POSTERS

P1: POSTER SESSION I. Wednesday, 3.09.2025
P2: POSTER SESSION II. Thursday, 4.09.2025
P3: POSTER SESSION III. Friday, 5.09.2025

P1.01 DEEP BODY PEPTIDERGIC AFFERENTS LACK ADVILLIN EXPRESSION: IMPLICATIONS FOR SENSORY NEURON PROFILING

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P1.02 PIEZO2-DEPENDENT RAPID PAIN SYSTEM IN HUMANS AND MICE

Brodzki M.[1], Bouchatta O.[1], Manouze H.[1], Carballo G.B.[1], Yu H.[2], Kindström E.[1], de- Faria F.M.[1], Thorell O.[1,3], Liljencrantz J.[4,5], Karlsson C.[1], Maidana Capitán M.B.[1], W. Ng K.K.[1], Terejko K.[1,6], Larsson M.[1], Luo W.[2], Marshall A.G.[1,7], Chesler A.T.[4,8], Olausson H.[1], Nagi S.S.[1,3], Szczot M.[1]

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P1.03 BEHAVIOURAL, ELECTROPHYSIOLOGICAL AND HISTOLOGICAL CHANGES IN A NEW MODEL OF ANOSMIA

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P1.04 CHANGES IN SYNAPTIC TRANSMISSION FROM MUSCLE SPINDLES TO MOTONEURONS IN RESPONSE TO ENDURANCE TRAINING

P1.05 CHANGES IN SYNAPTIC TRANSMISSION FROM MUSCLE SPINDLES TO MOTONEURONS IN RESPONSE TO WEIGHT-LIFTING TRAINING

Krauze M.[1], Bączyk M.[1], Drzymała-Celichowska H.[2], Krutki P.[1]

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P1.06 THE IMPACT OF ANODAL AND CATHODAL TSDCS ON PASSIVE MEMBRANE AND FIRING PROPERTIES OF SPINAL MOTONEURONS IN SOD1 G93A MICE

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P1.07 THE EFFECTS OF ELECTRODE CONFIGURATION ON MNS' RESPONSE TO TSDCS.

Wasicki B., Zawistowski P., Bączyk M.

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P1.08 CONCOMITANT EFFECTS OF FATIGUE AND POTENTIATION IN RAT MEDIAL GASTROCNEMIUS FAST MOTOR UNITS

Angelidis A.[1], Drzymała-Celichowska H.[2,3], Kryściak K.[2], Vandenboom R.[1], Celichowski J.[2]

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P1.09 THE ROLE OF CAP2 IN THE NEUROMUSCULAR SYSTEM

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P1.10 SH3BP2- A NEW REGULATOR OF NEUROMUSCULAR SYNAPSES

Pradhan B.S.[1,2], Bernadzki K.[2], Bandaruk Y.[1], Siudzińska A.[1], Cicco T.D.[1], Sotomska M.[1], Gawor M.[2], Krzemień J.[2], Chodaczek G.[1], Hashemolhosseini S.[3,1], Prószyński T.J.[1,2]

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Gorkowska-Nosal M.[1,2], Drwięga G.[1], Szumiec Ł.[3], Parkita J.R.[3], Cieślak P.E.[1]

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P1.12 EFFECTS OF LATERALIZED VISUAL STIMULATION ON MIDBRAIN DOPAMINERGIC NEURON ACTIVITY AND STRIATAL DOPAMINE RELEASE DYNAMICS

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P1.13 TIME NECESSARY TO RESTITUTE EXTRA INITIAL FORCE IN FAST MOTOR UNITS IN RAT MEDIAL GASTROCNEMIUS MUSCLE

Kryściak K.[1], Drzymała-Celichowska H.[1,2], Majerczak J.[3], Celichowski J.[1], Zoladz J.A.[3]

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P1.14 TREADMILL TRAINING VERSUS VOLUNTARY WHEEL RUNNING: EFFECTS IN CONTRACTILE PROPERTIES OF THE THREE TYPES OF MOTOR UNITS IN RAT MEDIAL GASTROCNEMIUS MUSCLE

Podgórski K.[1], Kryściak K.[1], Drzymała-Celichowska H.[1], Śliwowska J.[2], Celichowski J.[1]

