



THE FIRST INTERNATIONAL CONFERENCE  
FOR YOUNG NEUROSCIENTISTS  
**Brain & Neuroplasticity**

PROGRAM



OCTOBER 21-23, 2024  
Tbilisi, Georgia



09.00 - 09.30 REGISTRATION

09.30 - 10.00 OPENING

**SESSION I.** Chairs: Nino Sharikadze, Dina Ahmed

10.00 - 10.25 Shota Tsimakuridze\*, Tamar Shetekauri, Nino Tkemaladze, Nikoloz Oniani  
*School of Natural Sciences and Medicine, Ilia State University, Tbilisi, Georgia*  
EFFECTS OF SLEEP DEPRIVATION ON ACTIVE DIVERSION LEARNING IN MAMMALS

10.25 - 10.50 Ivliane Nozadze\*, Gulnazi Gurtskaia, Gulnara Gedevanishvili, Merab Tsagareli  
*Laboratory of Pain and Analgesia, Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia*  
TRPA1 CHANNEL: A TARGET FOR THERAPEUTIC DRUGS

10.50 - 11.15 Davit Vashakidze\*, Zurab Gaprindashvili  
*Laboratory of Biophysics, Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia*  
FREE WILL THROUGH NEUROSCIENCE

11.15 - 11.40 Nino Mamulashvili<sup>1\*</sup>, Marika Chikviladze<sup>1</sup>, Lali Shanshiashvili<sup>1,2</sup>, David Mikeladze<sup>1,2</sup>  
*<sup>1</sup>Institute of Chemical Biology, Ilia State University, Tbilisi, Georgia; <sup>2</sup>Department of Biochemistry, Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia*  
DIFFERENT BINDING PATTERNS OF MYELIN BASIC PROTEIN CHARGE ISOMERS WITH PEPTIDYL ARGININE DEIMINASE-2

11.40 - 12.00 BREAK

**SESSION II.** Chairs: Natalia Kiknadze, Ruzanna Shushanyan

12.00 - 12.25 Zurab Dolaberidze<sup>1,2\*</sup>, Tamar Dalakishvili<sup>1,3</sup>  
*<sup>1</sup>Tbilisi State Medical University; <sup>2</sup>High Technology Medical Center, University Clinic; <sup>3</sup>Tbilisi Heart and Vascular Clinic, Tbilisi, Georgia*  
RADIOBIOLOGICAL PROPERTIES OF RADIOTHERAPY-INDUCED COGNITIVE IMPAIRMENT IN CHILDREN

12.25 - 12.50 Nikita Choudhary  
*Georgian American University, Tbilisi, Georgia*  
THE ANATOMY AND PHYSIOLOGY OF PAIN

12.50 - 13.15 Rishika Dhapola\*, Harikrishna Reddy  
*Department of Pharmacology, Central University of Punjab, Bathinda, India*  
ISOLATION AND CHARACTERIZATION OF BRAIN-EXTRACT-ENRICHED EXOSOMES FOR THE PLAUSIBLE TREATMENT OF ALZHEIMER'S DISEASE

13.15 - 13.40 Nina Gogokhia<sup>1\*</sup>, Nino Kitoshvili<sup>1</sup>, Josef Dolidze<sup>2</sup>  
*<sup>1</sup>Black Sea University (IBSU); <sup>2</sup>AlterBridge University, Tbilisi, Georgia*  
ATTACHMENT, VAGAL TONE, AND THE CHOICE OF CRIME: UNDERSTANDING THE PSYCHOSOCIAL PATHWAYS FROM CHILDHOOD TO CRIMINAL BEHAVIOR POST-SOVIET GEORGIAN PERSPECTIVE

13.40 - 14.05 Rusudan Botsvadze\*, Tamar Shetekauri, Nikoloz Oniani  
*School of Natural Sciences and Medicine, Ilia State University, Tbilisi, Georgia*  
HOW FEAR CONDITIONING AFFECTS ACTIVE AVOIDANCE PARAMETERS IN RATS

14.05 - 15.00 LUNCH

**SESSION III.** Chairs: Irina Sharikadze, Giorgi Kipiani

15.00 - 15.25 Sophio Kalmakhelidze, Anastasia Avalishvili\*, Sophio Uchaneishvili, Nazi Ivanishvili, Mikheil Gogebashvili  
*Laboratory of Radiation Safety Problems, Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia*

