



The 1st Munich Winter Conference on Stress

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

Program



Saturday, March 18, 2017

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

20:00 – 22:00 **Dinner**

Sunday, March 19, 2017

7:30 – 8:30 **Breakfast**

8:30 – 10:30

Session 1: HPA axis

Chairs: Alon Chen & Mathias Schmidt

Ron de Kloet, NL

Tipping the balance towards stress resilience

James Herman, US

Neurocircuitry of Stress and Loss

Stafford Lightman, UK

On piste and off piste timing of the HPA axis

Clemens Kirschbaum, DE

Endocrine markers of chronic stress in man and mice

10:30 – 11:00

Open debate

11:00 – 16:00

Scientific group discussions / Outdoor activities

16:00 – 19:00

Session 2: Central regulation of the stress response

Chair: Xiao-Dong Wang

Jaideep Bains, CN

Hypothalamic CRH neurons and the control of spontaneous behavior

Tallie Z. Baram, US

Perfect storm at the synapse: how CORT and CRH synergize to disrupt memory after concurrent acute stresses

Benno Roozendaal, NL

Stress, memory, and the amygdala

17:20 – 17:40

Coffee break

Matthew Hill, CA

Endocannabinoid interactions with the stress response

Nick Justice, US

CRF responsive neural circuits: integrating stress with action

Jan Deussing, DE

Dissecting CRH-related circuits that modulate emotional behaviors and stress vulnerability

19:00 – 19:30

Open debate

20:00 – 22:00

Dinner

Monday, March 20, 2017

7:30 – 8:30

Breakfast

8:30 – 10:30

Session 3: Hot topics and debate

Chair: Raffael Kalisch

Karen Mifsud, UK

Mineralocorticoid and glucocorticoid receptor binding to glucocorticoid target genes in the rat hippocampus after stress

Lisa van Weert, NL

Target gene selectivity of mineralocorticoid over glucocorticoid receptor in the brain

Eva Naninck, NL

Early dietary supplementation with essential micronutrients protects against early-life stress induced cognitive impairments

Thomas Larrieu, CH

Hierarchical status predicts behavioural resilience and adaptation of accumbens metabolic profile following chronic social defeat stress

Maria Morena, CA

Paradoxical effects of fatty acid amide hydrolase overexpression in the BLA in anxiety and fear memory in rats

Mareen Engel, DE

A pivotal role for RNA methylation in stress response regulation and stress-induced psychiatric disorders

Discussion panel:

Inga Neumann, Hans Reul, Jeffrey Tasker, Beat Lutz, Xiao-Dong Wang, Cheryl McCormick, Deborah Suchecki

11:00 – 16:00

Scientific group discussions / Outdoor activities

16:00 – 19:00

Session 4: Stress, anxiety and fear

Chair: Inga Neumann

Rony Paz, IL

Mechanisms of fear generalization in primate circuits

Andrew Holmes, US

A novel genetic mechanism for amygdala-mediated fear extinction

Kerry Ressler, US

Circuit, cellular, and genetic approaches to understanding Fear-Related Disorders

17:20 – 17:40

Coffee break

Gal Richter-Levin, IL

Stress vulnerability and stress resilience in an animal model of pre-pubertal stress and PTSD

Nicholas Singewald, AT

(Epi)genetic mechanisms targeting fear extinction dysfunction in PTSD-related disorders

Carmen Sandi, CH

Mitochondria and stress coping strategies

20:00 – 22:00

Dinner & Poster presentation

Tuesday, March 21, 2017

7:30 – 8:30

Breakfast

8:30 – 10:30

Session 5: Epigenetic programming the stress response

Chair: Hans Reul

Isabell Mansuy, CH

How the environment can impact mental health across generations : Epigenetic mechanisms of induction and expression

Tracy Bale, US

Epigenetic mechanisms involved in stress programming of neurodevelopment

Michael Meaney, CA

Environmental regulation of the neural epigenome: Implications for interventions

Elisabeth Binder, DE

Mapping epigenetic marks of early adversity using human neuronal progenitor cell models