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P1.15 POST-STROKE SOMATOSENSORY DEFICITS ARE REFLECTED IN ALTERED ACTIVITY OF SPINAL WDR NEURONS

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P1.16 PROTEOMIC ALTERATIONS AFTER SPINALIZATION: PERSPECTIVES FROM MOTONEURONS, DORSAL ROOT GANGLIA, AND EPENDYMA

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P1.17 IDENTIFICATION OF A NOVEL GENETIC MOUSE MODEL OF BIPOLAR DISORDER REVEALING SEX DIFFERENCES

Kischel A.[1], Krzemień J.[2], Sadlak-Buda J.[1], Duda P.[1], Garmash I.[1], Joshi I.[1], Rojek K.[2], Kaczor P.[1], Jakubas M.[1], Myrcha M.[1], Boguszewski P.[2], Holmgren L.[3], Prószyński T.J.[1]

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P1.18 MITOCHONDRIAL CALCIUM UNIPORTER PROTECTS HIPPOCAMPAL CA2 NEURONS FROM EXCITOTOXIC INJURY

Skweres A., Beręsewicz-Haller M., Basheer O., Nalepa M., Owczarek A., Kawalec M., Gruszczynska-Biegala J., Zabłocka B., Węgrzynowicz M.

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P1.19 LOST ENZYME, LOST INTEGRITY: ARGINASE 2 DELETION DISRUPTS MITOCHONDRIA IN STRIATAL NEURONS

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P1.20 SEX-SPECIFIC ALTERATIONS IN MITOCHONDRIAL DYNAMICS AND AMPK SIGNALLING IN A TRAP1 MUTANT MICE- A NOVEL MODEL OF ASD.

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P1.21 ALTERED MITOCHONDRIAL METABOLISM IN THE BRAINS OF TRAP1 MUTANT MICE, A MODEL FOR AUTISM SPECTRUM DISORDER (ASD)

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P1.22 ELECTROPHYSIOLOGICAL AND ANATOMICAL CHARACTERISTICS OF VENTRAL DENTATE GYRUS INTERNEURONS IN A RAT MODEL OF AUTISM SPECTRUM DISORDER

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P1.23 CHANGES IN BRAIN BIOELECTRICAL ACTIVITY FOLLOWING TRANSCRANIAL DIRECT CURRENT STIMULATION IN INDIVIDUALS WITH ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD) AND AUTISM SPECTRUM DISORDER (ASD).

Skuła M.[1,2], Budzisz J.[3], Fila-Pawłowska K.[4], Ślęzak M.[2], Kajdanowicz T.[1], Rymaszewska J.[4]
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P1.24 SPNAR9810Q MICE: DEEP BEHAVIORAL AND MOLECULAR PHENOTYPING OF SPONTANEOUS SPECTRINOPATHY MODEL

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P1.25 MOLECULAR CHALLENGES IN HEREDITARY SPINOCEREBELLAR DEGENERATIONS

Méreaux J., Coarelli G., Davoine C., Guillot-Noel L., Heinzmann A., Ewenczyk C., Brice A., Durr A.

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P1.26 INTER-STRAIN CHIMERAS REVEAL NEURODEVELOPMENTAL MECHANISMS OF CORPUS CALLOSUM AGENESIS IN A MOUSE MODEL

Sampino S.[1], Ziętek M.[1], Winiarczyk D.[1], Viscomi M.P.[1], Żbikowska D.[1], Czyrska J.[1], Cybulska M.[1], Wenta-Muchalska E.[1], Bernat A.[2]

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P1.27 BEYOND CEREBRUM AND NEUROSURGERY: A SYSTEMATIC REVIEW ON CHIARI MALFORMATION TYPE I INTEGRATING MOLECULAR AND BEHAVIORAL METHODOLOGIES

Oezdil I.[1,2], Aprile D.[3], Beste C.[1,4,5]

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P1.28 TARGETING NEUROINFLAMMATION IN THE BRAIN: EFFECTS OF THE PUTATIVE CANNABINOID RECEPTOR GPR55 LIGANDS CBD, O-1602, AND ML-193 IN MIXED GLIAL CELL CULTURES

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P1.29 B-HYDROXYBUTYRATE ALTERS NEUROINFLAMMATORY RESPONSE AND CELL MIGRATION ABILITIES AFTER THE SCRATCH INJURY IN VITRO