A STUDY OF BEHAVIORAL PARAMETERS OF WHITE MICE UNDER MODELS OF POTENTIAL RADIATION HAZARDS IN SPACE

15.25 - 15.50 Guillermo Montaña-Valverde<sup>1,2\*</sup>, Annika Linke<sup>3</sup>, Dominika Slušná<sup>1</sup>, Jordi Muchart López<sup>4</sup>, Gustavo Deco<sup>2,5</sup>, Wolfram Hinzen<sup>1,5</sup>

*<sup>1</sup>Department of Translation and Language Sciences, Campus Poblenou, Pompeu Fabra University, Barcelona, Spain, <sup>2</sup>Center for Brain and Cognition, Computational Neuroscience Group, Universitat Pompeu Fabra, Barcelona, Spain, <sup>3</sup>Brain Development Imaging Laboratories, Department of Psychology, San Diego State University, San Diego, California, USA, <sup>4</sup>Department of Neuroradiology, Hospital Sant Joan de Déu, Barcelona, Spain, <sup>5</sup>Catalan Institution for Research and Advanced Studies, ICREA, Barcelona, Spain*  
BRAIN FUNCTION IN LANGUAGE- AND ASSOCIATED NETWORKS IN NON- OR MINIMALLY VERBAL CHILDREN

15.50 - 16.15 Negin Saeedi<sup>1\*</sup>, Fereshteh Pourabdolhossein<sup>2</sup>, Masoud Dadashi<sup>3</sup>, Mahyar Janahmadi<sup>1</sup>, Gila Behzadi<sup>1</sup>, Narges Hosseinmardi<sup>1</sup>

*<sup>1</sup>Department of Physiology, School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran; <sup>2</sup>Department of Physiology, School of Medicine, Babol University of Medical Sciences, Babol, Iran; <sup>3</sup>Department of Microbiology, School of Medicine, Alborz University of Medical Sciences, Karaj, Iran*  
GUT-BRAIN AXIS PROMINENCE IN THE ADJUSTMENT OF ADDICTIVE-LIKE BEHAVIORS

16.15 - 16.40 Nwamekang Belinga Luc<sup>1,2\*</sup>, Benjamin Francois<sup>3</sup>, Ruiqin N<sup>3</sup>, Allali G<sup>1,2</sup>, Richetin  
*<sup>1</sup>Department of Psychiatry, Center for Psychiatric Neurosciences, Lausanne University Hospital (CHUV) and University of Lausanne, Lausanne, Switzerland; <sup>2</sup>Leenaards Memory Center, Department of Clinical Neurosciences, Lausanne University Hospital, University of Lausanne, Lausanne, Switzerland. <sup>3</sup>Institute for Biomedical Engineering, ETH Zürich, Switzerland*  
DIFFERENTIAL EFFECTS OF TAU ISOFORMS ON EARLY STAGE OF FRONTOTEMPORAL DEMENTIA: INSIGHTS FROM WILD TYPE MOUSE PREFRONTAL MODEL

16.40 - 17.00 BREAK

**SESSION IV.** Chairs: Nino Oganezovi, Jugal Kishore

17.00 - 17.25 Terezia Khairallah\*, Saydah Eltigani, Trust Taurai, Faustina Joy, Rita Edwin  
*University of Georgia, Tbilisi, Georgia*  
ADVANCEMENTS IN TREATMENT OF NEUROLOGICAL DISORDERS USING CRISPR/CAS 9 TECHNOLOGY

17.25 - 17.50 ONLINE PRESENTATION WITH ZOOM  
Lali Kruashvili<sup>1\*</sup>, Julia Sepielak-Świdorska<sup>1</sup>, Błażej Ruszczycycki<sup>1,2</sup>, Kasia Radwańska<sup>1</sup>

*<sup>1</sup>Laboratory of Molecular Basis of Behavior, Nencki Institute of Experimental Biology, Warsaw, Poland; <sup>2</sup>Department of Medical Physics and Biophysics, Faculty of Physics and Applied Informatics, AGH University of Krakow, Krakow, Poland*  
EVALUATION OF SPATIAL CHOICES IN MICE IN THE AUTOMATED E-MAZE