10:30 – 11:00

Open debate

11:00 – 16:00 **Scientific group discussions / Outdoor activities**

16:00 – 19:00 **Session 6: Stress and disease**
Chair: Deborah Suchecki

Christopher Lowry, US

An immunization strategy for prevention of stress-related psychiatric disorders

Scott Thompson, US

Stress-induced dysfunction of excitatory synapses and the genesis of depression

John Cryan, IE

The Gut Microbiome: A Key Regulator of the Stress Response

17:20 – 17:40 **Coffee break**

Alan Schatzberg, US

The elusive search for effective HPA axis targeted therapies

Ofer Yizhar, IL

Representation of social information in the prefrontal cortex

Alessandro Bartolomucci, US

Coupling and uncoupling stress with obesity

19:00 – 19:30 **Open debate and closing remarks**

20:00 – 22:00 **Dinner**

Wednesday, March 22, 2017

7:30 – 12:00 **Breakfast & Departure**

Poster presentations

Rachel Anunu, IL

Modification of specific inhibitory synapse in sub-compartment of granule cells in dorsal dentate gyrus affects behavior

Philipp Bastians, DE

Connectomics of three-layered reptilian and mammalian cortices

Anna Biller, DE

Teenage owls and early school - a conflict relieved by later schooling times

Jennifer Chan, US

Long-term programming of intergenerational inheritance by paternal stress: A novel stress mechanism in the epididymis

Julien Dine, DE

Effects of GR specific deletion on electrophysiological properties of CRF neurons in the PVN and habituation to stress

Carine Dournes, DE

Mechanisms of Glucocorticoid receptors in CRF releasing neurons as key mediators of stress habituation

Michaela Filiou, DE

The bioenergetic dimension of stress: focus on synaptic mitochondria

Oren Forkosh and Yair Shemesh, IL

Ucn3 and CRF-R2 in the medial amygdala regulate complex social dynamics

Tamas Fuzesi, CN

In vivo activity of hypothalamic CRH neurons during stress

Andreas Genewsky, DE

Electrophysiological correlates of defensive distance in mice

Julia Gjerstad, UK

Sexually diergic effect of FKBP51 inhibition on the ultradian rhythm of corticosterone secretion in the rat

Anand Gururajan, IR

Neuromolecular biomarkers of stress resilience

Alexander Häusl, DE

Overexpression of FKBP51 in the PVN enhances HPA axis (re)activity

Jakob Hartmann, US

Region and cell type-specific functions of FKBP5 in fear and anxiety

Raffael Kalisch, DE

The Mainz Resilience Project (MARP)

Stoyo Karamihalev, DE

The individual mouse: Complex behavioral profiling reveals stable hidden traits in mice

Aniko Korosi, NL

Early-life stress in female mice alters response of the hippocampal neurogenic pool to prolonged exercise

Lena-Sophie Martis, UK

Cognitive impairments in the rodent depression model of chronic mild stress assessed by touchscreen operant learning paradigms

Rohit Menon, DE

Molecular mechanisms within the lateral septum regulate social fear in mice: role of endogenous OXT system and Hdac1

Silvia Monari, CH

Constitutional differences in corticosterone adaptation to stress are related to fear conditioning in rats

Juan A. Ortega Sánchez, ES

Simultaneous exposure to stress and amphetamine reduces stress-induced c-fos expression in the medial prefrontal cortex

Lilia Papst, DE

Glucocorticoid receptor activation shows cell type-specific effects on gene transcription in hIPSC model of human neuronal development

Signe Penner-Goeke, DE

Optimization of Glucocorticoid Receptor ChIP in LCLs

Max Pöhlmann, DE

The interaction of stress with the psychiatric risk factor FKBP51

Kitty Reemst, NL

Early life stress induces cognitive decline, synergistic effects of nutrition and the neuroimmune response

Sinead Rooney, AT

The role of microglia/myeloid system in innate anxiety and depression

Silvie Ruigrok, NL

Early-life stress effects' on metabolism and the leptin system

Maria Sanchís Ollé, ES

Adolescent exposure to a chronic uncontrollable stress increases the number of premature responses in the 5-choice serial reaction time task in adult rats

Jessie Scheimann, US

Cell type specific and region specific knockdown of glucocorticoid receptors differentially affects the HPA axis and behavior

Karla Schraut, DE

SLC6A15 – a novel potential target for the treatment of psychiatric disorders

Francesca Spiga, UK

Dynamic responses of the adrenal steroidogenic regulatory network to basal and stress-induced ACTH secretion

Deborah Suchrecki, BR

Maternal deprivation on postnatal 11 associated to a saline injection alters behavior emotional behavior and corticosterone stress response in a sex-dependent manner

Tobias Wiechmann, DE

An intronic structural variant shapes the risk for stress-related diseases accompanied by epigenetic adaptations at the FKBP5 locus