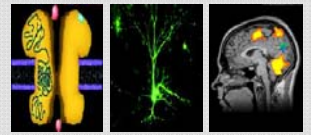


IGSN - CONFERENCE

in cooperation with **SFB 874** and **Extinction Learning Group**



Learning and memory: mechanisms, functional correlates, control and extinction

4th - 5th of March 2013

Veranstaltungszentrum, Ruhr Universität Bochum

Hosted by:

Denise Manahan-Vaughan

Director IGSN, Speaker SFB 874
Department of Neurophysiology, Faculty of Medicine

Onur Güntürkün

Speaker Extinction Learning Group
Biopsychology, Faculty of Psychology

Christian Bellebaum

Neuropsychology, Faculty of Psychology

Boris Suchan

Department of Neuropsychology, Faculty of Psychology



Learning and Memory:

mechanisms, functional correlates, control and extinction

Monday, 4th of March

9:00 **Welcome** by **MICHAEL HOLLMANN**, Speaker of the IGSN
and **DENISE MANAHAN-VAUGHAN**, Dean of Studies, IGSN

Learning and Memory

Host: **DENISE MANAHAN-VAUGHAN**

9:15 **Molecular and cellular mechanisms of learning and memory**

9:25 **GERMAN BARRIONUEVO** University of Pittsburgh, USA
**Synapse-specific compartmentalization of signaling cascades
for LTP induction in CA3 interneurons**

10:05 **BRIAN E. DERRICK** University of Texas, San Antonio, USA
**LTP and Function of the Direct Entorhinal Projections
to Hippocampal regions CA3 and CA1 *in vivo***

10:45 coffee break

11:05 **Functional correlates of learning and memory**

11:15 **BRUCE MCNAUGHTON** University of Lethbridge, Canada
**Doughnuts in the brain:
A toroidal attractor theory of the cognitive map**

11:55 **AGNES GRUART** Pablo de Olavide University, Seville, Spain
Learning and memory as functional states of the brain

12:35 **Brainstorming session** with speakers and students

13:05 lunch break (until 14:10)

(Each session will start with a short introduction of topic and speakers)

Learning and Memory:

mechanisms, functional correlates, control and extinction

Monday, 4th of March

Subcortical and cortical control of decision making and information storage

Hosts: **CHRISTIAN BELLEBAUM** and **BORIS SUCHAN**

14:10 **Introduction (1)**

14:20 **MARIJN VAN WINGERDEN** Heinrich-Heine-University Düsseldorf, Germany

**Good Vibrations: Rhythms and Plasticity in Neural Correlates of Value
in Rat Orbitofrontal Cortex**

15:00 coffee break

15:20 **TOBIAS KALENSCHER** Heinrich-Heine-University Düsseldorf, Germany

**Resisting and restricting temptation -
neural signatures of willpower and precommitment**

16:00 **Brainstorming session** with speakers and students

16:30 (approx.) end of first conference day

(length of each talk 30 minutes followed by 10 minutes discussion)

Learning and Memory:

mechanisms, functional correlates, control and extinction

Tuesday, 5th of March

9:30 **Introduction (2)** “Subcortical and cortical control”

9:40 **DOMINIC CHENG** Johns Hopkins University, Baltimore, USA

Functional MRI and tDCS Investigations of Human Eyeblick Conditioning

10:20 **CRAIG STARK** University of California, Irvine, USA

The role of human hippocampal subfields in pattern separation, aging, and MCI

11:00 coffee break

Extinction Learning and Forgetting

Host: **ONUR GÜNTÜRKÜN**

11:30 **Introduction**

11:40 **CYRIL HERRY** INSERM U862, Neurocentre Magendie, University of Bordeaux, France

Amygdala neuronal circuits of fear extinction

12:20 **Brainstorming session** with speakers and students

12:50 Lunch break (until 14:00)

14:00 **MARIE MONFILS** University of Texas at Austin, USA

Reconsolidation-extinction interactions in fear memory attenuation

14:40 **THOMAS AGREN** Uppsala University, Sweden

Removing fear from memories using reconsolidation disruption

15:20 **Farewell** (end of conference: 15:30)