	9.00–17.30	
D4	**Opening Ceremony** ▪ **Welcome by the Neur-IN Director** – Brázdil M. (10 min.) ▪ **Opening Speech by the Rector of Masaryk University** – Bareš M. (10 min.) ▪ **Neur-IN and Neurodegenerative Disorders** – Jech R. (10 min.)	**9.00–9.30**
D4	**Revolutionizing Neurology** ▪ **Artificial Intelligence on the Rise** – Volný O. (45 min.) ▪ **AI – Latest Developments in AI Factories, AI Gigafactories, the National AI Strategy, and the Czech Ministry of Health's AI Strategy** – Peter L. (15 min.)	**9.30–10.30**
	Coffee Break	**10.30–11.00**
D4	**Selected Key Topics from Pillar I** **Chair: doc. MUDr. Petr Dušek, Ph.D.** ▪ **NeuroSHARE – Population Screening of Prodromal Neurodegeneration** – Illner V. (30 min.) ▪ **Detection of Pathological Alpha-synuclein Seeding Activity in Tissues** – Holada K. (30 min.) ▪ **Chromatin Remodelling Disorders: Heterozygous De Novo EHMT2 Variants as a Novel Cause of Kleefstra Syndrome** – Sikora J. (30 min.)	**11.00–12.30**
	Lunch Break and Poster Session	**12.30–14.00**
D4	**Selected Key Topics from Pillar II** **Chair: prof. MUDr. Irena Rektorová, Ph.D.** ▪ **Structure-Based Design of Novel Alzheimer's Disease Treatments** – Mičan J. (30 min.) ▪ **Impaired Spatial Navigation in Alzheimer's Disease and Limbic Age-Related TDP-43 Encephalopathy (LATE)** – Laczó J. (30 min.) ▪ **Cortical Free-Water Imaging in Individuals at Risk of Lewy Body Disease: A Marker of Neuroinflammatory Compensation rather than Neuroaxonal Degeneration** – Mitterová K. (30 min.)	**14.00–15.30**
	Coffee Break	**15.30–16.00**
D4	**Selected Key Topics from Pillar III** **Chair: prof. MUDr. Přemysl Jiruška, Ph.D.** ▪ **Impact of Spreading Depolarisations on Epilepsy** – Jefferys J. G. R. (30 min.) ▪ **From Pathogenic Mechanisms to Causal Treatment of Developmental Epilepsies: Progress, New Data, and Future Therapeutic Directions** – Novák O. (30 min.) ▪ **Genetic Causes of Malformations of Cortical Development – Searching for a Needle in a Haystack** – Straka B. (30 min.)	**16.00–17.30**

NEURIN – POSTER SECTION

1. **Investigating Myelin Abnormalities in a Mouse Model of Focal Cortical Dysplasia Type II**
   Bogdanovič A.
2. **Non-Invasive Modulation of Language Networks in Patients with Parkinson's Disease: Resting State Functional Connectivity Analysis**
   Carbol D.
3. **Optimizing Machine Learning Models for Localization of Epileptogenic Tissue**
   Cimbálník J.
4. **Ocrelizumab Causes Transient Changes in the Composition of Intestinal Bacteria and Modulates the Immune Response Depending on the Response to Treatment**
   Coufal S.
5. **A New Mental Health Condition Revealed: The Depressive Emotional Despair Disorder (DEDD or E3D), Case Study of Three Couples**
   Elhaddadi M.
6. **Endo-Lysosomal Competition for Shared Membrane Remodelling Machinery as a Driver of Early Endosomal Pathology in Alzheimer's Disease**
   Dokoupil M.
7. **Plasma NfL, GFAP and pTau181 as Predictors of Phenotypic Progression in Subjects at Risk of Dementia with Lewy Bodies: A Longitudinal Cohort Study**
   Farkaš J.
8. **Intracranial EEG Activity During Discrimination of Emotional Facial Expressions**
   Hammer J.
9. **SeizureBox: An Open-Source Piezoelectric System for Non-Invasive Seizure Detection in Mice**
   Hosová L.

10. **Localizing Epileptogenic Tissue from Long-Term iEEG Using a Distance-Aware Transformer**
Hrtoňová V.
11. **Longitudinal in Vivo Two-Photon Imaging of Cortical Oligodendrocyte Differentiation Dynamics in a Mouse Model of Focal Cortical Dysplasia Type II**
Hrušková B.
12. **Quantification of Patient Motion in FDG-PET/CT Brain Imaging**
Janča R.
13. **Managing Epilepsy in Schools: National Implementation of IGAP-Aligned Systematic Support in the Czech Republic**
Janoušková K.
14. **Cognitive Impairment in Chronic Migraine and Chronic Tension-Type Headache: Changes After One Year of Treatment**
Kardyrkhodjayeva N.
15. **High-Frequency Oscillations Evolution in Focal Cortical Dysplasia Type II**
Karakullukcu N.
16. **Cerebral Organoid Co-Cultures Reveal Glioblastoma Plasticity and Patient-Specific Drug Responses**
Kocourková K., Slováčková J.
17. **Automated Detection of Epileptic Seizures in Murine EEG Using a Hierarchical System of Neural Networks**
Koza A.
18. **Two-Dimensional and Spheroid Models of Cells Resembling Cholinergic Neurons, for the Testing and Repurposing of Drugs Targeting Tauopathies**
Kozlov I.
19. **Cell Specific Regulation of Pathological Neuronal Activity in a Model of Focal Cortical Dysplasia**
Králíková M.
20. **Long-Term Dynamics of Epilepsy in a Mouse Model of Focal Cortical Dysplasia**
Kudláček J.
21. **Dysfunctional SORL1 Disrupts the Endo-Lysosomal Pathway and Extracellular Vesicle Biogenesis**
Machovec M.
22. **Network Hubs Supporting Verbal Memory Encoding: Implications for Cognitive Preservation in Epilepsy Surgery**
Matoušková B.
23. **DBSI Reveals Compartment-Specific Microstructural Signatures of Ischemic Lesion Evolution After Mechanical Thrombectomy**
Michal L.

24. **Cognitive Modulation of High-Frequency Oscillations in Human Epilepsy Networks**
Navrátil Z.

25. **AAV-Based Model of Focal Cortical mTORopathy with Seizures**
Olson C.

26. **Cell Type-Specific Network Dynamics During Seizure Initiation and Termination**
Populová J.

27. **Longitudinal Two-Photon Calcium Imaging Reveals Progressive Lesion Remodeling and VIP Interneuron Dysfunction in a Mouse Model of FCD II**
Řehořová M.

28. **Rostro-Caudal Locus Coeruleus Profiles in Individuals at Risk for Dementia with Lewy Bodies**
Sekaninová E.

29. **Connectivity-Based Analyses Reveal a Structured Temporal Evolution of Seizure Pathways in an Animal Model of Temporal Lobe Epilepsy**
Svobodová A.

30. **Physiological Responses During Hypercapnic Challenge**
Šmíd J.

31. **Long Term Trends in iEEG**
Trávníček V.

32. **Optimization of RT-QuIC Assay for the Evaluation of Synuclein Peptide Inhibitors Targeting α-Synuclein Seeding Activity**
Varečka A.

33. **Expanding Diagnostic Horizons: NGS Detection of Pathogenic Repeat Expansions in Patients with Neurodegeneration**
Vášová J.