**SESSION V.** Chairs: Temur Mantashashvili, Lela Chitadze

- 09.00 - 09.25 Chitadze Lela<sup>1\*</sup>, Vincenzo Lagani<sup>1,2</sup>, Brian J. McCabe<sup>3</sup>, Revaz Solomonias<sup>1,4</sup>  
*<sup>1</sup>Institute of Chemical Biology, School of Natural Sciences and Medicine, Ilia State University, Tbilisi, Georgia; <sup>2</sup>Biological and Environmental Sciences and Engineering Division, King Abdullah University of Science and Technology, Thuwal, Saudi Arabia; <sup>3</sup>Department of Zoology, University of Cambridge, Cambridge, United Kingdom; <sup>4</sup>Ivane Beritashvili Centre of Experimental Biomedicine, Tbilisi, Georgia*  
**SINGLE NUCLEI RNA - SEQ ANALYSIS DURING VISUAL IMPRINTING MEMORY IN DOMESTIC CHICKS - STUDY OF TRANSCRIPTION FACTOR - RORA AND LUC & L-PROTEIN**
- 09.25 - 09.50 A.S. Isoyan<sup>1,2</sup>, V.A. Chavushyan<sup>1,2</sup>, Gevorg Ghukasyan<sup>1,2\*</sup>, M.H. Danielyan<sup>1,2</sup>  
*<sup>1</sup>Orbeli Institute of Physiology NAS RA, Yerevan, Armenia; <sup>2</sup>Yerevan State Medical University After M. Heratsi, Yerevan, Armenia*  
**AMYLOID BETA-INDUCED CEREBROVASCULAR AND NEURONAL DYSFUNCTION IN RAT**
- 09.50 - 10.15 Ruzanna Shushanyan\*  
*Research Institute of Biology, Yerevan State University, Armenia*  
**ADAPTATIONS AGAINST HYPOXIA: EVALUATING HIGH ALTITUDE IMPACT ON BRAIN AND LUNG HEALTH**
- 10.15 - 10.40 Dina Ahmed\*, Stephen Getting, Sigrun Lange  
*Applied Pathobiology and Extracellular Vesicles Research Group, University of Westminster, London, United Kingdom*  
**IDENTIFICATION OF ROLES FOR PEPTIDYLARGININE DEIMINASES IN MODELS OF CNS REGENERATION, ASSESSING CAPACITIES OF PHARMACOLOGICAL PAN PAD INHIBITOR APPLICATION (CL-AMIDIN)**
- 11.40 - 12.00 BREAK

**SESSION VI.** Chairs: Zurab Dolaberidze, Rishika Dhapola

- 12.00 - 12.25 Nino Sharikadze\*, Yuko Yasui, Tsung Ping Su  
*Cellular Pathobiology Section, Integrative Neuroscience Research Branch, Intramural Research Program, National Institute on Drug Abuse, NIH, Baltimore, MD, USA*  
**SIGMA-1 RECEPTOR ACTION ON CORTICOSTERONE RELEASE FROM ADRENAL GLAND UNDER STRESS**
- 12.25 - 12.50 ONLINE PRESENTATION WITH ZOOM  
Raj Katariya<sup>1\*</sup>, Nandkishor Kotagale<sup>2</sup>, Milind Umekar<sup>1</sup>, Brijesh Taksande<sup>1</sup>  
*<sup>1</sup>Division of Neuroscience, Department of Pharmacology, Smt. Kishoritai Bhoyar College of Pharmacy, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur, Maharashtra, India; <sup>2</sup>Government College of Pharmacy, Sant Gadge Baba Amravati University, Amravati, Maharashtra, India*  
**CHRONIC 3-NPA EXPOSURE DISRUPTS STRIATAL AGMATINE HOMEOSTASIS TO EXHIBIT HD-LIKE PATHOLOGY IN RATS**

