to Actual Problems of Biology and Medicine

#### **Bachelor's and Master's theses leadership:**

**2011(bachelor)** Nana Beridze - Influence of rat brain protein complecsis on mitotic activity of bone marrow cells

**2011(master)** Levan Ninua - Adaptation mechanisms of liver in combined pathologies.

**2013 (master)** Nino Bedineishvili – quantitative changes of GABA and GAD65/67 positive cells in hippocampus of rats with halothane anesthesia and midazolam premedication

**2014(master)** ეკა ფერაძე - „ძვლის ტვინის უჯრედების გამრავლებაზე ზრდასრული ვირთაგვას თავის ტვინის უჯრედული პროტეომის ზემოქმედება“

**2015(bachelor)** Giorgi Nebieridze - The Study of signaling pathways of hepatocytes polyploidization in model of cholestatic liver

**2017 (master)** Giorgi Nebieridze - The Study of signaling pathways of hepatocytes polyploidization in model of cholestatic liver

#### **Computer Skills :**

Microsoft Word, Excel, PowerPoint, Photoshop, CorelDRAW, Microsoft Windows 98/00, Internet, E-mail.

#### **Publication (last 10 years):**

- 2009** D. Dzidziguri, M.Rukhadze, E.Bakuradze, I.Modebadze, I. Gorozia, V. Abashidze The comparative study of endogenous growth inhibiting factors of pro- and eukaryotic cells The FASEB Journal 2009; 23:LB181
- 2009** Vadachkoria Z.O., Dzidziguri L.V., *Bakuradze E.D.*, Dzidziguri D.V. The positive effects of midazolam on functional activity of white rat brain cells in conditions of halothane anesthesia Georgian Medical News 2009, 170:91-95
- 2010** D. Dzidziguri, E.Bakuradze, I. Modebadze, L. Ninua, D. Dekanoidze, L. Rusishvili The adaptation mechanisms of liver in combined pathologies FASEB J. 2010 24:lb402
- 2010** Vadachkoria Z.O., Dzidziguri L.D., Bakuradze E.D., Mosidze G.T. , Dzidziguri D.V. The influence of halothane on morphofunctional activity of rat hipocampal cells at the midazolam premedication Alergology and immunology 2010, 11 (2): 190-192
- 2011** Sujashvili R, Bakuradze E, Modebadze I, Dekanoidze D, Qirikashvili I. In vivo investigation of extracellular ubiquitin effect on liver histoarchitectonics. Georgian Med News. 2011 Feb;(191):77-81.
- 2011** Modebadze I., Bakuradze E., Ninua L., Dekanoidze D., Dzidziguri D. Adaptive growth features of rat cholestatic liver FASEB J March 17, 2011 25:794.3
- 2011** Vadachkoria Z., Dzidziguri L., Bakuradze E., Mosidze G., Modebadze I., Dzidziguri D. Influence of halothane narcosis on a change of the number of gaba-positive cells in the

