



# The 2<sup>nd</sup> Munich Winter Conference on Stress

**A Max Planck Institute of Psychiatry / Weizmann  
Institute of Science Conference**

## **Program**



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## ***Saturday, March 16, 2019***

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**15:00 – 19:00**      **Arrival & Registration**

**20:00 – 22:00**      **Dinner**

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## **Sunday, March 17, 2019**

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**7:30 – 8:30**

**Breakfast**

**8:30 – 10:30**

**Session 1: Stress-related pathologies: Challenges and directions**

**Chairs: Mathias Schmidt & Alon Chen**

*Joshua Gordon, US*

**Priorities in Stress Research: a View from the U.S. National Institute of Mental Health**

*Charles Nemeroff, US*

**Inflammation and immune function in depression and PTSD**

*Jonathan Seckl, UK*

**Glucocorticoid metabolism in the brain: not yet lost in translation**

*Marian Joels, NL*

**Of stressed mice and men: Helping each other**

**10:30 – 11:00**

**Open debate**

**11:00 – 16:00**

**Scientific group discussions / Outdoor activities**

**16:00 – 19:00**

**Session 2: Novel insights on stress and social behaviors**

**Chair: Michael Meaney & Nic van der Wee**

*Inga Neumann, DE*

**Consequences of high brain oxytocin activity on social fear: sex and lactation**

*Carmen Sandi, CH*

**Metabolic involvement on the long-term programming of social behaviors by peripubertal stress**

*Daniel Bayless, US*

**A neural pathway for innate gender recognition**

**17:30 – 18:00**

**Coffee break**

*Gil Levkowitz, IL*

**Role of the neuroendocrine transcription factor Otp  
in the adaptive response to stressors**

*Nadine Gogolla, DE*

**State-dependent modulation of fear and anxiety  
through insular cortical circuits**

**19:00 – 19:30**

**Open debate**

**20:00 – 22:00**

**Dinner & Poster presentation I**

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## Monday, March 18, 2019

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7:30 – 8:30

Breakfast

8:30 – 10:30

**Session 3: Stress-related psychopathologies I**

**Chair: Jaideep Bains & Tallie Z. Baram**

*Kerry Ressler, US*

**Understanding Post-traumatic Stress: Translating Fear and Trauma from Genes to Circuits**

*Sonia Lupien, CA*

**Are we good judges of our stress? Association (and lack of) between physiological and psychological markers of stress in humans**

*Anna Beyeler, FR*

**Anatomical and functional organization of valence circuits in the amygdala and insular cortex**

*Allyson Friedman, US*

**The role of sex steroids on stress susceptibility and resilience**

10:30 – 11:00

Open debate

11:00 – 16:00

Scientific group discussions / Outdoor activities

16:00 – 19:00

**Session 4: Stress-related psychopathologies II**

**Chair: Johannes Bohacek & Oliver Bosch**

*Dominique de Quervain, CH*

**Stress, Genes and Memory**

*John Cryan, IE*

**A Gut (Microbiome) Feeling About Stress**

*Michael Fanselow, US*

**Stress Enhanced Fear Learning and its Sequelae**

17:30 – 18:00

Coffee break

*Kay M. Tye, US*

**A cortical-brainstem circuit predicts and controls the development of compulsive alcohol drinking**

*Alessio Attardo, DE*

**The impact of stress on hippocampal dynamics of connectivity and spatial representations**

**19:00 – 19:30**

**Open debate**

**20:00 – 22:00**

**Dinner & Poster presentation II**

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## Tuesday, March 19, 2019

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7:30 – 8:30	<b>Breakfast</b>
8:30 – 10:30	<p><b><u>Session 5: Hot topics and debate</u></b> <b>Chair: Jim Herman &amp; Deborah Suchecki</b> <i>Selected student presentations and round table discussion</i></p> <p><i>Mirjam van Zuiden, NL</i> <b>Prenatal adversity is a moderating factor of the effects of childhood and adulthood trauma exposure on late life mental health</b></p> <p><i>Tatiana Korotkova, DE</i> <b>Regulation of social behaviors by the lateral septum</b></p> <p><i>Abigail M. Polter, US</i> <b>Sex-specific regulation of the VTA GABA neurons by subchronic stress</b></p> <p><i>Amalia Floriou-Servou, CH</i> <b>Rapid reconfiguration of the functional connectome after chemogenetic locus coeruleus activation</b></p> <p><i>Toni-Lee Sterley, CA</i> <b>Social transmission of stress</b></p> <p><i>Pablo Lopez, DE</i> <b>Dissecting the HPA axis after chronic stress using single-cell transcriptomics</b></p>
10:30 – 11:00	<b>Open debate</b>
11:00 – 16:00	<b>Scientific group discussions / Outdoor activities</b>
16:00 – 19:00	<p><b><u>Session 6: Novel stress-related circuits</u></b> <b>Chair: Soojin Ryu &amp; Benno Roozendaal</b></p> <p><i>Aniko Korosi &amp; Harm Krugers, NL</i> <b>Early life stress: lasting effects on plasticity, metabolism and Alzheimer's disease</b></p>

