### Oral Program

#### Sunday, September 17, 2017

11:00-13:00  **Registration | Tramuntana Foyer**

13:00-13:10  **Welcome and Introduction | Tramuntana 2 & 3**

13:10-17:00  **Session 1: Revisiting Glia | Tramuntana 2 & 3**

   - **Chair:** Marco Prinz, *University of Freiburg, Germany*

   - **Keynote:** Carla Shatz, *Stanford University, USA*
     - Surprise at the synapse: MHC class I and pruning in developmental critical periods and Alzheimer’s disease [K01]

14:00-14:30  **Beth Stevens, Children’s Hospital Boston, Harvard University, USA**

   - How microglia eliminate synapse in health and disease [INV01]

14:30-15:00  **Francisco Quintana, Brigham and Women’s Hospital, Harvard Medical School, USA**

   - Regulation of CNS inflammation and neurodegeneration by astrocytes [INV02]

15:00-15:30  **Refreshment Break | Tramuntana 1**

15:30-16:00  **Marc Freeman, Oregon Health & Science University, USA**

   - Glial engulfment functions in the developing and mature brain [INV03]

16:00-16:30  **Shane Liddelow, Stanford University, USA**

   - Neurotoxic reactive astrocytes in neuroinflammation and neurodegenerative disease [INV04]

16:30-16:45  **Yoh-suke Mukouyama*1, T. Yamazaki1, T.D. Arnold1, 1NIH/NHLBI, USA, 2UCSF, USA**

   - Unanticipated contribution of myeloid progenitors to brain pericyte development in the neurovascular unit [ST01]

16:45-17:00  **Diego Gomez-Nicola, University of Southampton, UK**

   - Microglial self-renewal and proliferation in the healthy and diseased brain [ST02]

17:00-18:00  **Welcome Drinks Reception | Tramuntana 1**

#### Monday, September 18, 2017

08:30-11:45  **Session 2: Neurodegeneration | Tramuntana 2 & 3**

   - **Chair:** Wolfgang Kastenmüller, *Institute of Experimental Immunology, University of Bonn, Germany*

08:30-09:00  **Marco Colonna, Washington University School of Medicine, USA**

   - TREM2 is a global regulator of microglia energetic and biosynthetic metabolism during steady state and in Alzheimer’s disease [INV05]

09:00-09:30  **Lawrence Steinman, Stanford University, USA**

   - Essential differences between neurodegeneration and neuroinflammation [INV06]

09:30-09:45  **W-P. Chong1,2, K. Raychaudhuri1, R. Horai3, P.B. Silver4, Y. Jittayasothorn5, C-C. Chan5, J. Chen5, Rachel Caspi1,2, 1National Institutes of Health, USA, 2ZOC, Sun Yat Sen University, China**

   - IL-17A controls expression of IL-17 lineage cytokines through a negative feedback loop involving IL-24, and limits autoimmune disease [ST03]

09:45-10:00  **Judith Hauptmann*3, T. Regen*1, K. Karram*1, F. Marini*1, M. Klein*1, H. Bindner*1, T. Bopp*1, A. Waisman*1, 1Institute for Molecular Medicine, University Medical Center of the Johannes Gutenberg University, Germany, 2Epidemiology and Informatics (IMBEI), Germany, 3University Medical Center of the Johannes Gutenberg University, Germany**

   - Blood brain barrier- IL-1signaling drives neuroinflammation [ST04]

10:00-10:30  **Refreshment Break | Sponsored by Takeda | Tramuntana 1**

10:30-11:00  **Li-Huei Tsai, Massachusetts Institute of Technology, USA**

   - Temporal mapping of microglia activation in neurodegeneration at single-cell resolution [INV07]

11:00-11:30  **Burkhard Becher, University of Zurich, Switzerland**

   - The T Cell-myeloid connection in CNS inflammation [INV08]

11:30-11:45  **Antoine Louveau1, J. Herz2, N.M. Alme3, K. Viar4, S. Da Mesquita5, I. Smirnov3, S. Hu3, C. Overall3, G. Oliver2, J. Kipnis1, 1University of Virginia, United States Minor Outlying Islands, 2Northwestern University, United States Minor Outlying Islands**

   - Structural and functional mechanisms underlying CNS drainage and immune surveillance by the
Tissue-specific neuroendocrine regulation of NKp46+ innate lymphoid cell (ILC) function is required for host antiviral defense [INV09]

Early wiring of the neocortex: microglia, inflammation, sex and germs [INV10]

Revisiting microglia [INV11]

Decreased adult neurogenesis underlies virus-induced memory dysfunction [INV14]

The olfactory bulb as an immunological barrier in intranasal virus infection [INV15]

Choline acetyltransferase in anti-viral T cells aids control of protracted infection [ST08]

Anti-NMDA receptor encephalitis and other antibody-mediated diseases of the synapse [INV16]

Sensory TRP channels as molecular sensors of bacterial endotoxins [ST09]

Tissue-specific neuroendocrine regulation of NKp46+ innate lymphoid cell (ILC) function is required for host antiviral defense [ST10]
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<td>14:15-17:20</td>
<td>Session 5: Gut-Brain Axis</td>
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<td>Chair: Beth Stevens, Children's Hospital Boston, Harvard University, USA</td>
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<td>14:15-14:45</td>
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<td>Dan Littman, Skirball Institute, New York University School of Medicine, USA</td>
<td>Lymphocyte interactions with neurons in the brain and gut [INV18]</td>
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<td>14:45-15:15</td>
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<td>Marco Prinz, University of Freiburg, Germany</td>
<td>Myeloid cells in the brain [INV19]</td>
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<td>15:30-16:00</td>
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<td>Refreshment Break</td>
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<td>16:00-16:30</td>
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<td>Sarkis Mazmanian, California Institute of Technology, USA</td>
<td>Gut microbiota contribute to motor symptoms and pathology in Parkinson’s disease [INV20]</td>
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<td>16:30-16:45</td>
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<td>Jun Huh, University of Massachusetts Medical School, USA</td>
<td>Maternal gut bacteria promote neurodevelopmental abnormalities in mouse offspring [ST12]</td>
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<td>16:45-17:35</td>
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<td>Keynote: Ruslan Medzhitov, Yale School of Medicine, USA</td>
<td>Shared strategies in the nervous and immune systems [K02]</td>
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<td>Closing Remarks</td>
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