



GEBIN 2015

Munich, Germany

11th Scientific Meeting April 23-25, 2015

Educational Short Course April 22-23, 2015

Wednesday, April 22

- 12:00 - 18:00 Educational short course

Thursday, April 23

- 8:30 - 12:30 Educational short course

- 13:30 Welcome reception 11th scientific meeting

- 14:30 - 17:30 Scientific meeting - **Jahrestreffen des AK NeuroEndokrinImmunologie**



- 14:30 – 15.15 Key note: **Peripheral Neuroimmune Interactions**

Chairs: U. Gimsa, E. Peters

K. A. Radek, Loyola University, Chicago, USA:

The role of cholinergic neurotransmission in wound healing

- 15.15 - 17:00 Session 1: **Peripheral Neuroimmune Interactions**

Chairs: U. Gimsa, E. Peters

T. Lowin, Regensburg:

Pro-inflammatory cytokines up-regulate and sensitize metabotropic and ionotropic cannabinoid receptors in rheumatoid arthritis and osteoarthritis synovial fibroblasts

S. Benson, Essen:

Inflammation-induced pain sensitization in men and women: Does sex matter in experimental endotoxemia?

- 15.45 - 16:00 Break

G. Pongratz, Regensburg:

Beta-2 adrenoceptor signal is augmented in B cells in the course of arthritis to increase IL-10

A. Stegemann / M. Böhm, Münster:

Tropisetron – an emerging anti-inflammatory and antifibrotic agent

M. Böhm, Münster:

Beta-endorphin suppresses collagen synthesis in human dermal fibroblasts and attenuates skin fibrosis in a mouse model of scleroderma

S. Dimitrov, Tübingen:

Beta2-adrenergic receptor signaling down-regulates the avidity of beta2-integrins activated through T- or natural killer-cell receptors in humans

- **17.00 – 17.30 Awards ceremony**

Chairs: N. Müller, A. del Rey

◆ 17:30 - 18:00 *GEBIN steering committee meeting*

- **18:00 - 19:30 Get together and poster session**

Poster titles see below

Friday, April 24

- **8:30 - 18:30 Scientific meeting**

- **8:30 – 9.15 key note: Stress, Behaviour and Immune Function**

Chairs: H. Engler, V. Stefanski

M.T. Bailey, The Ohio State University, Columbus, USA

Bidirectional interactions between the brain and the gut microbiota in health and disease

- **9.15 – 9.30 Break**

- **9.30 – 10.45 Session 2: Stress, Behaviour and Immune Function**

Chairs: H. Engler, V. Stefanski

L. Lückemann, Essen:

Pre-exposure to the unconditioned stimulus or conditioned stimulus does not affect learned immunosuppression in rats

M. Hadamitzky, Essen:

Acute and chronic immunosuppressive treatment with rapamycin affects brain and behavior

N. Havenstein, Hohenheim:

Seasonal impairments in immune competence in an obligate hibernator, the edible dormouse

B. Yi, München:

520-d isolation and confinement simulating a flight to Mars reveals heightened immune responses and alterations of leukocyte phenotype

K. Bösche, Essen:

Reconsolidation abrogates extinction of learned immunosuppression and prolongs heart allograft survival in rats

- **10.45 – 11.00 Break**

- **11.00 – 12.15 key note: Neuroendocrinology and immune Function**

Chairs: M. Böhm, T. Lange

C. Scheiermann, University of Munich, Germany

Rhythmic control of leukocyte migration

- **12.15 – 13.15 Lunch**

- **13.15 – 13.45 Late breaking news**

Chair: M. Schwarz

I. Sommer, University of Utrecht, Netherlands

Severe chronic psychosis after allogeneic SCT from a schizophrenic sibling

- **13.45 – 15.15 Session 3: Neuroendocrinology and Immune Function**

Chairs: M. Böhm, T. Lange

L. Engert, Hohenheim:

The pig (*Sus scrofa domestica*) as suitable non-rodent model for diurnal immunity: Porcine immune cells exhibit circadian rhythms

D. Blömker, Essen:

The role of the sympathetic nervous system during acute Friend retrovirus infection in mice



M. L. Barcena de Arellano, Berlin:

Sex differences in oestrogen-dependent macrophage-fibroblast interaction in cardiac inflammation

H. Engler, Essen:

Men and women differ in inflammatory and neuroendocrine responses to endotoxin but not in the severity of sickness symptoms

T. Lange, Lübeck:

Differential effects of sleep on inflammatory responses to pathogen- and damage-associated molecular patterns

H. Johar, München:

Association of salivary cortisol levels and type 2 diabetes in the KORA-Age study

- **15.15 – 15.30 Break**

- **15.30 – 16.15 Key note: [Neuroimmunology](#)**

Chairs: E. Weihe, A. del Rey

B. Engelhardt, University of Bern, Switzerland

How brain barriers control immune cell entry into the CNS

- **16.15 – 17.30 Session 4: [Neuroimmunology](#)**

Chairs: E. Weihe, U. Meier

S.V. Ramagopalan, London

Co-associations of multiple sclerosis with schizophrenia and bipolar disorder: record linkage studies

U.-C. Meier, London:

The brain and the environment in multiple sclerosis

P. Dua, London:

The role of enolase as a potential target antigen in Tourette's Syndrome and other neuropsychiatric disorders associated with streptococcal infection