*Byungkook Lim, US*

**Neural circuit mechanisms of early life stress-induced vulnerability to obesity**

*Mary-Kay Lobo, US*

**Molecular mediators of dendritic atrophy regulate stress susceptibility**

**17:30 – 18:00**

**Coffee break**

*Scott Russo, US*

**Motivational Circuitry of Aggression**

**18:30 – 19:30**

**Open debate and closing remarks**

**20:00 – 22:00**

**Dinner**



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***Wednesday, March 20, 2019***

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**7:30 – 12:00**

**Breakfast & Departure**

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## **Poster presentations I    Sunday, March 17, 2019**

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*Sergey Anpilov, IL*

**Oxytocin transforms group dynamics in mice by increasing aggression and repetitive behavior**

*Simone Astori, CH*

**Constitutive differences in corticosterone adaptation to stress are related to fear conditioning and sleep abnormalities in rats**

*Valeria Bonapersona, NL*

**The behavioral phenotype of early life adversity: a 3-level meta-analysis of preclinical studies**

*Joeri Bordes and Max Pöhlmann, DE*

**Pharmacological modulation of the psychiatric risk factor FKBP51 modulates efficiency of common antidepressant drugs**

*Elena Brivio, DE*

**Sex-specific signatures of acute stress in the paraventricular nucleus of the hypothalamus using single cell transcriptomics**

*Lea Brix and Alexander Häusl, DE*

**The co-chaperone FKBP51 shapes the acute stress response in the Paraventricular Nucleus of the Hypothalamus**

*Rob Buurstedde, NL*

**A short-list of GR targets implicated in glucocorticoid-enhanced memory consolidation in the male rat brain**

*Simon Chang, DE*

**Characterization of CRH/ CRH receptor neurocircuitries and their interaction with stress**

*Dipesh Chaudhury, AE*

**Effects of Social Stress on Circadian Rhythms and Sleep-Wake Cycle**

*Alireza Chenani, DE*

**Effects of stress on hippocampal activity patterns**

*David Csabai, HU*

**Quantave ultrastructural analysis of neuronal mitochondria in the medial prefrontal cortex of chronically stressed rats**

*Alec Dick, DE*

**Transcriptomic and epigenomic profiling in prefrontal cortical neurons following chronic stress**

*Jinlan Ding, NL*

**Late glucocorticoid receptor antagonism changes the outcome of adult life stress**

*Clara Engelhardt, DE*

**The impact of FKBP51 in regulating anxiety-related behavior in distinct brain regions**

*Sriparna Ghosal, CH*

**Implication of the mitochondrial fusion protein mitofusin 2 in the nucleus accumbens in anxiety-and depression-like behaviors**

*Cindy Grossmann, DE*

**Role of oxytocin on social fear conditioning in male mice**

*Katharina Gryksa, DE*

**Differential effects of chronic psychosocial stress on social and non-social fear conditioning in male mice**

*Jakob Hartmann, US*

**The involvement of SKA2, a novel GR interaction partner, in stress related psychiatric disorders**

*Jun Huang, CH*

**Roles of Nucleus Accumbens D1- and D2- medium spiny neurons in reward processing**

*Wataru Inoue, CA*

**Intrinsic plasticity as a neural correlate for stress habituation**

*Freddy Jeanneteau, FR*

**BDNF-dependent glucocorticoid signaling promotes learning-dependent synapse maintenance**

*Stoyo Karamihalev, DE*

**Gene expression profiling identifies brain region-specific networks underlying social dominance in mice**

*Alexandra Klein, DE*

**Dissecting the role of interoceptive insular cortical circuits in regulating learned fear**

*Jelle Knop, NL*

**The effects of different early-life rearing conditions on adult behavior and maternal care in heterozygous dopamine receptor D4 knock-out mice**