Rauk Z.[1,2], Maciak P.[1,3], Tylko G.[4], Romek M.[4], Setkowicz Z.[2], Duda M.[3]

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P1.30 OXIDATIVE STRESS IN PRIMARY MICROGLIAL CELLS DUE TO EXPOSURE TO PLASTIC NANOPARTICLES

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P1.31 THERAPEUTIC POTENTIAL OF PAPE-1 AGAINST HYPOXIC/ISCHEMIC BRAIN INJURY: A DUAL NEURON - GLIA TARGETED APPROACH

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P1.32 SORCS2 SHIELDS ASTROCYTES FROM AMYLOID BETA (AB) STRESS BY REGULATING P75 NTR SIGNALING

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P1.33 SORCS2 SHAPES THE SECRETOME OF ASTROCYTES ACTIVATED AFTER ISCHEMIC STROKE.

Tempes A.[1], Bakun M.[2], Czerny K.[1], Piątek S.[1,3], Koschützke L.T.[3], Daugardt A.[3], Jariwala V.[4], Joseph K.[4], Harms C.[3], Malik A.R.[1]

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P1.34 ALTERATIONS OF IMMUNE CHECKPOINT PROTEINS IN ANIMAL MODELS OF DEPRESSION-LIKE BEHAVIOR

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P1.35 INFLUENCE OF PSYCHOSOCIAL OVERCROWDING STRESS ON THE EXPRESSION OF INFLAMMATORY FACTORS IN THE RAT COLON

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P1.36 MODULATION OF NMDA RECEPTOR SUBUNIT EXPRESSION BY (R,S)-SULFORAPHANE IN THE OLFACTORY BULBECTOMY MODEL IN MICE

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P1.37 EFFECTS OF CHRONIC MILD STRESS AND ESCITALOPRAM ON GLUCAGON-LIKE PEPTIDE-1 AND FUNCTIONALLY RELATED PROTEINS IN THE FRONTAL CORTEX OF RATS.

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P1.38 DISTINCT MICRORNA SIGNATURES OF CHILDHOOD TRAUMA IN HUMAN SERUM AND SPERM: IMPLICATIONS FOR POTENTIAL INTERGENERATIONAL TRANSMISSION

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P1.39 FROM DIET TO DEMENTIA: THE WESTERN DIET'S INFLUENCE ON ALZHEIMER'S VIA THE LIVER-BRAIN AXIS AND SYSTEMIC MARKERS.

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P1.40 BRAIN ENERGY IMBALANCE AND INFLAMMATORY RESPONSE IN BBB DYSFUNCTION IN APOE-/-/LDLR-/- MICE DURING HYPERCHOLESTEROLEMIA

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P1.41 COMPENSATORY NEUROGENESIS AND NEUROPEPTIDE NETWORK IN THE PREVENTION OF HYPERPHAGIA IN A DICER-DEFICIENT MOUSE MODEL OF HYPOTHALAMIC OBESITY

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P1.42 SEX-DEPENDENT NEURONAL ACTIVATION AND BEHAVIOURAL DYSFUNCTION CAUSED BY NTG-INDUCED MIGRAINE IS REVERSED BY NOP RECEPTOR AGONIST

Mudgal A.[1,2], Pietrzak-Mitura D.[1], Wronikowska-Denysiuk O.[1], Toll L.[2], Ozawa A.[2], Targowska-Duda K.[1,2]

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P1.43 THE EFFECT OF RETINAL DOPAMINE SIGNALING ON THE BEHAVIORAL RHYTHMS

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P1.45 HALLUCINATIONS AS A CONSEQUENCE OF PREDICTIVE CODING AND BAYESIAN INFERENCE DISRUPTIONS: A SYSTEMATIC REVIEW ACROSS PSYCHOSIS, PSYCHEDELICS, AND SENSORY DEPRIVATION WITH MACHINE LEARNING PERSPECTIVES

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P1.46 KETAMINE INDUCED REORGANIZATION OF BRAIN ACTIVITY: SPIKE ACTIVITY AND CHANGES IN GAMMA AND HIGH-FREQUENCY OSCILLATIONS

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P1.47 CALMODULIN CONTROLS SPATIAL AND TEMPORAL SPECIFICITY OF CALCIUM TRANSIENTS

