



MULTIFACETED NEUROSCIENCE: CELEBRATING 140 YEARS OF IVANE BERITASHVILI

Program

June 12-14, 2025

Tbilisi, Georgia

The conference is held within the framework of Science Week, supported by the Ministry of Education, Science and Youth of Georgia



**MULTIFACETED NEUROSCIENCE:
CELEBRATING 140 YEARS OF
IVANE BERITASHVILI**

Program

JUNE 12-14, 2025

TBILISI, GEORGIA

**The conference is held within the framework of Science
Week, supported by the Ministry of Education,
Science and Youth of Georgia**

ORGANIZING COMMITTEE

Prof. Revaz Solomonia, PhD, ScD – Chair

Prof. Gvantsa Chkadua, PhD, ScD

Prof. Sophio Uchaneishvili, PhD

Prof. Mzia Zhvania, PhD, ScD

Prof. Tamar Bikashvili, PhD

Dr. Nino Pochkidze

JUNE 12, 2025

CONFERENCE HALL A

09.00 - 10.00 REGISTRATION

10.00 - 10.30 WELCOME ADDRESS

Prof. Revaz Solomonias, PhD, ScD – Chair of the Organizing Committee of the Conference
“Multifaceted Neuroscience – Celebrating 140 Years of Ivane Beritashvili”

Prof. Gvantsa Chkadua, PhD, ScD – Director of Ivane Beritashvili Center of Experimental Biomedicine

Prof. Ketevan Kokrashvili, PhD – Head of the Science Development Department, Ministry of Education, Science and Youth of Georgia

10.30 - 12.30 - SESSION I

Chair: Prof. Gvantsa Chkadua

10.30 - 11.30 PLENARY LECTURE

**THE ROLE OF MUTATIONS IN THE HOMEOSTATIC IRON REGULATORY GENE
IN NEURODEGENERATIVE DISEASE**

James R. Connor

Pennsylvania State University, PA, USA

11.30 - 12.30 PLENARY LECTURE

OBESITY AND THE CARDIOVASCULAR SYSTEM

Fausto Pinto

University of Lisbon, Lisbon, Portugal

12.30-13.00 COFFEE BREAK

13.00-14.30 - SESSION II

Chair: Prof. Gvantsa Chkadua

13.00 - 13.30

TRP CHANNELS IN ACUTE AND CHRONIC ITCH: EVALUATION OF HYPERALGESIA AND ALLODYNIA

Merab Tsagareli

Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia

13.30 - 14.00

DEEP BRAIN STIMULATION OF THE MEDIAL SEPTUM IMPROVES MEMORY IMPAIRMENT IN NATURALLY AGED RATS: BEHAVIORAL, IMMUNOHISTOCHEMICAL AND NEUROCHEMICAL STUDY

Gela Beselia^{1,3}, Maia Burjanadze¹, Revaz Solomonias^{1,2}, Lia Tsverava^{1,2}, Nino Chkhikvishvili¹,
Mariam Chighladze¹, Temur Naneishvili¹, Barbare Nozadze¹, Manana Dashniani¹

¹Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; ²Ilia State University,
Tbilisi, Georgia; ³Petre Shotadze Tbilisi Medical Academy, Tbilisi, Georgia

14.00 - 14.30

CITRULLINATED MYELIN BASIC PROTEIN ISOMER C8 MODULATES INFLAMMATION AND APOPTOSIS: IMPLICATIONS FOR AUTOIMMUNITY

Lali Shanshiashvili^{1,2}, Marika Chikviladze¹, Nino Mamulashvili¹, David Mikeladze^{1,2}

¹Ilia State University, Tbilisi, Georgia; ² Ivane Beritashvili Center of Experimental Biomedicine,
Tbilisi, Georgia

14.30 - 15.30 LUNCH BREAK

15.30 - 17.30 - SESSION III

Chair: Prof. Tamar Bikashvili

15.30 - 16.30 PLENARY LECTURE

THE POROSOME SECRETORY NANOMACHINE: DISCOVERY TO THERAPY (Online Participation)

Bhanu Jena

Wayne State University, MI, USA

16.30 - 17.00

CYTOCHROME C AS A NON-CANONICAL MODULATOR OF NA,K-ATPASE: ISOFORM-SPECIFIC AND REDOX-DEPENDENT REGULATION

Gvantsa Chkadua^{1,2}, Eka Nozadze¹, Leila Tsakadze¹, Lia Shioshvili¹, Nana Arutinova¹, Marine Leladze¹, Sopio Dzeladze¹, Maia Javakhishvili¹

¹Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; ²Georgian National University, Tbilisi, Georgia.