*Aron Kos, DE*

**Chronic stress regulated synaptic miR-217 controls anxiety-like behavior and stress susceptibility**

*Janssen M. Kotah, NL*

**The age-dependent effects of early-life stress exposure on hippocampal microglia and astrocytes in the APP/PS1 mouse model of Alzheimer's disease**

*Julia Lemos, US*

**Corticotropin releasing factor enhances the neuronal excitability of medium spiny projection neurons in the nucleus accumbens**

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## **Poster presentations II    Monday, March 18, 2019**

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*Julia Leschik, DE*

**BDNF overexpression in serotonergic neurons increases adult neurogenesis and confers protection against chronic stress**

*Srivaishnavi Loganathan, DE*

**Interactions of calcium channel (Cav1.2) circuitry with early life stress and their involvement in the pathogenesis of psychiatric disorders**

*Sofia Lopez, US*

**Corticosterone and dopamine activity in the nucleus accumbens change in a sex- and phenotype-dependent manner following Pavlovian conditioning**

*Paul J. Marvar, US*

**Central amygdala angiotensin Type 2 receptor (AT2R) activation reduces fear-related behavior**

*Marianella Masís, DE*

**Social fear conditioning in rats selectively bred for high anxiety-related behavior**

*Rohit Menon, DE*

**miR132 and the regulation of social fear - possible role in transgenerational inheritance of social preference**

*Eva Mikics, HU*

**Early social isolation-induced social deficits are linked to changes in prefrontal perineuronal nets and network organization**

*Patricia Molina, ES*

**Prefrontal cortex and stress: Identification of specific neuronal populations and their role in the vulnerability-resilience induced by stress**

*Iris Mueller, US*

**Adolescent conditioning affects fear expression and rate of safety learning during adult discriminative conditioning**

*Tobias Pohl, DE*

**Partner-loss induced neuroinflammation in prairie voles**

*Danai Riga, DE*

**Dynamic regulation of the extracellular matrix in the transition from stress to depression**

*Karla-Gerlinde Schraut, DE*

**Loss of the psychiatric risk factor SLC6A15 is associated with increased metabolic functions in hippocampal cell culture**

*Annabel K. Short, Tallie Z. Baram, US*

**Altered circuitry and low circulating estrogen protect estrous females from spatial memory impairments provoked by concurrent multiple acute stresses**

*Paromita Sen, DE*

**Effects of a bipolar disorder associated SNP on ADCY2 protein function and mouse behavior**

*Regis Shanley, US*

**Estrogenic activity in the ventral tegmental area modulates the behavioral response to stress**

*Francesca Spiga, UK*

**The long-term effects of synthetic glucocorticoid treatment on clock gene expression and on the inflammatory response to LPS in the rat brain are region specific**

*Julia Sulger, DE*

**Dissecting neuronal circuits for defensive sonic vocalization in mice**

*Amrutha Swaminathan, IL*

**Where do the origins of stress resilience lie?**

*Mate Toth, HU*

**Cognitive and emotional traits as vulnerability factors in an animal model of Posttraumatic Stress Disorder**

*Saulo Tractenberg, BR*

**Early life stress and unpredictable social stress during adolescence as predictors of anxiety related behaviors during adulthood**

*Jesús Úbeda-Contreras, ES*

**Effects of chronic adolescent controllable/uncontrollable stress at short- and long- term**

*Lidia Urbina, DE*

**The purinergic P2X7 receptor in diagnosis, prognosis and treatment of depression**

*Michael van der Kooij, DE*

**Altered CSF energy metabolism and reduced mitochondrial function of the prefrontal cortex of chronically stressed mice**

*Lotte van Doeselaar, DE*

**Testing an alternative method for chronic social defeat in female mice**

*Ghabiba Weston, DE*

**Effects of stress on in vivo hippocampal CA1 synaptic dynamics and CA1-dependent learning and memory**

*Xiao-Dong Wang, CN*

**Tactile modulation of memory and anxiety requires dentate granule cells along the dorsoventral axis**

*Susanne Wolf, DE*

**Impact of stress during pregnancy on behavior and microglia cellular senescence in the adult offspring**