- hippocampus of adult rats with the midazolam premedication. *Georgian Medical News*, 2011, 4(193):46-50
8. **2012** Sujashvili Rusudan, Ekaterine Bakuradze, Irina Modebadze, Daviut Dekanoidze. In vivo introduce extracellular Ubiquitin regulates intracellular processes. *Word Academy of Science Engineering and Technology*, 2012, Issue 61, 326-329.
  9. **2013** I. Modebadze, M. Rukhadze, E. Bakuradze, D. Dzidziguri. Pancreatic Cell Proteome - Qualitative Characterization And Function. *Georgian Medical News*, 2013; 7-8(220-221):71-77.
  10. **2013R**. Sujashvili, E. Bakuradze, I. Modebadze, D. Dekanoidze. Ubiquitin in combination with alcohol stimulates proliferative activity of hepatocytes. *Georgian Medical News*, 2013; 10(223):86-90.
  11. **2014**. E. Bakuradze, I. Modebadze, G. Mosidze, E Peradze, D. Dzidziguri The influence of endogenous protein complex on morpho-functional activity of bone marrow cells (616.3), *The FASEB Journal* 28 (1 Supplement),
  12. **2015** D. Dzidzigiri, M. Rukhadze, I. Modebadze, N. Giorgobiani, L. Rusishvili, G. Mosidze, E. Tavdishvili, E. Bakuradze The Comparative Study of Thermostable Protein Macromolecular Complexes (Cell Proteomics) From Different Organisms, *Chemical and Structure Modification of Polymers CRC Press. SECTION II: #30. 395 pages*
  13. **2015** T. V Sanikidze, S. A Kiparoidze, I.R Modebadze, E. D Bakuradze, I. Dj Pkhakadze, D.V Dzidziguri Role of reactive oxygen and nitrogen species in pathogenesis of cholestasis (Experimental study) *E-Health and Bioengineering Conference (EHB)*, 2015:1-4.
  14. **2015** Z Vadachkoria, L Dzidziguri, E Bakuradze, I Modebadze, N Oganezovi, M Mikadze, D Dzidziguri Comparative study of growth inhibitory protein complex derived from different forms of children hemangioma. *Georgian medical news* 2015, 9(246): 73-77
  15. **2016** D. Dzidzigiri, M. Rukhadze, I. Modebadze, N. Giorgobiani, L. Rusishvili, G. Mosidze, E. Tavdishvili, and E. Bakuradze Extraction and Comparative Characterization of Thermostable Protein Complexes *Physical Chemistry for the Chemical and Biochemical Sciences CRC Press. Part Two #19. 375 pages*
  16. **2016** D Dzidziguri, M Rukhadze, I Modebadze, E Bakuradze, M Kurtanidze, V Giqoshvili The study of the immune corrective properties of greek walnut (*juglans regia l.*) septa on the experimental model of leukopenia. *Georgian medical news*,3 (252), 84-89
  17. **2017** N.T. Saliya, O.L. Bokeriya, D.V. Dzidziguri, E.D. Bakuradze I.R. Modebadze – Ph. D. “Effect of exposure of bioresonance endogenous electromagnetic fields on the proliferative activity of regenerating liver of experimental animals”. “ELECTROMAGNETIC WAVES AND ELECTRONIC SYSTEMS”, 2017, 22(5).
  18. **2018** Diana Dzidziguri, Irina Modebadze, Ekaterine Bakuradze, Giorgi Mosidze, Manana Berulava Determination of The Properties of Rat Brain Thermostable Protein Complex which Inhibit Cell Proliferation *Cell Journal (Yakhteh)* 2018 4(19): 552–558

#### Conferences (last 5 years):

1. **2009** E. Bakuradze, I. Modebadze, G.Mosidze, L.Ninua, D.Dekanoidze, D.Dzidziguri Changes of Hepatocytes nuclear membrane permeability in cholestatic liver Joint EASL-AASLD Monothematic conference Nuclear receptors and liver diseases Vienna, Austria February 27-March 1, 2009