17.00 - 17.30

DECONVOLVING VISUAL IMPRINTING MEMORY IN CHICKS USING SINGLE-CELL TRANSCRIPTOMICS

Revaz Solomonias, Vincenzo Lagani, Zaza Khuchua, Lela Chitadze, Teimuraz Bokuchava, Veriko Bokuchava, Lia Tsverava

Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia, Ilia State University, Tbilisi, Georgia; King Abdullah University of Science and Technology, Saudi Arabia

19.00 - GALA DINNER

****For participants registered for the Gala Dinner***

JUNE 13, 2025

10.00 - 11.45 - SESSION IV

Chair: Prof. Merab Tsagareli

10.00 - 11.00 PLENARY LECTURE

TRP CHANNELS IN PAIN AND ITCH SENSATIONS

Ears Carstens

University of California, Davis, CA, USA

11.00 - 11.45 PLENARY LECTURE

NOVEL DEVELOPMENTS AND APPLICATIONS OF NANOMOTION DETECTION IN BIOLOGY AND MEDICINE

Sandor Kasas^{1,2}

¹Laboratory of Biological Electron Microscopy (LBEM), Ecole Polytechnique Fédérale de Lausanne (EPFL), Université de Lausanne, Lausanne, Switzerland; ²Center Universitaire Romand de Médecine Légale (UFAM), Université de Lausanne, Lausanne, Switzerland

11.45 - 12.15 COFFEE BREAK

12.15 - 13.15 - SESSION V

Chair: Prof. Merab Tsagareli

12.15 - 12.45

HORMESIS PRINCIPLE: ANALGESIC ACTION OF SMALL DOSES OF BLUNT-NOSED VIPER VENOM AND OREGANO ESSENTIAL OIL

Armen Voskanyan, Lilya Parseghyan, Armenuhi Moghrovyan, Sona Poghosyan, Anna Darbinyan

Leon A. Orbeli Institute of Physiology, Yerevan, Armenia

12.45 - 13.15

ANALGESIC AND ANTI-INFLAMMATORY PROPERTIES OF BLUNT-NOSED VIPER VENOM COMBINED WITH OREGANO ESSENTIAL OIL

Anna Darbinyan, Lilya Parseghyan, Armenuhi Moghrovyan, Sona Poghosyan, Armen Voskanyan

Leon A. Orbeli Institute of Physiology, Yerevan, Armenia

13.15-14.15 LUNCH BREAK - POSTER SESSION I

14.15 - 16.00 - SESSION VI

Chair: Prof. Revaz Solomonian

14.15 - 15.15 PLENARY LECTURE

GENE AND CELL THERAPIES FOR EPILEPSY (*Online Participation*)

Merab Kokaia

Epilepsy Center, Lund University, Lund, Sweden

15.15 - 16.00 PLENARY LECTURE

HUMAN REPROGRAMMED CELLS FOR RESTORATION OF STROKE-DAMAGED CORTICAL NETWORK (*Online Participation*)

Zaal Kokaia

Stem Cell Center, Lund University, Lund, Sweden

16.00 - 18.00 - SESSION VII

CONFERENCE HALL A

Chair: Prof. Lali Shanshiashvili

16.00 - 16.30

ANTIMICROBIAL PEPTIDES: IMPLICATIONS FOR NEURAL AND MENTAL HEALTH

Malak Pirtskalava

Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia

16.30 - 17.00

SUITABILITY OF EXPERIMENTAL MODELS OF HEMORRHAGIC SHOCK FOR RHEOLOGICAL STUDIES

Maia Mantskava¹, Nana Momtselidze¹, Giorgi Kuchava¹, Lia Davlianidze¹, Eka Arziani², Maia Gotsadze², Tamar Kandashvili²

¹Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; ²Tbilisi State Medical University, Tbilisi, Georgia

17.00 - 17.30

PSYCHOLOGICAL ASPECTS OF COMMUNICATING WITH PATIENTS ABOUT RADIATION RISKS

Ketevan Jariashvili^{1,2,4}, Salome Kiparoidze^{1,3}, Davit Nadareishvili^{1,3,4}, Manana Gvasalia¹

¹Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; ²Agency of Nuclear and Radiation Safety, Tbilisi, Georgia; ³New Vision University, Tbilisi, Georgia; ⁴Radiation Safety Center, Tbilisi Georgia

17.30 - 18.00

IDENTIFICATION OF GLUTEN-SPECIFIC DNA MARKERS FOR ASSESSING THE ALLERGENICITY OF GEORGIAN ENDEMIC WHEAT

Nelly Datukishvili^{1,2}, Kakha Bitskinashvili¹, Tamara Kutateladze¹, Tamar Koberidze², Boris Vishnepolsky¹, Marina Karseladze¹

¹Ilia State University, Tbilisi, Georgia; ²Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia

