Thursday, May 11th

- 8:45 Welcome (Jens Kreisel and Michael Heneka, Luxembourg)
- 9:00 Plenary Talk 1: Cerebrospinal fluid proteogenomic analyses: identification of novel proteins and therapeutic targets for AD & PD (Carlos Cruchaga, St. Louis)

Session 1 - Genetics

- 10:00 Evaluating the contribution of biological age in the risk of progressing to dementia (Alfredo Ramirez, Bonn)
- 10:30 Coffee Break
- 11:00 Cortical PU.1 ChIPseq profiles uncover a role for PU.1 in microglial polarization (Philip de Jager, New York)
- 11:30 Step by step: towards a better understanding of the Genetic architecture of AD (Jean-Charles Lambert, Lille)
- 12:00 Luxembourg National Research Fund presentation
- 12:15 Lunch and Poster Session
- **13:30 Plenary Talk 2:** Host microbiome interaction in health and disease (Eran Elinav, Rehovot) *virtual*

Session 2 - Microbiome

- 14:30 The microbiota-gut-brain axis as a modulator of cognitive function in brain disorders (Anthony Hannan, Melbourne)
- 15:00 Natural microbiota-shaped immune responses (Barbara Rehermann, Washington)
- 15:30 Coffee Break
- 16:00 2 Blitz Talks (F. Evans & J. Rueda-Carrasco)

Session 3 - Microglia

- 16:15 Microglial dysfunction and brain disease: mechanims awaiting exploration in comparment-specific neurovascular interactions (Adam Denez, Budapest)
- 16:45 Autophagy-phagocytosis crosstalk in microglia (Amanda Sierra, Bilbao)
- 17:15 Mitochondrial metabolism and microglial activity (Alberto Pascual, Sevilla)
- 17:45 Microglial gene regulatory networks (Nicole Coufal, San Diego)
- 18:15 Anti-inflammatory clearance of amyloid beta by a novel chimeric phagocytosis inducer (Hyuk Chan Kim, Daejeon)

Friday, May 12th

8:30 Plenary Talk 3: TBD (Renzo Mancuso, Antwerpen)

Session 4 - Cancer

- 9:30 Brain macrophages in inflammation and cancer (Kiavash Movahedi, Brussels)
- 10:00 The functional heterogeneity of glioma-associated brain immune cells (Bozena Kaminska, Warsaw)
- 10:30 Coffee Break
- 11:00 The early neurodegeneration and immune mechanisms in AD (Stefan Teipel, Rostock)
- 11:30 Plenary Talk 4: Control of neuron activity by microglia (Anne Schäfer, Cologne)
- 12:30 Lunch and Poster Session
- 13:45 2 Blitz Talks (A. Michelucci & A. Mohebiany)

Session 5 - Emerging Targets

- 14:00 Cerebrospinal fluid immunity in healthy brain aging and neurodegenerative disease (David Gate, Chicago)
- 14:30 T lymphocytes in aging and animal models of neurodegeneration (Alon Monsonego, Beer-Sheva)
- 15:00 2 Blitz Talks (O. Gokce & P. Martorell)
- 15:15 Coffee Break
- 15:45 Sensing DNA as a danger signal through the cGAS-STING pathway (Andrea Ablasser, Lausanne)
- 16:15 Plenary Talk 5: TREM2 risk polymorphisms in AD (Marco Colonna, St. Louis)

Session 6 - Inflammation

- 17:15 Galectin-3 in AD: a future target in AD? (Tomas Deierborg, Lund)
- 17:45 Inflammation and immune dysfunction in Parkinson's disease: targeting the gut-brain axis to reduce risk and progression (Malú Tansey, Gainesville)
- 18:15 2 Blitz Talks (C. Cangalaya & S. Brioschi)
- 18:30 Carousel Dinner and Poster Session

Saturday, May 13th

9:00 Plenary Talk 6: Modeling neurological disease for drug research (Richard Ransohoff, Boston) - *virtual*

Session 7 - Disease Modeling

- 10:00 Elucidating disease states of glia by CRISPR-based functional genomics (Martin Kampmann, San Francisco)
- 10:30 Coffee Break
- 11:00 Brain imaging across scales: studying neuronalmicroglial interactions during CNS development (Francesca Peri, Zurich)
- 11:30 Mechanisms and modulators of alpha-synuclein pathology (Donato Di Monte, Bonn)
- 12:00 2 Blitz Talks (S. Castro-Gomez & M. Zattoni)
- 12:15 Lunch
- 13:30 Plenary Talk 7: Role of APOE and the immune response in tau-mediated neurodegeneration (David Holtzman, St. Louis)

Session 8 - Clinical Aspects of Neuroinflammation

- 14:30 Surfing on waves: fluid biomarkers for neuroinflammation in AD (Charlotte Teunissen, Amsterdam)
- 15:00 Effect of Aging and Amyloid on Viral-Vector Induced Tauopathy (Marcia Gordon, East Lansing / Michigan)
- 15:30 Coffee Break
- 16:00 2 Blitz Talks (N. Afang & J. Jauregui-Lozano)
- 16:15 Genetic analysis of the human microglial transcriptome across disease pathologies (Towfique Rai, New York)
- 16:45 Immune dysregulation and astrogliosis as potential mechanisms of cognitive decline in late life (Brianne Bettcher, Denver)
- 17:15 Wrap up and closing (Michael Heneka, Luxembourg)