- 12.50 - 13.15 Nino Oganezovi<sup>1\*</sup>, Vincenzo Lagani<sup>1,2</sup>, Marine Kikvidze<sup>1,3</sup>, Giorgi Gamkrelidze<sup>1,4</sup>, Lia Tsverava<sup>1,8</sup>, Eka Lepsveridze<sup>1,6</sup>, Kevin M. Kelly<sup>3,4,5,6,7</sup>, Revaz Solomonias<sup>1,7,8</sup>  
*<sup>1</sup>School of Natural Sciences and Medicine, Institute of Chemical Biology, Ilia State University, Tbilisi, Georgia; <sup>2</sup>Biological and Environmental Sciences and Engineering Division, King Abdullah University of Science and Technology, Thuwal, Saudi Arabia; <sup>3</sup>Department of Neurobiology and Anatomy, Drexel University College of Medicine, Philadelphia, PA, USA; <sup>4</sup>Department of Neurology, Philadelphia, PA, United States; <sup>5</sup>Department of Neurology, Allegheny General Hospital, Pittsburgh, PA, USA; <sup>6</sup>Center for Neuroscience Research, Allegheny Health Network Research Institute, Pittsburgh, PA, United States; <sup>7</sup>Drexel University College of Medicine, Philadelphia, PA, USA; <sup>8</sup>Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia*  
**LONG-TERM EFFECTS OF MYO-INOSITOL ON TRAUMATIC BRAIN INJURY: EPIGENOMIC AND TRANSCRIPTOMIC STUDIES**
- 13.15 - 13.40 Jugal Kishore  
*Georgian National University SEU*  
**ADVANCES IN 3D BIOPRINTING FOR MODELING NEURAL TISSUE: APPLICATIONS IN NEURODEGENERATIVE DISEASES AND BRAIN INJURY**
- 13.40 - 14.05 Natalia Kiknadze<sup>1,2\*</sup>, Elene Zhuravliova<sup>1,2</sup>, David Mikeladze<sup>1,2</sup>  
*<sup>1</sup>Institute of Chemical Biology, Ilia State University; <sup>2</sup>Department of Biochemistry, Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia*  
**PHTHALATE'S NEUROTOXIC POTENTIAL DURING THE PRENATAL PERIOD AND IMPACT ON PTEN/Akt/mTOR PATHWAY**
- 14.10 - 15.00 LUNCH
- 15.00 - 15.45 **POSTER SESSION** Chairs: Giorgi Lobzhanidze, Nino Sikharulidze  
Lia Tsverava<sup>1,2</sup>, Luka Kharkhelauri<sup>1</sup>, Vincenzo Lagani<sup>1,3</sup>, Giorgi Gamkrelidze<sup>1</sup>, Veriko Bokuchava<sup>1\*</sup>, Tamar Kiguradze<sup>2</sup>, Merab Kokaia<sup>4</sup>, Revaz Solomonias<sup>1,2</sup>  
*<sup>1</sup>Institute of Chemical Biology, Ilia State University, Tbilisi, Georgia; <sup>2</sup>Laboratory of Biochemical Neuropharmacology, Ivane Beritashvili Centre of Experimental Biomedicine, Tbilisi, Georgia; <sup>3</sup>Biological and Environmental Sciences and Engineering Division, King Abdullah University of Science and Technology, Thuwal, Saudi Arabia; <sup>4</sup>Epilepsy Centre, Department of Clinical Sciences, Lund University Hospital, Lund, Sweden*  
**PREVENTING EPILEPTOGENESIS BY INTERACTION BETWEEN INOSITOL ISOMERS AND PROTEINS**
- Teimuraz Bokuchava<sup>1\*</sup>, Lela Chitadze<sup>1</sup>, Vincenzo Lagani<sup>1,3</sup>, Brian J. McCabe<sup>4</sup>, Revaz Solomonias<sup>1,2</sup>  
*<sup>1</sup>Institute of Chemical Biology, School of Natural Sciences and Medicine, Ilia State University, Tbilisi, Georgia; <sup>2</sup>Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; <sup>3</sup>Biological and Environmental Sciences and Engineering Division, King Abdullah University of Science and Technology, Thuwal, Saudi Arabia; <sup>4</sup>Department of Zoology, University of Cambridge, Cambridge, United Kingdom*  
**RESEARCH OF SINGLE CELL NUCLEI TRANSCRIPTOME IN MEMORY OF VISUAL IMPRINTING IN CHICKS - STUDING QUANTITATIVE CHANGES OF LONG NON-CODING RNA "ENSGAL000100007489" IDENTIFIED IN GLUTAMATERGIC NEURONS**

Sophio Kalmakhelidze<sup>1,3\*</sup>, Diana Museridze<sup>1</sup>, Lali Gegenava<sup>1</sup>, Nino Gvinadze<sup>1</sup>, Mikheil Gogebashvili<sup>2</sup>, Nazi Ivanishvili<sup>2</sup>