16.00 - 18.00 - SESSION VIII

CONFERENCE HALL B

Chair: Prof. Sophio Uchaneishvili

16.00 - 16.30

MODELING ALZHEIMER'S DISEASE THROUGH INACTIVATION OF COLLAPSIN RESPONSE-MEDIATOR PROTEIN 2

Afet Bakhshaliyeva, Arif Mekhtiev

Academician Abdulla Garayev Institute of Physiology, Baku, Azerbaijan

16.30 - 17.00

ALTERATIONS IN THALAMOCORTICAL HCN CHANNEL ACTIVITY BY MULTIPLE SCLEROSIS IN MURINE MODEL

Tengiz Oniani¹, Thomas Budde¹, Anna Junker²

¹Institute of Physiology, Münster University, Münster, Germany; ²European Institute for Molecular Imaging, Münster University, Münster, Germany

17.00 - 17.30

TRACE ELEMENTS-INDUCED NEUROTOXICITY IN WHITE RAT MODEL

Tamar Bikashvili^{1,2}, Lia Gelazonia¹, Mariam Mikadze¹, Marina Sardlishvili¹

¹Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; ²New Vision University, Tbilisi, Georgia

17.30 - 18.00

RODENT PROPIONIC ACID MODEL OF AUTISM: SYNAPTIC ARCHITECTURE OF SOCIAL BRAIN. ELECTRON MICROSCOPIC STUDY

Mzia Zhvania^{1,2}, Giorgi Lobzhanidze², Nadezhda Japaridze^{2,3}, Pikria Khomasuridze¹, Giorgi Kipiani¹

¹Ilia State University, Tbilisi, Georgia; ²Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; ³New Vision University, Tbilisi, Georgia

JUNE 14, 2025

10.00 - 12.00 - SESSION IX

CONFERENCE HALL A

Chair: Prof. Armen Sargsyan

10.00 - 10.30

MYO-INOSITOL AS A PROMISING ANTIEPILEPTOGENIC DRUG: MULTIDISCIPLINARY STUDY

Georgi Gamkrelidze¹, Luka Kharkhelaury¹, Veriko Bokuchava¹, Lia Tsverava^{1,2}, Eka Lepsveridze¹, Vincenzo Lagani^{1,3}, Maia Burjanadze², Manana Dashniani², Merab Kokaia⁴, Revaz Solomonian^{1,2}

¹Ilia State University, Tbilisi, Georgia; ²Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia

10.30 - 11.00

ASSYST: A UNIVERSAL AUTOMATED TOOL FOR RELIABLE SEIZURE DETECTION POWERED BY RUNNING RHYTHMOGRAM METHOD

Armen Sargsyan¹, Andreas A. Ioannides², Pablo Casillas-Espinosa³, Gilles van Luijtelaar⁴, Terry O'Brien³

¹Orbeli Institute of Physiology, Yerevan, Armenia; ²AAI Scientific Cultural Services Ltd., Nicosia, Cyprus; ³Monash University, Melbourne, Australia; ⁴Radboud University, Nijmegen, Netherlands

11.00 - 11.30

EVALUATING THE FEASIBILITY OF AN AI-BASED ALGORITHM ENCEVIS AS AN ASSISTANT TO NEUROPHYSIOLOGISTS IN CLINICAL PRACTICE

Aleksandre Tsereteli, Natela Okujava,
Simon Khechinashvili University Hospital, Tbilisi, Georgia

11.30 - 12.00

INTERACTION BETWEEN SEIZURE AND THETA RHYTHM

Nini Nikabadze^{1,2}, Irine Bilanishvili¹, Maia Barbakadze, K. Balarjishvili¹, Giorgi Andronikashvili¹, Nadejda Khizanishvili¹, Zaqaria Nanobashvili¹

¹Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; ²Ilia State University, Tbilisi, Georgia

10.00-12.0 - SESSION X

CONFERENCE HALL B

Chair: Prof. Maia Mantskava

10.00 - 10.30

SIGMA-1 RECEPTOR AGONISTS COUNTERACT PARA-CRESOL-INDUCED DEPRESSIVE-LIKE BEHAVIOR: ROLE OF DOPAMINE TRANSPORTER DYSREGULATION IN A GUT-BRAIN AXIS MODEL

Elene Zhuravliova^{1,2}, Natia Okriashvili¹, Natalia Kiknadze¹, Nana Narmania^{1,2}, Tamar Barbakadze^{1,2}, David Mikeladze^{1,2}

¹Ilia State University, Tbilisi, Georgia; ²Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia

10.30 - 11.00

THE ROLE OF INTEGRINS IN THE DEVELOPMENT OF HYPOXIC-ISCHEMIC PROCESSES IN NEURONAL CELLS

Tamar Barbakadze, Elisabed Kvergelidze, Elena Zhuravliova, Nana Narmania, Maia Sepashvili, David Mikeladze

Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; Ilia State University, Tbilisi, Georgia

11.00 - 11.30

TARGETING THE UB/SDF1/CXCR4 AXIS: A MULTIMODAL APPROACH TO UNDERSTANDING CELLULAR REGENERATION AND PATHOLOGY

Rusudan Sujashvili¹, Irine Ioramashvili^{1,2}, Giorgi Javakhishvili³

¹Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; ²Ilia State University, Tbilisi, Georgia; ³The University of Georgia, Tbilisi, Georgia