K. Berer, Munich:

The intestinal microbiota and its role in CNS-specific autoimmunity



E. M. Schmidt, Tübingen:

Effects of minocycline on sleep, memory, and immune parameters in humans

- **17.30 – 18.00 Walk to the restaurant 'Weisses Bräuhaus'**

- **18.30 – 19.30 25 years anniversary symposium**
"25 years of PNI, induced by Volkswagenstiftung"



Chairs: H. Engler, V. Stefanski

H. Besedowski, Marburg: More than 25 years of PNI research

E. Weihe, Marburg: 25 years of anatomical approaches in PNI research

M. Schedlowski, Essen: 25 years of experimental PNI research

R. Straub, Regensburg: 25 years of peripheral neuro-immune interactions research

N. Müller, München: 25 years of PNI research in Psychiatry

•**19:30 congress dinner**

Saturday, April 25

•**9:00 - 12:00 Scientific meeting**

- **9.00 – 9.45 key note:**

Neuroendocrine Immune Network in Psychiatric Disease and Mental Health

Chairs: N. Müller, M. Schwarz

F. Benedetti, Ospedale San Raffaele, Milano, Italy

The impact of cytokines for grey-matter changes in psychiatric disorders

- **9.45-10.00 Break**

- **10.00 – 11.30 Session 5:**

Neuroendocrine Immune Network in Psychiatric Disease and Mental Health

Chairs: N. Müller, M. Schwarz

Ch. Böck, Ulm:

The effects of child maltreatment on mitochondrial functionality of peripheral immune cells

M. Elwenspoek, Luxemburg

Early life adversity alters the activation status of T cells

J. Hahn, Tübingen:

Impact of sleep on innate immune cells

R. Emeny, München:

Attachment style determines the association of oxytocin with anabolic and immune factors in older adults; findings from the cross-sectional KORA Age Study

E. Weidinger, München:

The Inflammation Hypothesis of Tourette's Syndrome

K. Bechter, Günzburg:

CSF findings support the mild encephalitis hypothesis of severe mental illness

- **11.30 – 12.00 Poster award ceremony**

Chairs: M. Schedlowski, R. Straub

•**12:00 Farewell**



Posters

Stress, behavior and immune function

Frank Risto Rommel, Gießen:

Stress affects mast cell protease expression: potential role of cholinergic signaling

Tilmann Otto Kleine, Marburg:

Behaviour modifies cellular immune surveillance (CIS) of human central nervous system (CNS); reviewed with Marburg Cerebrospinal-Fluid (CSF) Model

Liubov Petrakova, Essen:

Psychosocial Stress increases salivary alpha-amylase activity independently from plasma noradrenalin levels

Luciana Besedovsky, Tübingen:

Sleep compared to continuous wakefulness reduces the number of various human T cell subsets in blood

Ulrike Kübler, Zürich:

Dark chocolate attenuates intracellular pro-inflammatory reactivity to acute psychosocial stress in men

Charlotte Heyer, Hohenheim:

Effects of dietary phosphorus and calcium on the adaptive immune response following immunization in pigs

Julia Kirchhof, Essen:

Adrenoceptor-dependent interaction between A kinase anchor proteins and the protein phosphatase calcineurin in human CD4⁺ T cells

Anna Lena Kahl, Essen:

Cyclosporine A-induced immune suppression does not impair attention or memory performance in humans



Andrea Füchsl, Ulm:

Effects of stress coping and bite wounds on the time course of splenic GC resistance during chronic subordinate colony housing

Dominik Langgartner, Ulm:

Environmental factors substantially affect the outcome of an established murine model for chronic psychosocial stress

Neuroendocrinology and peripheral neuroimmune interactions

Susanne Klatt, Regensburg:

Early Sympathectomy Inhibits Egress of Lymphocytes in Control and Arthritic Animals and Ameliorates Arthritic Disease

Claudia Zuccarella, Bern:

Higher macrophage superoxide anion production in essential hypertension

Hubert Stangl, Regensburg:

Catecholaminergic-to-cholinergic transition of sympathetic nerve fibers is stimulated under healthy but not under inflammatory arthritic conditions

Matthias Ebbinghaus, Jena:

IL-17A does not contribute to the impact of the sympathectomic nervous system on experimental arthritis

Zsuzsa Jenei-Lanzl, Regensburg:

Interaction of PDE4 and β -arrestin reverses anti-inflammatory effects of catecholamine-producing cells in chronic arthritis via adrenoceptor switching from G α s to G α i signalling

Neuroendocrine immune network in psychiatric disease and mental health

Karlijn Becking, Groningen:

Innate immune responsiveness differentiating between unipolar and bipolar depressive episodes

Hannes Bielas, Zürich:

Preliminary Evidence for a Compromised T-Cell Compartment in Maltreated Children with Depression and Posttraumatic Stress Disorder

Laura Große, Münster:

Cellular immune activation and suppression co-occurring in major depressive disorder

Nilay Heggul, London / Gregor Schütze, München :

Interferon-alpha-induced depression: the involvement of the kynurenine and tryptophan pathway

Bianka Leitner, München:

COX-2 inhibition as an antidepressant therapy- new results

Martin Schäfer, Marburg:

Microglia express the vesicular nucleotide transporter (VNUT) essential for exocytotic ATP release

