

THE LANCET Summit

Inflammation and Immunity in Disorders of the Brain and Mind



Thursday, November 15, 2018

- 16:00-18:00 Registration
18:00-19:30 Welcome Reception

Friday November 16, 2018

- 07:30-08:45 Registration
08:45-09:00 Welcome and introduction
Josep Dalmau^{1,2}, ¹University of Pennsylvania, USA, ²University of Barcelona, Spain

09:00-10:30 Session 1 – Neuroinflammation and microglia

- 09:00-09:30 **Is neuroinflammation a promising therapeutic target for Alzheimer's disease?**
Michael Heneka^{1,2}, ¹University of Bonn, Germany, ²German Center for Neurodegenerative Disease, Germany
- 09:30-10:00 **From yolk sac to neurodegeneration: the multiple facets of microglia**
Marco Prinz, University of Freiburg, Germany
- 10:00-10:30 **Manipulating the microglia in chronic neurodegenerative disease**
V. Hugh Perry, University of Southampton, UK

10:30-11:00 Refreshment break

11:00-12:30 Session 2 – Inflammation and immunity in schizophrenia and other mental disorders

- 11:00-11:30 **Potential role of inflammation in Depression and Schizophrenia: cause and effective treatment**
Golam Khandaker, University of Cambridge, UK
- 11:30-12:00 **Interleukin 6 in treatment-resistant depression**
Wayne Drevets, Johnson & Johnson, Inc, USA
- 12:00-12:30 **Molecular and imaging biomarkers for first episode psychosis: novel cytokine and chemokine signaling pathways**
Akira Sawa, Johns Hopkins University and Hospital I, USA

12:30-13:30 Lunch

12:30-13:30 Poster Session

14:00-15:30 Session 3 – Systemic signals and the BBB, a wall with selective door

- 14:00-14:30 **The gut brain axis: how commensal bacteria may influence risk of neurological disease**
Sergio Baranzini, University of California San Francisco, USA
- 14:30-15:00 **The gut-brain axis: mind -altering microbiotica**
P. Bercik, McMaster University, Canada
- 15:00-15:30 **Regulation of the blood-brain barrier in health and disease**
Richard Daneman, University of California San Diego, USA

15:30-16:00 Refreshment break

16:00-17:50 Session 4 – Neuropsychiatric manifestations of neuronal autoantibodies

- 16:00-16:20 **Case studies in autoimmune encephalitis and psychiatry**
Thomas Pollak, Kings College London, UK
- 16:20-16:50 **Anti-NMDA receptor encephalitis: an immune-mediated synaptopathy that presents with**

psychosis

Josep Dalmau^{1,2}, ¹University of Pennsylvania, USA, ²University of Barcelona, Spain

16:50-17:20

Antibody-mediated sleep diseases

Joan Santamaria, *University of Barcelona, Spain*

17:20-17:50

Antibody mediated psychosis - new hope or false dawn?

Belinda Lennox, *University of Oxford, UK*

17:50-18:40

Session 5 – “Is it time to start screening for autoantibodies in first-episode psychosis?”

Panel discussion:

10 minutes “A neurologist with autoimmune psychosis”

(presented by a patient - The identity of the patient will be revealed at the end of the presentation)

10 minutes comments (Francesc Graus, *University of Barcelona*)

10 minutes comments (Akira Sawa or Marion Leboyer)

20 minutes general discussion (Francesc Graus, Akira Sawa, Marion Leboyer)

Saturday November 17, 2018

08:30-10:00

Session 6 – Immune molecules in the brain

08:30-09:00

Beyond autoimmunity: Immune proteins in neural homeostasis

Lisa Boulanger, *Princeton University, USA*

09:00-09:30

Mechanisms of cognitive dysfunction in SLE

Betty Diamond, *The Feinstein Institute for Medical Research, USA*

09:30-10:00

Cytokines signatures and response to treatment in psychiatric disorders

Nicolas Glaichenhaus, *CNRS, University of Nice, France*

10:00-10:30

Refreshment break

10:30-12:00

Session 7 – B and T cells in brain diseases

10:30-11:00

CNS phagocytes presenting myelin autoantigen direct autoimmune T cells into the target tissue

Harmut Wekerle, *Max Plank Institute, Germany*

11:00-11:30

The T-cell side of multiple sclerosis

Reinhard Hohlfeld, *Ludwig Maximilians University, Munich, Germany*

11:30-12:00

Antibody independent Contributions of B cells to CNS Inflammation

Amit Bar-Or, *University of Pennsylvania, USA*

12:00-13:00

Lunch

13:00-13:30

Poster Viewing Session

Session 8 – Poster presentations

13:30-14:00

Presentations of the 3 best posters by the authors

5 minutes each followed by 15 minutes discussion

14:00-15:30

Session 9 – Infectious and genetic triggers of immune-inflammation of the brain

14:00-14:30

Inborn errors of immunity underlying childhood viral encephalitis

Shen-Ying Zhang, *Rockefeller University, USA*

14:30-15:00

The genetics of narcolepsy : immune and viral mechanisms

Emmanuel Mignot, *Stanford University, USA*

15:00-15:30

Immunogenetics of major psychiatric disorders

Marion Leboyer, *University of Paris-Est-Créteil, France*

15:30-16:00

Refreshment break

16:00-17:00

Session 10 – Immune-inflammation in Neurology and Psychiatry: treatment implications and future directions

- 16:00-16:30 **Immunological aspects of psychotic disorders**
Iris Sommer, University Medical Center, The Netherlands
- 16:30-17:00 **Fighting Alzheimer's disease by unleashing innate and adaptive immune cells**
Michal Schwartz, Weizmann Institute of Science, Israel
- 17:00-17:10 **Closing ceremony**
Josep Dalmau^{1,2}, Elena Becker-Barroso³
¹University of Pennsylvania, USA, ²University of Barcelona, Spain, ³Editor – The Lancet Neurology, UK