2. **2009** D. Dzidziguri, M.Rukhadze, E.Bakuradze, I.Modebadze, I. Gorozia, V. Abashidze The comparative study of endogenous growth inhibiting factors of pro- and eukaryotic cells Experimental Biology 2009, New Orleans, April 22, 2009
3. **2009** E. Mitaishvili, E.Bakuradze, M.Alania, D.Dzidziguri, C. Skhirtladze, N. Doreulee Kainic acid induced Status Epilepsy: correlation of behavioral disturbance with morphological changes in hippocampus of the rats 1<sup>st</sup> International Symposium on Vision and Cognition 2009, 22<sup>nd</sup> September, Tbilisi, Georgia
4. **2009** D.Dzidziguri, E. Bakuradze, I. Modebadze, G. Mosidze, L.Dzidziguri, Z. Vadachkoria The comparative study of halothane depressant effect on morphofunctional different parts of rat hippocampus Abcam conference Synaptic inhibition in health and diseases, 2009, October 15-16<sup>th</sup>, Chicago, USA.
5. **2009** S. Qemoklidze, E. Bakuradze, I. Modebadze, D.Dekanoidze, L.Ninua, D.V. Dzidziguri, Influence of the Truncal Vagotomy on the liver Regeneration. Abstracts of the scientific board of 13<sup>th</sup> ESS Meeting. 2009. November 27<sup>th</sup> Tbilisi, Georgia.
6. **2010** D. Dzidziguri, E.Bakuradze, I. Modebadze, L. Ninua, D. Dekanoidze, L. Rusishvili The adaptation mechanisms of liver in combined pathologies Experimental Biology 2010, Anaheim,California, April 14-18, 2010.
7. **2010** The influence of adult rats brain endogenous protein factor on neurogenesis Abcam conference Adult neurogenesis: structure and function, May 27-30 Frauenchiemsee, Germany
8. **2010** The influence of halothane on morphofunctional activity of rat hippocampal cells at the midazolam premedication VI Georgian Congress of Allergology and immunology Tbilisi-Tskaltubo October 1-3.
9. **2010** Decrease of orexin- and GAD Immunoreactivity is correlated with behavioral changes in kainic acid rat model of epilepsy 9th "Gagra Talks" International Conference on Fundamental Questions of Neuroscience October 13-16, 2010 Tbilisi Georgia
10. **2011** Adaptive growth features of rat cholestatic liver Experimental Biology 2011 Washington DC, USA 9-13 April,2011
11. **2011** R. Sujashvili E.Bakuradze, I.Modebadze, D. Dekanoidze Supposed effect of extracellular ubiquitin in vivo injections in hepatocyte proliferation activity Ubiquitin research and development San Diego, USA, Jan 27-28. 2011
12. **2011** E. Bakuradze, I. Modebadze, G. Mosidze, D.Dzidziguri The inhibition of infant rat hippocampal progenitor cell proliferation with endogenous protein factor 8th IBRO (International Brain Research Organization) World Congress of Neuroscience Florence, Italy, July 14-18.
13. **2011** Vadachkoria Z., Dzidziguri L., Mitaishvili E., Mosidze G. · Bakuradze E., Modebadze I., Dzidziguri D. The influence of halothane on behavioral parameters of rats with midazolam premedication. 8<sup>th</sup> IBRO (International Brain Research Organization) World Congress of Neuroscience Florence, Italy, July 14-18.
14. **2011**Sujashvili R, Bakuradze E, Modebadze I, Dekanoidze D . Inhibition of hepatocytes proliferative activity by in vivo injected extracellular ubiquitin. Cell Biology of Ubiquitin-Dependent Degradation Pathways 11-13th September 2011, University of Liverpool.
15. **2011** Sujashvili R, Bakuradze E, Modebadze I, Dekanoidze D – Molecular Insights for Innovative Therapies 1—3 December 2011, Heidelberg, Germany.
16. **2011** E. Bakuradze, L. Ninua, I. Modebadze, D. Dekanoidze, D. Dzidziguri Liver ability to regulate adaptive growth at combined pathologies The 22nd Wilhelm Bernhard Workshop, 25-30 August, Riga, 2011 Latvia.