11.30 - 12.00

VITAMIN D DEFICIENCY IN TYPE 2 DIABETES MELLITUS: META-ANALYTIC INSIGHTS (2020–2025) INTO ITS IMPACT ON CARDIOVASCULAR RISK, LIPID PROFILE, INFLAMMATORY MARKERS, OBESITY PARAMETERS AND DIABETIC MICROVASCULAR COMPLICATIONS

Nino Sakhanberidze^{1,2}, Maia Mantskava^{1,2}, Nana Momtselidze¹, Giorgi Kuchava², Manana Namoradze¹, Nino Charkviani¹

¹Tbilisi State Medical University, Tbilisi, Georgia; ²Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia

12.00 - 13.00 POSTER SESSION II

13.00 – CLOSING CEREMONY

LIST OF POSTER PRESENTATIONS

(Poster sessions for June 13 and June 14 of the conference).

POSTER SESSION I

JUNE 13, 2025

1. TRP CHANNELS IN PAIN MODULATION

Nozadze I, Gurtskaia G, Tsagareli M, Gedevanishvili G, Abzianidze E, Tsagareli M.

Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia

2. TOLERANCE TO NSAIDS IN BRAIN LIMBIC AREAS OF RATS

Gurtskaia G, Tsagareli N, Nozadze I, Gedevanishvili G, Abzianidze E, Tsagareli M.

Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia

3. ATTENTION DISTRIBUTION ACCORDING TO THE SIZE, COLOR, AND LOCATION OF STIMULI IN THE VISUAL SPACE

Khomeriki M, Lomashvili N.

Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia

4. EFFECTS OF RADON VAPOR EXPOSURE ON BEHAVIOR AND ELECTROLYTE BALANCE IN AGGRESSIVE RATS: A CASE STUDY

Nikolaishvili M, Tarkhnishvili A, Andronikashvili G, Gurashvili T, Pevadze K, Natadze D, Dondoladze K.

Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia

5. THE IMPACT OF THE BIAS OF VISUAL ATTENTION TO THE VISUAL HALF-FIELD ON THE FLUENT READING IN LEFT-TO-RIGHT AND RIGHT-TO-LEFT READERS

Tsiklauri G, Kerashvili A, Ali Khaled M, Aly Loura M, Roinishvili M, Roinishvili L, Makashvili M.

Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia

6. OXIDATIVE AND ANTIOXIDATIVE ACTIVITY OF ORGANISM AFTER CONDITIONS OF HYPERTHERMIA-INDUCED HORMESIS AND ITS DISRUPTION BY HIGH TEMPERATURE

Sikharulidze N, Devdariani M, Kvachakidze I, Nebieridze M, Davlianidze L, Gumberidze L, Oren B, Mitagvaria N.

Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia

7. NEUROPROTECTIVE SYNERGY OF DEXAMETHASONE AND SEABUCKTHORN OIL IN HIGH-ALTITUDE BRAIN INJURY: EVIDENCE FROM RAT BRAIN HISTOLOGY

Shushanyan R, Grigoryan A, Abgaryan T, Karapetyan A.
Yerevan State University, Yerevan, Armenia

8. EFFECTS OF PROLONGED SOCIAL ISOLATION ON MEMORY AND DEPRESSIVE BEHAVIOR IN RATS OF VARYING SOCIAL STATUS

Matitaishvili T¹, Domianidze T¹, Burjanadze G², Shengelia M², Menteshashvili N¹.

¹Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; ²Ivane Javakhishvili Tbilisi State University, Tbilisi, Georgia

9. ACTIVITY OF BRAIN ENERGY METABOLISM ENZYMES IN NEURODEGENERATIVE DISORDERS IN THE AGING PROCESS

Abiyeva E.
Academician Abdulla Garayev Institute of Physiology, Baku, Azerbaijan

10. MALATE DEHYDROGENASE ACTIVITY IN THE BRAIN OF OLD RATS AS A RESULT OF OLFACTORY BULBECTOMY

Mammedkhanova V.
Academician Abdulla Garayev Institute of Physiology, Baku, Azerbaijan

11. OXIDATIVE AND BEHAVIORAL CHANGES INDUCED BY ISOLATION IN DOMINANT AND SUBMISSIVE RATS

Domianidze T, Matitaishvili T, Mitagvaria N, Davlianidze L, Gumberidze L, Menteshashvili N.
Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia

12. ADAPTATION OF GLUTAMINE SYNTHETASE ACTIVITY TO THE LIGHT DEPRIVATION AS A MANIFESTATION OF NEUROPLASTICITY IN RATS

Efendiyeva E, Khairova V, Aliyeva N.
Academician Abdulla Garayev Institute of Physiology, Baku, Azerbaijan

13. ELECTRON TRANSFER AND THERMAL STABILITY OF CYTOCHROME C UNDER PROLONGED GLYCATION BY GLUCOSE AND LACTOSE: SIMILARITIES AND DIFFERENCES

Makharadze M¹, Vashakidze D¹, Dolidze T¹, Uchaneishvili S¹, Khoshtariya D^{1,2}.