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P1.48 CHARACTERIZATION OF THE CEREBRAL CORTEX IN THE NON-HUMAN PRIMATE BRAIN: A DEEP LEARNING MODEL INTERPRETABILITY APPROACH

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P1.49 CAUSALITY IN NEURONAL CIRCUITRY, FROM GRANGER TO LLMS

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P1.50 OMENTIN-1 IS REGULATED BY KISSPEPTIN AND ESTRADIOL AND MODULATES GNRH SIGNALING VIA PKC, ERK1/2, AND CAMP PATHWAYS IN MOUSE GT1-7 NEURONS

Respekta-Długosz N.[1,2], Wachowska D.[1,2], Froment P.[3], Dupont J.[3], Rak A.[1]

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P1.51 **THE EFFECTS OF SLEEP DEPRIVATION ON GUT CONDITION – DROSOPHILA MELANOGASTER MODEL.**

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P2.01 **A ROLE OF ASTROCYTIC IGFBP2 IN DENDRITIC SPINE STRUCTURAL PLASTICITY**

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P2.42 A NOVEL CROSS-SPECIES P-TAU217 IMMUNOASSAY FOR INVESTIGATING ANIMAL MODELS OF ALZHEIMER'S DISEASE

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P2.44 MODELING NEURONAL AGING IN HIPSC-DERIVED DOPAMINERGIC NEURONS: D-GALACTOSE-INDUCED EPIGENETIC DEREGULATION, MITOCHONDRIAL DYSFUNCTION, AND SENESCENCE-ASSOCIATED PHENOTYPES

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P2.47 TOPOGRAPHIC MAPPING OF VISUAL INPUT TO DOPAMINERGIC MIDBRAIN STRUCTURES IN THE RAT

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P2.48 A BIOORTHOGONAL PUTRESCINE PROBE TO TRACK POLYAMINE UPTAKE AND FLUX UNDER NEUROTOXIC STRESS

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P2.49 A RAPID IMMUNOFLUORESCENCE METHOD COMPATIBLE WITH FUNCTIONAL ASSAYS IN ACUTE AND ORGANOTYPIC SLICES

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P2.51 A LOW-COMPUTATIONAL PIPELINE FOR POST-DEEPLABCUT ANALYSIS OF OPEN FIELD TEST DATA USING CENTROID-BASED SPATIAL METRICS

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P2.53 SEARCHING FOR THE PARAMETERS OF NEURON-SPECIFIC EXPRESSION OF AAV VECTORS IN THE MOUSE HYPOTHALAMUS

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P3.02 ASSESSMENT OF MITOPHAGY IN HUMAN SUBPALLIAL ORGANOIDS ENRICHED WITH GABAERGIC NEURONS IN DRAVET SYNDROME

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P3.03 INTEGRATING COMPUTATIONAL AND EXPERIMENTAL APPROACHES TO REVEAL TAURINE'S NEUROPROTECTIVE ROLE IN RETINAL ISCHEMIA

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P3.04 ACTIVITY-DEPENDENT ANTIOXIDANT GENE THERAPY FOR EPILEPSY

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P3.05 MUSCLEBLIND-LIKE RNA BINDING PROTEIN TRAFFICKING DYNAMICS ARE REGULATED BY MOLECULAR INTERACTIONS WITH EARLY AND RECYCLING ENDOSOMES

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P3.06 MULTICENTRIC STUDY OF LONGITUDINAL CHANGES IN NEUROMELANIN MRI SIGNAL AS A PROGRESSION MARKER IN PARKINSON'S DISEASE

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P3.09 IRON-CALCIUM CROSSTALK AND FERROPTOSIS IN LRRK2-LINKED PARKINSON'S DISEASE. NEUROPROTECTIVE ROLE OF MCU INHIBITION

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P3.17 THE DOPAMINE IN GLUTAMATERGIC NEURONS AFFECTS SURVIVAL AND MOTOR ABILITIES OF DOROSPHILA MELANOGASTER.

