

June 22-25
2024
Hamburg

SYNAPTOPATHIES

Molecular Mechanisms of Brain Disease

Program



Saturday, June 22, 2024

12:30 Registration and check-in at the Elsa-Brändström Conference Center

Session #1

15:00-15:15 Opening remarks
Eckart D. Gundelfinger / Dietmar Richter
(Chair persons of the Blankenese Conferences)

15:15-15:30 Welcome address
Blanche Schwappach-Pignataro
(Dean of the University Medical School Hamburg and Member of the Board of Trustees, JUNG-Stiftung)

15:30-16:10 **Reinhard Jahn (Göttingen)**
Exocytosis of synaptic vesicles - from molecules to function



Session #2

Chairs: Jörg Bartsch / Stefan Kins



16:15-16:45 **Tobias M. Böckers (Ulm)**
Excitatory Synapses and Neuropsychiatric Diseases

16:50-17:20 **Torben Hausrat (Hamburg)**
Tubulin isotypes: specific functions in the brain?

17:25-17:55 [Coffee Break](#)

17:55-18:25 **Nils Brose (Göttingen)**
Dynamic regulation of presynaptic function and plasticity in health and disease

18:30-19:00 **Gerhard Schratt (Zürich)**
Non-coding RNA function in neural circuit development and behaviour

19:05-19:20 **Maaïke A. van Boven (Short Communication)**
Timing is of the essence: desynchronized synaptic transmission as novel disease mechanism in SYT1-associated disorder

19:30 [Welcome Reception & Dinner](#)

Sunday, June 23, 2024

Session #3



Chairs: Michael R. Kreutz / Anna Karpova

9:00-9:30 **Natalia Kononenko (Cologne)**
Nurturing brain health: the role of autophagy in neuronal metabolism

9:35-10:05 **Sandra-Fausia Soukup (Bordeaux)**
How is autophagy regulated at the synapse? Consequences in brain health and disease

10:10-10:40 **Michael A. Cousin (Edinburgh)**
Synaptic vesicle endocytosis dysfunction and neurodevelopmental disorders

10:45-11:00 **Sebastian Samer** (Short Communication)
Protein transport from synapse to nucleus is essential for the maintenance of CREB activity after induction of synaptic plasticity

11:05-13:00 **Poster Session (Posters #1 - #18)**
with Coffee served at posters

13:00-14:00 **Lunch Break**

Session #4 "A Neurochemist's View on Functions and Dysfunctions of Brain Synapses"



Chairs: Michael Cousin / Eckart Gundelfinger

14:05-14:35 **Anne-Sophie Hafner (Nijmegen)**
Excitatory presynapse dysfunction in Alzheimer's disease

14:40-15:10 **Isabel Pérez Otaño (Alicante)**
Synaptic machinery for lasting synaptic changes – GIT1/mTOR complexes control synapse-specific translation and memory

15:15-15:45 **Eunjoon Kim (Daejeon)**
NMDA receptor dysfunction in mouse models of autism spectrum disorders

15:50-16:15 **Coffee Break**

16:15-16:45 **Etienne Herzog (Bordeaux)**
A synaptic analysis reveals dopamine hub synapses in the mouse striatum

16:50-17:20 **Peter Penzes (Chicago)**
Synaptic ectodomain signaling and neurodevelopmental disorders

17:25-17:40 **Hans-Jürgen Kreienkamp** (Short Communication)
Variants in LRRC7, encoding Densin-180, lead to intellectual disability, autism, aggression and abnormal eating behaviors

17:45-18:25 **Thomas Jentsch (Berlin)**
Control of vesicle size – an unsuspected role of the 'novel' acid-activate Cl channel ASOR



18:30-19:50 **Dinner**

Session #5 "Immune system-related Synaptopathies"
Chair: Manuel Frieze

19:50-20:20 **Michela Matteoli (Milan)**
Immune-synaptopathies: how the immune system affects synapse function

20:25-20:55 **Harald Prüss (Berlin)**
Autoimmunity and neurodegeneration -- new disease concepts

Monday, June 24, 2024

Session #6

Chairs: Matthias Kneussel / Dietmar Kuhl

9:00-9:30

Thomas Bourgeron (Paris)

The genetic architecture of autism: from medicine to neurodiversity

9:35-10:05

Marina Mikhaylova (Berlin)

SHANK3 in parvalbumin neurons



10:10-10:40

Cecile Charrier (Paris)

Molecular mechanisms of synaptic development: insights from human-specific genes



10:45-11:00

Alberto Catanese (Short Communication)

Multimomics analysis of hiPSC-derived motoneurons identify pathological synaptic signatures commonly shared across the heterogenous spectrum of ALS

11:05-13:00

Poster Session (Posters #19 - #35)

with Coffee served at posters

13:00-14:00

Lunch Break

Session #7

“Young Women in Science”

Chairs: Cecile Charrier / Ora Ohana

14:00-14:30

Katarzyna M. Grochowska (Hamburg)

Lysosomal control of the metastable proteome regulates structural spine plasticity

14:35-15:05

Cordelia Imig (Copenhagen)

Dissecting molecular mechanisms underlying serotonin release from sensory cells in the gut epithelium in health and disease

15:10-15:40

Noa Lipstein (Berlin)

Presynaptic mechanisms in neurodevelopmental and neurodegenerative brain disorders

15:45-16:00

Marilyn Tirard (Short Communication)

Effects of Perturbed Sumoylation, Neddylation, and Ufmylation on Synaptic Transmission

16:05-16:30

Coffee Break

Session #8

Chairs: Reinhard Jahn / Jacob B. Sørensen

16:30-17:00

Josef T. Kittler (London)

Molecular mechanisms of inhibitory synapse formation and plasticity

17:05-17:45

Matthijs Verhage (Amsterdam)

Disease mechanisms and intervention strategies for SNAREopathies



17:50-18:30

Morgan Sheng (Boston)

Synaptic and molecular mechanisms underlying schizophrenia and bipolar disorder

18:45

Dinner (Awarding of Poster Prizes)

20:00

Evening event (Round table)

Event Venue: Elsa Brändström Haus

Address:
Weißes Haus
Kösterbergstraße 62
22587 Hamburg

<https://ebh-hamburg.de/en/>

Event Homepage:



Closest Bus Stop:
Lichtheimweg

From S-Bahn Blankenese the Buses 286 and 388 are going to Lichtheimweg. Please check the HVV Homepage or App for more information.

www.hvv.de/en



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