17. **2012** D. Dzidziguri, G. Mosidze, I. Modebadze, E. Bakuradze, M. Berulava. "The Influence of halotane on the Proliferative Activity of Dental Gyrus. ISTC international scientific seminar "neuroplasticity: nervous substrate for health and disease. New approaches for research" *September 25-27, 2012, Tbilisi, Georgia.*
18. **2012** D. Dzidziguri, G. Mosidze, M. Berulava, I. Modebadze, E. Bakuradze. The influence of rat brain protein factor on the GAD65/67 positive cell quantity in hippocampus of growing rats. 2012, Barcelona, Spain.
19. **2013** Comparative study of hepatocyte transcriptional activity at early stage of reparative growth" 23rd Conference of the asian pacific association for the study of the liver. 6-9 June **2013**. Singapore
20. **2013** S Kiparoidze, E Bakuradze, I Modebadze, T Sanikidze, D Dzidziguri. Comparative study of liver functional characteristics in combined pathologies by the method of electron paramagnetic resonance. *Journal of Clinical and Experimental Hepatology*, 2013; 3 (1), S121.
21. **2013** D. Dzidziguri\*, M. Rukhadze, I. Modebadze, N. Giorgobiani, L. Rusishvili, G. Mosidze, E. Tavdishvili, E. Bakuradze. "The Comparative Study of Thermostable Protein Macromolecular Complexes (Cell Proteomics) From Different Organisms" 2013, September 8-11. The 3rd International Caucasian Symposium on Polymers and Advanced Materials Tbilisi, Georgia.
22. **2014** S. Kiparoidze, D. Dzidziguri, E. Bakuradze, I. Modebadze, G. Nebieridze. HGF Signaling pathway and cell polyploidization in cholestatic liver. The International Liver Congress™ 2014, 49th annual meeting of the European Association for the Study of the Liver. *Journal of Hepatology* 60 (1), S207-S208.
23. **2014** The preparation of plant (Greek walnut -*Juglans regia*) origin bioactive additive for Correction of immune system International Scientific Conference "science, Technology and innovative technologies in the prosperous epoch of the powerful state" June 12-14, 2014, Ashkhabad, Turkmenistan
24. **2014**. E. Bakuradze, I. Modebadze, G. Mosidze, E Peradze, D. Dzidziguri The influence of endogenous protein complex on morpho-functional activity of bone marrow cells *Experimental Biology*, San Diego 13-16 April,
25. **2014** e. bakuraZe, s. kiparoiZe, i.modebaZe, g.nebieriZe, d.ZiZiguri qolestazur RviZiSi ujredabis poliploidizaciis Sesaxeb Tsu, zust da sabuneismetyvelo mecnierebaTa fakultetis me-2 safakulteto konferencia, Tbilisi 3-5 Tebervali
26. **2015** e. bakuraZe, i. modebaZe, n. bedineiSvili, m. berulava, z. vadaWkoria, l. ZiZiguri, d. ZiZiguri zrdasruli virTagvas hipokampSi kalbindin pozitiuri ujredabis cvlilebebis Seswavla halotanis narkozisa da midazolamiT premedikaciis pirobebSi Tsu, zust da sabuneismetyvelo mecnierebaTa fakultetis me-3 safakulteto konferencia, Tbilisi 3-5 Tebervali
27. **2015** G. Mosidze, I. Modebadze, E. Bakuradze, L.Rusishvili, N. Bedineishvili, M.Berulava, N. Giorgibiani, D. Dzidziguri. Action Mechanism and Function of Protein Complex Derived from Adult Rats Brain. The First SDSU – Georgia STEM WORKSHOP on Nanotechnology and Environmental Sciences 2015, September 4-5, Tbilisi, Georgia.
28. **2015** Z. Vadachkoria, L. Dzidziguri, G.Ghibradze, E. Bakuradze, I. Modebadze, N. Oganezovi, M. Mikadze, D. Dzidziguri The study of growth inhibitory protein complex derived from different forms of hemangioma. The First SDSU – Georgia STEM WORKSHOP on Nanotechnology and Environmental Sciences 2015, September 4-5, Tbilisi, Georgia.
29. **2015** D.Dzidziguri, S.Kiparoidze, E.Bakuradze, I.Modebadze, G.Nebieridze The study of hepatocyte polyploidization using a model of cholestatic liver. The First SDSU – Georgia STEM

WORKSHOP on Nanotechnology and Environmental Sciences 2015, September 4-5, Tbilisi, Georgia.

30. **2015** Diana Dzidziguri<sup>1</sup>, Irina Modebadze<sup>1</sup>, Ekaterine Bakuradze<sup>1</sup>, N.Oganezovi<sup>1</sup>, L.Rusishvili<sup>1</sup>, L.Dzidziguri<sup>2</sup>, Z.Vadachkoria<sup>2</sup>. The Comparative Study of Growth regulating polymeric compounds in cells with different degree of transformation. 4th International Caucasian Symposium on Polymers and Advanced materials. 2015 1-4 თებერვალი, ბათუმი, საქართველო
31. **2016** Study of action of low molecular weight components separated from adult rat pancreas thermostable protein complex I. Modebadze, E. Bakuradze, D. Dzidziguri The fourth annual conference in exact and natural sciences dedicated to 140 Anniversary of the birth of Ivane Javakhishvili. 2016 25-29 January, Tbilisi, Georgia
32. **2017** E. Bakuradze, S. Kiparoidze, K. Agagulian, I. Modebadze, G. Nebieridze, D.Kordzaia, D.Dzidziguri The changes of the mitotic activity and the rate of polyploidization due to the inhibition of MEK/ERK signaling pathway in cholestatic liver The fifth annual conference in exact and natural sciences 2017, 2-7 February Tbilisi, Georgia,
33. **2018** E. Bakuradze, G. Mosidze, I.Modebadze, A.Kordzadze, D.Dzidziguri Effects of the brain endogenous inhibitory factor on bone marrow cells the sixth annual conference in exact and natural sciences 2018 , 12-15 February Tbilisi, Georgia.

**Voluntary commitment:**

2010, 2011, 2012, 2013 Participate in workshop Children's University Summer Academy .  
Leader of the Georgian national team in the International Biology Olympiad.