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P3.18 THE EFFECT OF PARACETAMOL ON THE PROGRESSION OF PARKINSON'S DISEASE IN THE DROSOPHILA MELANOGASTER MODEL

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P3.21 MUTATIONS AFFECTING KV2.1 SUBUNITS DISRUPT INHIBITORY NEUROTRANSMISSION

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P3.22 ROLE OF CERT1 IN CONTROL OF MICROGLIA BIOLOGY IN MICE – RELEVANCE FOR COGNITIVE FUNCTIONS

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P3.24 THE PROGRESSION OF ALS IN THE SKELETAL MUSCLES AFTER SWIM TRAINING IN FEMALE AND MALE MICE

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P3.27 A NEW MOLECULAR MECHANISM OF NEUROPLASTICITY

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P3.28 PLASTICITY OF LAYER 1 INTERNEURONS OF THE MOUSE VISUAL CORTEX

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P3.29 NUCLEUS INCERTUS CONNECTIVITY WITH MIDBRAIN CENTRES - IMPLICATIONS FOR STRESS AND REWARD PROCESSING

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P3.30 RELAXIN-3 AND OXYTOCIN SIGNALING IN THE VENTRAL DENTATE GYRUS: DIVERGENT NEUROMODULATORY ROLES IN STRESS- AND ANXIETY-RELATED CIRCUITS

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P3.33 ELECTROPHYSIOLOGICAL AND BEHAVIORAL INSIGHTS INTO THE IPN-VHPC CIRCUIT UNDERLYING SOCIAL STRESS RESPONSES

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P3.35 ANGIOMOTIN-LIKE 1 – A NEW PLAYER IN THE BRAIN PHYSIOLOGY

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P3.36 DIFFERENCES IN TONIC CURRENT DENSITY DUE TO PLASTICITY INDUCTION IN SST+ CELL SUBTYPES

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P3.37 NONASSOCIATIVE ILTD AT INTERNEURON–INTERNEURON SYNAPSES IN THE HIPPOCAMPUS

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P3.38 BIDIRECTIONAL MODULATION OF GABAERGIC SYNAPTIC TRANSMISSION AND PLASTICITY IN VIP INTERNEURONS BY D2-FAMILY DOPAMINE RECEPTORS

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P3.39 ADRENERGIC MODULATION OF INTRINSIC CORTICAL EXCITABILITY IN PREFRONTAL PYRAMIDAL NEURONS

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P3.40 ONCOMETABOLITE D-2HG ALTERS M6A RNA MODIFICATIONS IN IDH MUTANT GLIOMAS TO PROMOTE NEUROGLIOMAL SYNAPTIC SIGNALING

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P3.41 KAINATE-MEDIATED SIGNALLING IN THE OLFACTORY BULB IS INVOLVED IN THE GENERATION OF KETAMINE-ENHANCED HIGH-FREQUENCY OSCILLATIONS (130-180 HZ) IN FREELY MOVING RATS

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P3.42 BRAIN TSUNAMIS – MODELING MIGRAINE-LINKED SPREADING DEPOLARIZATION AND THE EFFECT OF VALPROATE

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P3.43 ELECTROPHYSIOLOGICAL PROFILING OF SYNAPTIC DYSFUNCTION IN TOXIN-INDUCED AND GENETIC ZEBRAFISH MODELS OF PARKINSON'S DISEASE

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P3.46 PROMOTING REMYELINATION IN THE CNS BY TARGETING NEUROINFLAMMATION

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P3.47 PSYCHEDELICS-MEDIATED NEUROIMMUNE SIGNALLING THROUGH 5-HT$_2$A AND SIGMA-1 RECEPTORS

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P3.48 FUNCTIONAL CONSEQUENCES OF INCREASED EBI2 SIGNALING IN GLIAL CELL BIOLOGY AND MYELINATION.

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P3.49 THE SILENT NOCICEPTORS AS REGULATORS OF IMMUNE CELLS ACTIVITY

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P3.50 GPR84 MODULATES INFLAMMATORY SIGNALING IN NEUTROPHILS AND MICROGLIA: A DUAL-CELLULAR APPROACH TO CHRONIC PAIN MECHANISMS

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P3.52 IN VIVO INVESTIGATION OF THE SEX-DEPENDENT ANALGESIC EFFECTS OF HISTAMINE H4 RECEPTOR ANTAGONIST IN A MURINE MODEL OF NEUROPATHIC PAIN

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P3.53 SEX-DEPENDENT DIFFERENCES IN NEUROPATHIC PAIN: INSIGHTS FROM FUNCTIONAL METABOLIC PHENOTYPING AND IMMUNOLOGICAL ALTERATIONS

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