<sup>1</sup>Laboratory of Neurotoxicology, Ivane Beritashvili Center of Experimental Biomedicine

<sup>2</sup>Laboratory of Radiation Safety Problems, Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; <sup>3</sup>Department of Physics, Biophysics, Biomechanics and Informational Technologies, Tbilisi State Medical University, Tbilisi, Georgia

**NEUROBEHAVIOURAL EFFECTS OF ACUTE HIGH-DOSE WHOLE-BODY IRRADIATION**

Mariam Mamagulashvili\*, Nikoloz Oniani, Tinatini Charekishvili

School of Natural Sciences and Medicine, Ilia State University, Tbilisi, Georgia

**A PRECISE STUDY OF SPATIAL MEMORY CONSOLIDATION USING THE BARNES MAZE IN RATS**

Temuri Mantashashvili\*, Luka Nakaidze, Giorgi Ananiashvili, Marika Mdivnishvili

Tbilisi State University, Tbilisi, Georgia

**EFFECTS OF L-ARGININE ON THE ANTIOXIDANT SYSTEM OF DEPRESSED ANIMALS**

Mahsa Farid Habibi\*, Mojgan Hamdami<sup>1</sup>, Amir Saied Seddighi<sup>2,3</sup>, Afsoun Seddighi<sup>2,3</sup>, Tohid Emami Meybodi<sup>2,3</sup>

<sup>1</sup>Neuroscience Research Center, Shahid Beheshti University of Medical Science; <sup>2</sup>Functional Neurosurgery Research Center, Tehran, Iran; <sup>3</sup>Shohada Tajrish Comprehensive Neurosurgical Center of Excellence, Shahid Beheshti University of Medical Sciences, Tehran, Iran

**NEUROPLASTICITY IN GLIOMA PATIENTS: INSIGHTS FROM QUANTITATIVE EEG ANALYSIS PRE- AND POST-SURGERY**

Romina Baghinejad\*, Maryam Fallahi, Narges Hosseinmardi, Mahyar Janahmadi<sup>1</sup>, Hossein Azizi<sup>2</sup>

<sup>1</sup>Department of Physiology, Shahid Beheshti University of Medical Sciences, Teheran, Iran;

<sup>2</sup>Department of Physiology, Faculty of Medical Science, Tarbiat Modares University, Tehran, Iran

**THE EFFECT OF SOCIAL HIERARCHY ON ANXIETY-LIKE BEHAVIORS IN MALE RATS**

Mojgan Hamdami\*, Roozbeh.M<sup>2</sup>, Khanmirzaie.A<sup>3</sup>, Esmaili Zandi.Sh<sup>4</sup>

<sup>1</sup>Neuroscience Research Center, Shahid Beheshti University of Medical Science, Tehran, Iran; <sup>2</sup>Brain Mapping Research Center, Loghman Hospital, Shahid Beheshti University of Medical Science, Tehran, Iran; <sup>3</sup>Faculty of medicine, Shahrood University of Medical Science, Shahrood, Iran; <sup>4</sup>Institute for Cognitive Science, Tehran, Iran

**NEUROPLASTICITY IN ACTION: A CASE STUDY ON TRANSCRANIAL DIRECT CURRENT STIMULATION (tDCS) AS A THERAPEUTIC INTERVENTION FOR FIBROMYALGIA. REVIEW**

Irina Sharikadze\*, Nadezhda Japaridze<sup>2,3</sup>, Fuad Rzayev<sup>4</sup>, Eldar Gasimov<sup>4</sup>, Mzia Zhvania<sup>1,2</sup>

<sup>1</sup>Ilia State University, Faculty of Natural Science and Medicine, Tbilisi, Georgia;

<sup>2</sup>Department of Brain Ultrastructure and Nanoarchitecture, Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; <sup>3</sup>New Vision University, Tbilisi, Georgia; <sup>4</sup>Baku Medical University, Baku, Azerbaijan

**THE KAINIC ACID INDUCED STATUS EPILEPTICUS. COMPARATIVE STUDY OF THE HIPPOCAMPUS IN WISTAR RATS**

Irine Ioramashvili<sup>1,2\*</sup>, Rusudan Sujashvili<sup>1,3</sup>

<sup>1</sup>Laboratory of Biophysics, Ivane Beritashvili Center of Experimental Biomedicine;