¹Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; ²Ivane Javakhishvili Tbilisi State University, Tbilisi, Georgia

14. ELECTROMAGNETIC RADIATION AND ISOENZYME SPECTRUM OF LACTATE DEHYDROGENASE IN THE BRAIN OF RATS

Panakhova Kh, Madjidova S.
Academician Abdulla Garayev Institute of Physiology, Baku, Azerbaijan

15. THE EFFECT OF 30-DAY PROTEIN FEEDING IN ANIMALS ON THE FORMATION OF MEMORY TRACES OF CONDITIONED PASSIVE AVOIDANCE REFLEXES

İbrahimova S.

Academician Abdulla Garayev Institute of Physiology, Baku, Azerbaijan

16. THE SHINE-THROUGH PARADIGM: A SENSITIVE MARKER FOR SCHIZOPHRENIA SPECTRUM DISORDERS

Roinishvili M^{1,2}, Garobbio S³, Ramos da Cruz J³, Favrod O³, Shaqiri A³, Brand A³, Herzog MH³, Chkonia E⁴.

¹Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; ²Free University, Tbilisi, Georgia; ³BMI, EPFL, Lausanne, Switzerland; ⁴Medical State University, Tbilisi, Georgia

17. SHORT- AND LONG-TERM EFFECT OF TOLUENE CHRONIC EXPOSURE ON SYNAPTIC ARCHITECTURE IN ADOLESCENT MALE WISTAR RATS. ELECTRON MICROSCOPIC STUDY

Pochkhidze N^{1,2}, Zhvania M^{1,2}, Japaridze N^{1,3}.

¹Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; ²Ilia State University, Tbilisi, Georgia; ³New Vision University, Tbilisi, Georgia

18. ASSESSMENT OF THE SMELL OF LONG - LIVERS IN THE POSTCOVID PERIOD
Bagirova F.

Academician Abdulla Garayev Institute of Physiology, Baku, Azerbaijan

19. CHANGES IN THE BLOOD LEUKOCYTE FORMULA OF WHITE RATS EXPOSED TO NON-IONIZING ELECTROMAGNETIC WAVES

Abbasova M.

Academician Abdulla Garayev Institute of Physiology, Baku, Azerbaijan

20. THE EFFECT OF ELECTROMAGNETIC WAVES ON THE BLOOD LEUKOFORMULA OF PUPPIES AT DIFFERENT PERIODS OF PRENATAL DEVELOPMENT

Guliyeva A.

Academician Abdulla Garayev Institute of Physiology, Baku, Azerbaijan

21. PHOSPHATE-ACTIVATED GLUTAMINASE ACTIVITY IN A RAT MODEL OF STREPTOZOTOCIN-INDUCED NEURODEGENERATION

Gadirova L.

Academician Abdulla Garayev Institute of Physiology, Baku, Azerbaijan

22. REVOLUTIONIZING HEMORHEOLOGY THROUGH ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

Mantskava M, Kuchava G, Momtselidze N.

Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia

23. WHITE LABORATORY RATS AFTER ACUTE SINGLE STRESS SOUND EXPOSURE TO ULTRASTRUCTURAL CHARACTERISTICS OF GLIAL-CAPILLARY CONTACTS IN THE ORBITAL CORTEX

Sultanli M.

Academician Abdulla Garayev Institute of Physiology, Baku, Azerbaijan

24. AUTHENTICATION OF OILS USING NOVEL PCR APPROACHES

Kutateladze T¹, Bitskinashvili K¹, Vishnepolsky B¹, Ninidze T^{1,2}, Karchkhadze K², Datukishvili N^{1,2}.

¹Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; ²Ilia State University, Tbilisi, Georgia

POSTER SESSION II

JUNE 14, 2025

1. THERMAL AND MECHANICAL SENSORY AND PAIN ASSESSMENT IN HEALTHY STUDENTS

Kvachadze I, Gvasalia T, Giorgobiani T, Tsagareli M.

Tbilisi State Medical University, Tbilisi, Georgia

2. A GENERAL VIEW OF PAIN PERCEPTION IN ATHLETES

Kakiashvili L, Ebralidze K, Tsagareli M, Kvachadze I.

Georgian State University of Physical Education and Sport, Tbilisi, Georgia; Tbilisi State Medical University, Tbilisi, Georgia

3. THERMAL PAIN SENSATION DURING DIFFERENT SATIETY LEVELS IN MALES AND FEMALES ACROSS OVARIAN-MENSTRUAL CYCLE

Gvasalia T, Chichinadze G, Tsagareli M, Kvachadze I.

