



University of  
Zurich<sup>UZH</sup>

Clinical Research Priority Program Synapse & Trauma

---

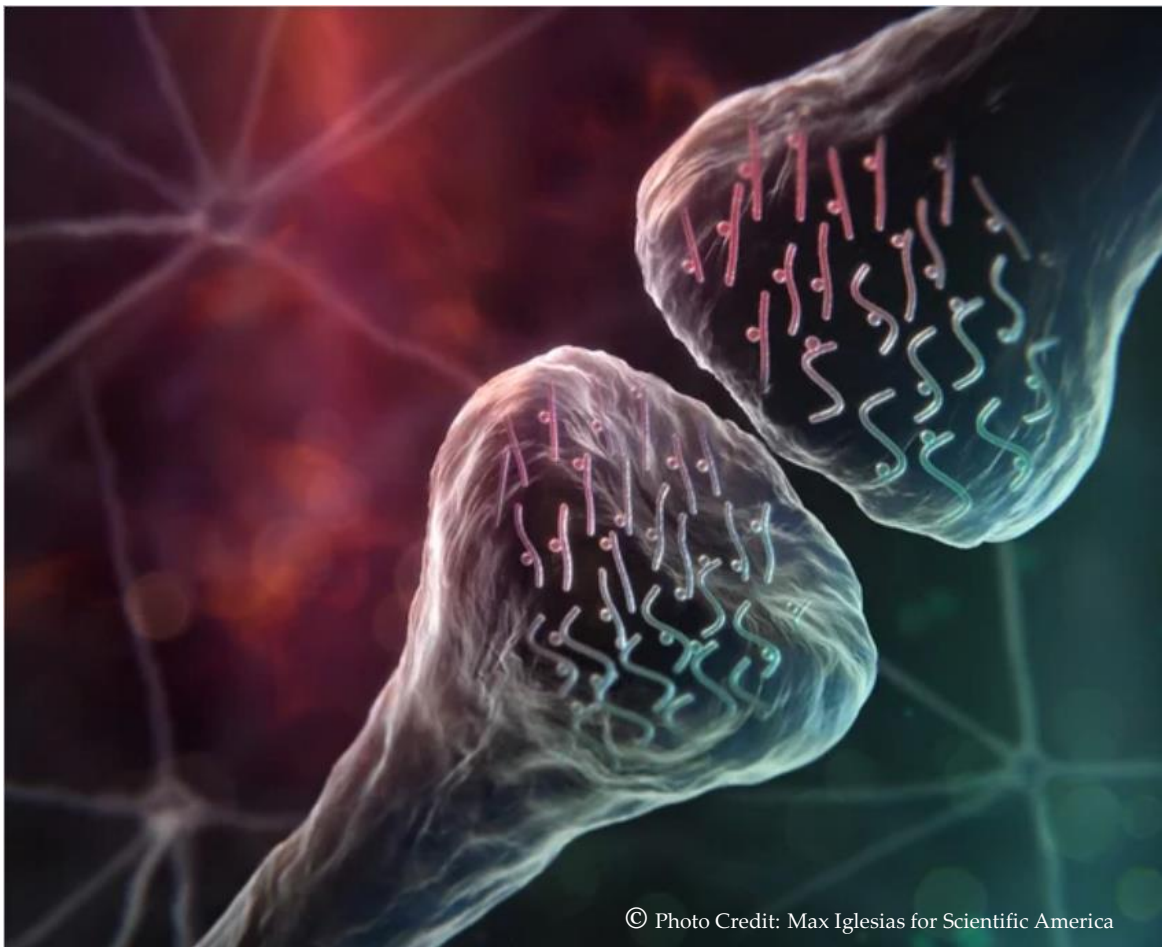
Symposium

CRPP Synapse & Trauma

## Aversive memories: Translating Basic Science to Clinical Treatment

Friday, 29.10.2021, 09.00 – 18.00h

UZH Center, KOL-G-217



© Photo Credit: Max Iglesias for Scientific America

# *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**

<b>08.15 – 09.00</b>	<i>Registration</i>
<b>09.00 – 09.10</b>	<i>Welcome introduction</i>
<b>Session 1:</b>	<b>Clinical treatment for stress-related disorders: Novel scientific insights</b>
09.10 – 09.40	<b>Emily Holmes</b> Mental Health Science: a curiosity about translation and aversive memories
09.40 – 10.10	<b>Dominique de Quervain</b> Memory as a target of pharmacological interventions in the treatment of stress-related disorders
10.10 – 10.30	<b>Dominik Bach &amp; Birgit Kleim</b> Blocking human fear memory by targeting intrasynaptic signaling pathways: From the lab to the clinic
<b>10.30 – 11.00</b>	<i>Coffee break (Lichthof Nord)</i>
11.00 – 12.30	<b>Merel Kindt</b> The surprising subtleties of changing fear memory: Lessons from basic science in cooperation with Psychiatric Colloquium (KPPP/ UZH Psychiatry)
<b>12.30 – 13.30</b>	<i>Lunch (Lichthof Nord)</i> with parallel <b>Poster Session</b>
13.30 – 14.00	<b>CRPP Student Snapshot talks</b>
<b>Session 2:</b>	<b>Therapies on the Horizon: Hacking aversive memories in rodents and humans</b>
14.00 – 14.30	<b>Raffael Kalisch</b> Dopaminergic influence on memory extinction
14.30 – 14.50	<b>Steven Brown</b> Cortical synaptic changes: a question of clocks and sleep
14.50 – 15.20	<b>Kim Do</b> Translational approach towards mechanisms-based biomarkers guided treatment in early phases of psychosis
<b>15.20 – 15.50</b>	<i>Coffee break (Lichthof Nord)</i>
<b>Session 3:</b>	<b>From amnesia to intrusions: Understanding how memories are stored in the brain</b>
15.50 – 16.20	<b>Bianca A. Silva</b> Brain circuits for fear attenuation
16.20 – 16.40	<b>Shiva Tyagarajan</b> The Inhibitory synaptic scaffold: controlling point for sleep and affective behavior
16.40 – 17.40	<b>Tomas Ryan</b> Engrams as plasticity states across evolution development
<b>18.00</b>	<i>Apéro (Lichthof Nord)</i>

## 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](mailto:Register_CRPP.Symposium@bli.uzh.ch)

## Location and Travel Directions

University of Zurich, Hörsaal KOL-G-217, Rämistrasse 71, 8006 Zurich