<sup>2</sup>Ilia State University, <sup>3</sup>University of Georgia

**UBIQUITINATION PAVES A PATH BETWEEN AGE RELATED DISEASES**

**SESSION VII.** Chairs: Anastasia Avalishvili, Guillermo Montaña-Valverde

15.45 - 16.10 ONLINE PRESENTATION WITH ZOOM

Mohan Jayaram<sup>1,2\*</sup>, Katyayani Singh<sup>1,2</sup>, Arpana Hanumantharaju<sup>1,2</sup>, Kaie Mikheim<sup>1,2</sup>, Toomas Jagomäe<sup>1,3</sup>, Srirathi Muthuraman<sup>1,2</sup>, Tambet Tõnissoo<sup>4</sup>, Jürgen Innos<sup>1,2</sup>, Estonia Kersti Lilleväli<sup>5</sup>, Mari-Anne Philips<sup>1,2</sup>, Eero Vasar<sup>1,2</sup>

<sup>1</sup>Department of Physiology, Institute of Biomedicine and Translational Medicine, University of Tartu, Estonia; <sup>2</sup>Centre of Excellence in Genomics and Translational Medicine, University of Tartu, Estonia; <sup>3</sup>Laboratory Animal Centre, University of Tartu, Estonia; <sup>4</sup>Institute of Molecular and Cell Biology, University of Tartu, Estonia

**ROLE OF Negr1 IN THE PATHOGENESIS OF NEUROPSYCHIATRIC DISORDERS**

16.10 - 16.35 Mohadeseh Giahi\*, Narges Hosseinmardi, Mahyar Janahmadi

Department of Physiology, Medical School, Shahid Beheshti University of Medical Sciences, Tehran, Iran

**GLT-1 ACTIVATION REDUCES PTZ-INDUCED BEHAVIOURAL SEIZURES**

16.35 - 17.00 Ammar Alirani\*, Giorgi Chilingarashvili<sup>2</sup>

<sup>1</sup>Ilia State University, Tbilisi, Georgia; <sup>2</sup>Nazareth Hospital, Philadelphia, PA, USA

**UNMASKING THE UNCOMMON: A CASE PRESENTATION OF GRAVES' THYROTOXICOSIS COMPLICATED BY THYROTOXIC HYPOKALEMIC PARALYSIS IN AN AFRICAN AMERICAN MALE**

17.00 - 17.20 BREAK

**SESSION VIII.** Chairs: Marika Chikviladze, Elham Yaghoubi Asl

17.20 - 17.45 ONLINE PRESENTATION WITH ZOOM

Yamini Almal<sup>1\*</sup>, Charlotte Malcolm<sup>2</sup>

<sup>1</sup>UCL GOS Institute of Child Health, <sup>2</sup>Great Ormond Street Hospital NHS Trust, United Kingdom

**FIVE-FACTOR INTELLIGENCE AND VISUAL-MOTOR FUNCTIONING IN PEDIATRIC POSTERIOR FOSSA TUMOUR SURVIVORS**

17.45 - 18.10 Mariam Mikadze\*, Lia Gelazonia, Marina Sardlishvili, Tamar Bikashvili

Laboratory of Neurotoxicology, Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia

**ROLE OF QUERCETIN IN MANGANESE-INDUCED TOXICITY**



**SESSION IX.** Chairs: Rusudan Botsvadze, Mojtaba Madadi Asl

10.00 - 10.25 Marika Chikviladze<sup>1\*</sup>, Nino Mamulashvili<sup>1</sup>, Maia Sepashvili<sup>1,2</sup>, Nana Narmania<sup>1,2</sup>, Jeremy Ramsden<sup>3</sup>, Lali Shanshiashvili<sup>1,2</sup>, David Mikeladze<sup>1,2</sup>

<sup>1</sup>Institute of Chemical Biology, Ilia State University, Tbilisi, Georgia; <sup>2</sup>Department of Biochemistry, I. Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; <sup>3</sup>Department of Biomedical Research, The University of Buckingham, Hunter Street, Buckingham, United Kingdom

**INFLAMMATORY RESPONSES IN ASTROCYTES CAN BE TRIGGERED BY CITRULLINATED MYELIN BASIC PROTEIN**

10.25 - 10.50 Shima Davoudi<sup>1\*</sup>, Mahyar Janahmadi<sup>2</sup>

<sup>1</sup>Neurophysiology Research Center, School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran; <sup>2</sup>Neuroscience Research Center and Department of Physiology, School of Medicine, Shahid Beheshti University of Medical Sciences Tehran, Iran