Tbilisi State Medical University, Tbilisi, Georgia

4. DOSE-DEPENDENT EFFECTS OF MYO-INOSITOL ON KAINIC ACID INDUCED EPILEPSY

Lepsveridze E¹, Gamkrelidze G¹, Tsverava L^{1,2}, Kharkhelaury L¹, Lagani V^{1,3}, Solomonias R^{1,2}.

¹Ilia State University, Tbilisi, Georgia; ²Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; ³King Abdullah University, Thuwal, Saudi Arabia

5. THE EFFECT OF VENTRAL TEGMENTAL AREA ACTIVATION ON THE COURSE OF LOCAL AND GENERALIZED CONVULSIVE REACTIONS INDUCED BY HIPPOCAMPAL STIMULATION

Barbakadze M¹, Bilanishvili I¹, Nikabadze N², Balarjishvili K¹, Andronikashvili G¹, Khizanishvili N¹, Nanobashvili Z¹.

¹Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; ²Ilia State University, Tbilisi, Georgia

6. PRENATAL EXPOSURE TO DI(2-ETHYLHEXYL) PHTHALATE ALTERS THE ASSOCIATION OF GLUTAMATERGIC PROTEINS WITH PTEN IN THE HIPPOCAMPUS OF MALE OFFSPRING RATS

Kiknadze N, Zhuravliova E, Mikeladze D.

Ilia State University, Tbilisi, Georgia

7. ANXIOLYTIC EFFECT OF LEMON BALM (MELISSA OFFICINALIS) INFUSION AND ITS COMPARISON WITH DIAZEPAM IN BEHAVIORAL MODELS IN RATS

Andronikashvili G¹, Okujava M^{1,2}, Gurashvili T^{1,3}, Bagashvili T^{1,4}, Gogeshvili K¹.

¹Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; ²Ilia State University, Tbilisi, Georgia; ³Alterbridge University, Tbilisi, Georgia; ⁴Ivane Javakhishvili Tbilisi State University, Tbilisi, Georgia

8. BIOINFORMATIC INSIGHTS INTO UBIQUITIN AND SDF1/CXCR4 AXIS AFTER IRRADIATION

Ioramashvili I^{1,2}, Sujashvili R^{1,3}.

¹Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; ²Ilia State University, Tbilisi, Georgia; ³The University of Georgia, Tbilisi, Georgia

9. THE EFFECT OF TOLUENE ON MOTOR CORTEX PYRAMIDAL NEURONS IN DIFFERENT AGED RATS

Gelazonia L, Mikadze M, Sardlishvili M, Bikashvili T.

Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia

10. INOSITOLS AND TRAUMATIC BRAIN INJURY BIOMARKERS – TIME DEPENDENT STUDIES

Oganezovi N¹, Lepsveridze E¹, Lagani V^{1,2}, Gamkrelidze G¹, Tsverava L^{1,3}, Solomonias R^{1,3}.

¹Ilia State University, Tbilisi, Georgia; ²Abdullah University, Thuwal, Saudi Arabia; ³Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia

11. PREVENTION OF KAINIC-ACID INDUCED EPILEPTOGENESIS BY MYO-INOSITOL: TRANSCRIPTOMIC AND EPIGENOMIC STUDIES

Tsverava L^{1,2}, Lagani V^{1,3}, Kharkhela L¹, Nadirashvili N¹, Kiguradze T¹, Lepsveridze E¹, Gamkrelidze G¹, Solomonias R^{1,2}.

¹Ilia State University, Tbilisi, Georgia; ²Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; ³King Abdullah University, Thuwal, Saudi Arabia

12. INFORMATION INTAKE AND RETENTION ON RADIORESISTANCE RESEARCH IN LABORATORY WHITE MICE

Gogebashvili M, Kalmakhelidze S, Avalishvili A, Gunia N, Ivanishvili N.

Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia

13. RADON AS A FACTOR OF CHRONIC RADIATION EXPOSURE TO HEMATOPOIESIS

Grebenchuk H¹, Tulashvili E², Kalmakhelidze S¹, Ivanishvili N¹, Gogebashvili M¹.

¹Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; ²Materials Research Scientific-Research Institute, Tbilisi, Georgia; Ivane Javakhishvili Tbilisi State University, Tbilisi, Georgia

14. LONG-LASTING EFFECTS OF MYO-INOSITOL ON IONOTROPIC GLUTAMATERGIC RECEPTOR EXPRESSION IN KAINIC ACID INDUCED EPILEPSY

Bokuchava V¹, Tsverava L^{1,2}, Gamkrelidze G¹, Dzeladze D¹, Solomonias R^{1,2}.

¹Ilia State University, Tbilisi, Georgia; ²Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia

15. RADIATION-INDUCED MODULATION OF HIPPOCAMPAL NA,K-ATPASE ACTIVITY

Nozadze E¹, Tsakadze L¹, Shioshvili L¹, Arutinova N¹, Leladze M¹, Dzeladze S¹, Javakhishvili M¹, Chkadua G^{1,2}.

