Symposium

CRPP Synapse & Trauma

Aversive memories: Translating Basic Science to Clinical Treatment

Friday, 29.10.2021, 09.00 – 18.00h

UZH Center, KOL-G-217
Invitation

In today's turbulent world, stress and trauma have emerged as major risk factors for various psychiatric disorders. Across the entire spectrum of trauma-related disorders, cognitive-behavioural psychotherapy, which seeks to modify aversive memories, is currently the recommended first-line treatment. Yet, in clinical practice the majority of patients remain symptomatic. This has led to high-profile calls for developing adjunct pharmacological therapies. During the same time, advances in synaptic biology yielded a wide range of compounds that modify synapses themselves, the surrounding extracellular matrix that shapes their properties, and the daily rhythms of sleep and wake that govern their strength. Our Clinical Research Priority Program «Synapse and Trauma» connects these disparate strands and delivered novel insights for approaches to alter aversive memories. We focus on the combination of psychotherapy with pharmacological agents that modulate intra-synaptic signaling. Along with esteemed national and international colleagues from basic and clinical science we will in our symposium discuss such novel approaches to tackle aversive learning and memories. We will also engage in discussing the unique challenge of translating basic science findings to practice and to bringing them to clinical application.

You are cordially invited to join our Clinical Research Priority Program Symposium!

Dominik Bach, Steven Brown, Birgit Kleim and Shiva Tyagarajan

Invited Speakers

Prof. Dr. Emily Holmes
Karolinska Institute Stockholm & Department of Psychology, Uppsala University (SWE)

Prof. Dr. Dominique De Quervain
Department of Cognitive Neuroscience, University of Basel (CH)

Prof. Dr. Merel Kindt
Department of Psychology, University of Amsterdam (NL)

Prof. Dr. Raffael Kalisch
German Resilience Center & Johannes Gutenberg University Mainz (GER)

Prof. Kim Q. Do
Centre for Psychiatric Neurosciences, University Hospital of Lausanne (CH)

Dr. Bianca A. Silva
National Research Council of Italy, Institute of Neuroscience (ITALY)

Prof. Dr. Tomas Ryan
School of Biochemistry & Immunology Trinity Biomedical Sciences Institutes Trinity College
Institute of Neuroscience Trinity College Dublin (IRL)

UZH Hosts and Sessions Chairs

Prof. Dr. Dominik Bach
Max Planck UCL Centre for Computational Psychiatry and Ageing Research

Prof. Dr. Steven Brown
Institute of Pharmacology and Toxicology, Chronobiology and Sleep Unit

Prof. Dr. Birgit Kleim
Department of Psychiatry Psychotherapy and Psychosomatics

Prof. Dr. Erich Seifritz
Department of Psychiatry Psychotherapy and Psychosomatics

Prof. Dr. Shiva Tyagarajan
Institute of Pharmacology and Toxicology, Neurodevelopmental Pharmacology
Aversive memories: Translating Basic Science to Clinical Treatment

08.15 – 09.00  Registration

09.00 – 09.10  Welcome introduction

Session 1:  Clinical treatment for stress-related disorders: Novel scientific insights
09.10 – 09.40  Emily Holmes
Mental Health Science: a curiosity about translation and aversive memories

09.40 – 10.10  Dominique de Quervain
Memory as a target of pharmacological interventions in the treatment of stress-related disorders

10.10 – 10.30  Dominik Bach & Birgit Kleim
Blocking human fear memory by targeting intrasynaptic signaling pathways: From the lab to the clinic

10.30 – 11.00  Coffee break (Lichthof Nord)

11.00 – 12.30  Merel Kindt
The surprising subtleties of changing fear memory: Lessons from basic science in cooperation with Psychiatric Colloquium (KPPP/ UZH Psychiatry)

12.30 – 13.30  Lunch (Lichthof Nord) with parallel Poster Session

13.30 – 14.00  CRPP Student Snapshot talks

Session 2:  Therapies on the Horizon: Hacking aversive memories in rodents and humans
14.00 – 14.30  Raffael Kalisch
Dopaminergic influence on memory extinction

14.30 – 14.50  Steven Brown
Cortical synaptic changes: a question of clocks and sleep

14.50 – 15.20  Kim Do
Translational approach towards mechanisms-based biomarkers guided treatment in early phases of psychosis

15.20 – 15.50  Coffee break (Lichthof Nord)

Session 3:  From amnesia to intrusions: Understanding how memories are stored in the brain
15.50 – 16.20  Bianca A. Silva
Brain circuits for fear attenuation

16.20 – 16.40  Shiva Tyagarajan
The Inhibitory synaptic scaffold: controlling point for sleep and affective behavior

16.40 – 17.40  Tomas Ryan
Engrams as plasticity states across evolution development

18.00  Apéro (Lichthof Nord)
Information
Coffee, snacks and lunch, as well as an apero will be provided for registered participants.

SGPP Credits
Symposium participation will be recognized with 5 SGPP credit points.

COVID-19 safety and hygiene information
Due to COVID-19-related restrictions, places are limited to 80 persons and a COVID-19 certificate incl. ID Card will be required from participants upon entering the lecture hall.
Registration is open from 8.15am on the day of the symposium.

Registration
Participation in the symposium is free, but registration is required (Deadline 15.10.2021). Please register via the website:
https://www.synapsetrauma.uzh.ch/en/CRPP-Symposium-Registration

Contact
Register_CRPP.Symposium@bli.uzh.ch

Location and Travel Directions
University of Zurich, Hörsaal KOL-G-217, Rämistrasse 71, 8006 Zurich