**THE CONTRIBUTION OF ASTROCYTIC Kir4.1 CHANNELS TO NEURONAL EXCITABILITY IN PRENATAL VALPROIC ACID-EXPOSUED MODEL OF AUTISM**

10.50 - 11.15 Barbare Nozadze<sup>1\*</sup>, Gela Beselia G<sup>1,2</sup>, Maia Burjanadze<sup>1</sup>, Nino Chkhikvishvili<sup>1</sup>, Mariam Chighladze<sup>1</sup>, Manana Dashniani<sup>1</sup>

<sup>1</sup>Laboratory of Behavior and Cognitive Functions, Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia; <sup>2</sup>Petre Shotadze Tbilisi Medical Academy, Tbilisi, Georgia

**NEUROTRANSMITTER ACTIVITY IN THE SEPTO-HIPPOCAMPAL NETWORK AND MEMORY FUNCTION IN A RAT MODEL OF AGING**

11.15 - 11.40 Elham Yaghoubi Asl<sup>1\*</sup>, Elham Paraandavaji<sup>2,3</sup>, Tohid Emami Meybodi<sup>4</sup>

<sup>1</sup>Cognitive Neuroscience Institute for Cognitive Science Studies Tehran, Iran; <sup>2</sup>Skull Base Research Center, Loghman Hakim Hospital, Shahid Beheshti University of Medical Sciences, Tehran, Iran; <sup>3</sup>Baharloo Hospital, Tehran University of Medical Sciences, Tehran, Iran; <sup>4</sup>Neurosurgery department, Shohada Tajrish Hospital, Shahid Beheshti University of Medical Sciences, Tehran, Iran

**THE IMPORTANCE OF APPLICATION OF COGNITIVE TASKS TO DIFFERENTIATE APHASIA FROM DYSARTHRIA DURING AWAKE CRANIOTOMY: A CASE REPORT**

11.40 - 12.00 BREAK

**SESSION X.** Chairs: Sophio Kalmakhelidze, Mohadeseh Giahi

12.00 - 12.25 ONLINE PRESENTATION WITH ZOOM

Mojtaba Madadi Asl<sup>1,2\*</sup>, Alireza Valizadeh<sup>2,3</sup>

<sup>1</sup>School of Biological Sciences, Institute for Research in Fundamental Sciences (IPM), Tehran, Iran; <sup>2</sup>Pasargad Institute for Advanced Innovative Solutions (PIAIS), Tehran, Iran; <sup>3</sup>Department of Physics, Institute for Advanced Studies in Basic Sciences (IASBS), Zanjan, Iran

**SINGLE-NEURON DYNAMICS SHAPE ENTRAINMENT EFFECTS OF TRANS-CRANIAL ALTERNATING CURRENT STIMULATION**

12.25 - 12.50 Giorgi Kipiani<sup>1\*</sup>, Mzia Zhvania<sup>1,2</sup>

<sup>1</sup>Faculty of Natural Science and Medicine, Ilia State University, Tbilisi, Georgia; <sup>2</sup>Laboratory of Brain Ultrastructure and Nanoarchitecture, Ivane Beritashvili Center of Experimental Biomedicine, Tbilisi, Georgia

**A RODENT PROPIONIC ACID MODEL OF AUTISM: BEHAVIORAL, MORPHOLOGICAL, IMMUNE AND HORMONAL CHANGES - GENDER DIFFERENCES. REVIEW**

12.50 - 13.15 Maryam Fallahi<sup>1\*</sup>, Romina Baghinejad, Narges Hosseinmardi, Mahyar Janahmadi, Ali Jaafari Suha, Fereshteh Poorabdolhossein<sup>2</sup>

<sup>1</sup>Department of Physiology, Shahid Beheshti University of Medical Sciences, Tehran, Iran, <sup>2</sup>Department of Physiology, Babol University of Medical Sciences, Babol, Iran

**ELECTROPHYSIOLOGICAL AND BEHAVIORAL INVESTIGATION OF MICROGLIAL INTERVENTION IN SOCIAL HIERARCHY FORMATION, STRESS AND SYNAPTIC PLASTICITY OF THE HIPPOCAMPUS IN MALE RATS**

13:15 **CLOSING CEREMONY**



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