¹Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; ²Georgian National University, Tbilisi, Georgia

16. SINGLE NUCLEI RNA-SEQ ANALYSIS OF VISUAL IMPRINTING MEMORY IN CHICKS: MEMORY-SPECIFIC CHANGES OF DIFFERENTIALLY EXPRESSED GENE PRODUCTS: RORA, LUC7L, ROBO1, FOXP2

Chitadze L¹, Lagani V^{1,2}, Bokuchava T¹, Bokuchava V¹, Tsverava L^{1,3}, Nadirashvili N¹, McCabe B⁴, Khuchua Z¹ and Solomonias R^{1,3}.

¹Ilia State University, Tbilisi Georgia; ²King Abdullah University Thuwal, Saudi Arabia; ³Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; ⁴University of Cambridge, UK

17. SINGLE NUCLEI TRANSCRIPTOMIC PROFILE OF MEMORY AFTER VISUAL IMPRINTING IN CHICKS- STUDYING QUANTITATIVE CHANGES OF DIFFERENTIALLY EXPRESSED LONG NON-CODING RNAS ENSGAL000100007489 AND ENSGAL00010026609

Bokuchava T¹, Chitadze L¹, Lagani V^{1,3}, McCabe⁴, Khuchua Z¹, Solomonias R^{1,2}.

¹Ilia State University, Tbilisi, Georgia; ²Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; ³King Abdullah University, Thuwal, Saudi Arabia, ⁴University of Cambridge, Cambridge, UK

18. KNOWLEDGE, AWARENESS, AND ATTITUDES TOWARDS EPILEPSY AMONG SECONDARY SCHOOL TEACHERS IN GEORGIA

Lazariashvili M^{1,2}, Megrelishvili M², Gogatishvili N^{1,4}, Kuchukhidze G³, Kasradze S^{1,4}.

¹Institute of Neurology and Neuropsychology, Tbilisi, Georgia; ²Ilia State University, Tbilisi, Georgia; ³Christian Doppler University Hospital, Paracelsus Medical University, Salzburg, Austria; ⁴Caucasus International University, Tbilisi, Georgia

19. PEPTIDYL ARGININE DEIMINASE-2 EXPRESSION RATE BY THE ACTION OF MYELIN BASIC PROTEIN CHARGE ISOMERS

Mamulashvili N¹, Chikviladze M¹, Shanshiashvili L^{1,2}, Mikeladze D^{1,2}.

¹Ilia State University, Tbilisi, Georgia; ²Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia

20. WORK ENDURANCE AND LOCOMOTOR ACTIVITY OF CHRONICALLY EXPOSED RATS

Museliani T, Jikia G, Tsitskishvili L.

Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia

21. OXYTOCIN AND ELECTROMAGNETIC THERAPY: HORMONE-DEPENDENT EFFECTS ON STRESS

Bukia N^{1,2}, Butskhrikidze M¹, Machavariani L¹, Svanidze M³, Siradze M¹.

¹Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; ²Caucasus International University, Tbilisi, Georgia; ³Ivane Javakhishvili Tbilisi State University, Tbilisi, Georgia

22. NEUROPROTECTIVE EFFECTS OF HERNIARIN AGAINST IONIZING RADIATION-INDUCED COGNITIVE AND BEHAVIORAL DEFICITS

Kalmakhelidze S^{1,2}, Museridze D¹, Gegenava L¹, Gvinadze N¹.

¹Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; ²Tbilisi State Medical University, Tbilisi, Georgia.

23. RLS AND OTHER SLEEP DISORDERS AMONG YOUNG PEOPLE OF GEORGIA

Mamasakhlisi K¹, Kasradze S^{1,2}, Högl B³.

¹Institute of Neurology and Neuropsychology, Tbilisi, Georgia; ²Caucasus International University, Tbilisi, Georgia; ³Medical University of Innsbruck, Innsbruck, Austria

24. CHARACTERIZATION OF MICROPLASTICS IN HUMAN TISSUES: CASE STUDIES AND RESEARCH PERSPECTIVES

Mikautadze E.

European University, Tbilisi, Georgia

25. THE IMPACT OF EDUCATIONAL LEVEL ON QUALITY OF LIFE IN GEORGIAN PEOPLE WITH EPILEPSY

Jishkariani T^{1,2,3}, Mamasakhlisi K^{1,2}, Museridze G², Megrelishvili M³, Kasradze S^{1,2}.

¹Caucasus International University, Tbilisi, Georgia; ²Institute of Neurology and Neuropsychology, Tbilisi, Georgia; ³Ilia State University, Tbilisi, Georgia

26. THE IDENTIFICATION AND COMPARATIVE CHARACTERISATION OF THE ENDOGENOUS GROWTH INHIBITORY FACTOR FROM VARIOUSLY TRANSFORMED HUMAN NERVE CELLS

Modebadze I¹, Kordzadze A², Bakuradze E¹, Rusishvili L¹, Berulava M³, Dzidziguri D¹.

¹Ivane Javakhishvili Tbilisi State University, Tbilisi, Georgia; ²The First University Clinic of TSMU, Tbilisi, Georgia; ³Sokhumi State University, Tbilisi, Georgia

27. KAINIC ACID STATUS EPILEPTICUS - INDUCED CHANGES IN THE HIPPOCAMPUS AND HYPOTHALAMUS ALTER THE EFFECTS OF EXOGENOUS OREXIN-A IN THE HIPPOCAMPUS

Kapanadze T¹, Bakuradze E¹, Kutelia G^{1,2}, Chkhartishvili B¹, Doreulee N¹.

¹Ivane Javakhishvili Tbilisi State University, Tbilisi, Georgia; ²V. Chavchanidze Institute of Cybernetics, Georgian Technical University, Tbilisi, Georgia

28. GLIOMA-NEURON SYNAPSES: REDEFINING TUMOR-BRAIN INTERACTIONS
Kishore J^{1,2}, Zhvania M^{1,3}.

¹Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; ²Georgian National University, Tbilisi, Georgia; ³Ilia State University, Tbilisi, Georgia

29. BEHAVIORAL BIOMARKERS OF TRAUMATIC FEAR MEMORY

Kutelia G^{1,2}, Bukia R^{1,2}, Chikovani M¹, Doreulee N¹.

¹Ivane Javakhishvili Tbilisi State University, Tbilisi, Georgia; ² V. Chavchanidze Institute of Cybernetics, Georgian Technical University, Tbilisi, Georgia

30. EXOGENOUS CORTICOSTERONE CHANGES THE EXPRESSION OF GENES INVOLVED IN TRAUMATIC MEMORY FORMATION

Ansiani R¹, Kutelia G^{1,2}, Ugulava G¹, Kuchukashvili Z¹, Silagava K¹, Giunashvili T¹, Doreulee N¹.

¹Ivane Javakhishvili Tbilisi State University, Tbilisi, Georgia; ²V. Chavchanidze Institute of Cybernetics, Georgian Technical University, Tbilisi, Georgia

31. ANTIDEPRESSANT AND ANTIMICROBIAL ACTIVITY OF THE SELECTIVE SEROTONIN REUPTAKE INHIBITORS IN DEPRESSIVE AND NON-DEPRESSIVE RATS

Rogava N^{1,2}, Maglakelidze N¹, Bejanishvili K¹, Lomtadze Z², Nachkebia N¹.

¹Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; ²Sokhumi State University, Tbilisi, Georgia

32. LONG-LASTING EFFECTS OF EARLY POSTNATAL DYSFUNCTION OF THE BRAIN MUSCARINIC CHOLINERGIC SYSTEM ON LEARNING AND MEMORY AND ADULT HIPPOCAMPAL NEUROGENESIS

Shavgulidze M, Maglakelidze N, Rogava N, Bezhanishvili K, Nachkebia N.

Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia

33. SLEEP DISTURBANCES AND DYSREGULATION OF ANTIOXIDATIVE STATUS IN VPA-MODELS OF AUTISM AND PREVENTIVE EFFICIENCY OF MICROENCAPSULATED GRAPE SEED OIL

Bezhanishvili K, Mchedlidze O, Maglakelidze N, Rogava N, Kharadze D, Omiadze T, Nachkbia N.

Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia

34. THE RESULTS OF 3-MONTH PSYCHOLOGICAL TRAINING IN CHILDREN WITH ADHD

Chantadze L^{1,2}, Zhamureli N², Katcharava L², Darsavelidze K², Aptsiauri K¹, Gugushvili M¹, Khachidze I^{1,2}.

¹Ivane Beritashvili Center for Experimental Biomedicine, Tbilisi, Georgia; ²Georgian National University, Tbilisi, Georgia

35. THE INFLUENCE OF CYB5-REDUCTASE INHIBITION ON THE CHOLINERGIC SYSTEM, EPILEPTIFORM ACTIVITY, AND BEHAVIORAL PATTERNS

Adamashvili N, Gegechkori S, Melkadze N, Qurasbediani M, Doreulee N.

Ivane Javakhishvili Tbilisi State University, Tbilisi, Georgia

36. THE VALUE OF NMDA- GLUTAMATE RECEPTORS IN THE STRUCTURE OF SLEEP-WAKEFULNESS CYCLE

Mchedlidze O, Chkhartishvili E, Chijavadze E, Babilodze M, Nachkebia N.

Ivane Beritashvili Center for Experimental Biomedicine, Tbilisi, Georgia

Ivane Beritashvili Center of Experimental Biomedicine
14, Levan Gotua Str, Tbilisi, Georgia