

THE TWENTIETH EIBSEE MEETING

CELLULAR MECHANISMS OF NEURODEGENERATION

OCTOBER 26-28, 2022

Keynote speakers

M. Götz (Helmholtz Zentrum, Munich)

U. Hartl (Max Planck Institute of Biochemistry, Munich)

B. Stevens (Harvard Medical School, Boston)

International speakers

M. Citron (UCB Biopharma, Brussels)

Ph. De Jager (Columbia University Irving Medical Centre, New York)

A. Goate (Icahn School of Medicine at Mount Sinai, New York)

D. Holtzman (Washington University, St. Louis)

C. ladecola (Weill Cornell Medicine, New York)

M. Kampmann (University of California, San Francisco)

K. Monroe (Denali Therapeutics, San Francisco)

A. Schaefer (Icahn School of Medicine at Mount Sinai, New York)

D. Selkoe (Harvard Medical School, Boston)

P. St. George-Hyslop (University of Toronto)

Farewell speaker

K. Beyreuther (University of Heidelberg)

National speakers

L. Burbulla, S. Jäkel, E-M. Mandelkow,

E. Mandelkow, J. Neher, D. Paquet, J. Schultze

Organized by

C. Haass (DZNE & University of Munich)









The 20th Eibsee Meeting (October 26-28, 2022)

CELLULAR MECHANISMS OF NEURODEGENERATION

organized and funded by the

DZNE, German Center for Neurodegenerative Diseases - Munich

SyNergy - Munich Cluster for Systems Neurology

The Hans und Ilse Breuer Foundation

organizer

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Location



Important info about Covid-19 rules

For participants we have to follow strict regulations regarding Covid-19:

Proof of a complete corona vaccination

(Vaccination pass or digital) is obligatory

Travelling

by train: Take the train to Garmisch (via Munich). In Garmisch please take a taxi to the hotel (about 15-20 min drive).

by plane: From Munich airport take the S-Bahn to Munich Central station (Hauptbahnhof Hbf). At the central station take the train to Garmisch (about 1h50min); from here take a taxi to the hotel.

by car: From Munich take the highway to Garmisch. In Garmisch follow the signs to Eibsee. The hotel is at the end of the road right at the foot of the Zugspitze. It takes approx. 1h20min.

Weather

It is fall and it might be cold already. For those who like to go on a walk, please bring your hiking boots with you.

Acknowledgements

We greatly appreciate funding of the Eibsee Meeting by the Hans and Ilse Breuer Foundation, the German Center for Neurodegenerative Diseases (DZNE) and SyNergy - Munich Cluster for Systems Neurology









PROGRAM

Wednesday, October 26

The traditional "scientific walk" around the lake (if weather permits; we meet in the lobby)

| | 15:00 | Welcome: 20 years of Eibsee Meeting Christian Haass, DZNE and University of Munich, Germany |
|-----------------------------------------------------------|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 15:10 – 15:50 Keynote Lecture I Chair: Christian Haass | | • |
| | | Beth Stevens, Harvard Medical School, Boston, USA How Microglia Eliminate Specific Synapses in Health & Disease: New biological insight and clinical translation |
| | 15:50 – 17:30 Chair: Jörg Schul | Topic I - 20 years of Eibsee Meeting – special guests |
| | 15:50 – 16:10 | Dennis Selkoe, Harvard Medical School, Boston, USA Mechanistic and diagnostic advances in the era of anti-amyloid therapeutics |
| | 16:10 – 16:30 | Peter St. George-Hyslop, University of Toronto, Canada Interactions between the intrinsically disordered world of membraneless biomolecular condensate- based organelles and the ordered world of membrane-bound organelles |
| | 16:30 – 16:50 | Martin Citron, UCB Biopharma, Brussels, Belgium From mechanistic hypothesis to drug development in neurodegeneration |
| | 16:50 – 17:10 | Eva-Maria & Eckhard Mandelkow, DZNE Bonn, Germany Tau |
| | 17:10 – 17:30 | Katja Bär, Hans & Ilse Breuer Foundation, Frankfurt am Main, Germany Presentation of the Best Paper Award |
| | | |

18:30 Reception with "Bavarian Beer & Music" at the terrace of the "See Pavillon"
19:00 Eibsee 20th anniversary dinner
Special guest "The Amyloid Man"

Thursday, October 27

9:00 – 9:40 Keynote Lecture II

Chair: Sabine Liebscher

12:00

Magdalena Götz, HelmholtzZentrum Munich, Germany Mechanisms of neurogenesis and neuronal replacement

9:40 – 11:20 Topic II - Non-neuronal contributions in neurodegeneration

Chair: Martin Kerschensteiner

9:40 – 10:00 Sarah Jäkel, Institute for Stroke and Dementia Research, Munich, Germany

Oligendendrocyte heterogeneity and neurodegeneration: is there a link?

10:00 – 10:40 Coffee Break

The role of dopamine oxidation in the preferential degeneration of midbrain neurons in neurodegenerative diseases

11:00 – 11:20 Philip De Jager, Columbia University Irving Medical Centre, New York, USA
Resolving changes in inter-cellular communication within cortical cellular communities that are perturbed in relation to Alzheimer pathology and impaired cognition

Flash talks I (selected poster presentations)

Chair: Christian Haass

10:40 - 11:00

11:30 – 11:40 Five two-minute talks with one slide

12:00 - 13:30 Lunch

13:30 - 15:00 Time for a recreation

15:00 – 17:00 Topic II - Non-neuronal contributions in neurodegeneration (continued)

Lena Burbulla, University of Munich, Germany

Chair: Thomas Misgeld

15:00 – 15:20 Martin Kampmann, University of California, San Francisco, USA CRISPR-based functional genomics for neurodegenerative disease

15:20 – 15:40 Costantino Iadecola, Weill Cornell Medicine, New York, USA
Neurovascular dysfunction in neurodegeneration: innate immunity takes center stage

15:40 – 16:20 Coffee Break

16:20 – 16:40 Alison Goate, Icahn School of Medicine at Mount Sinai, New York, USA Human Genetics implicate efferocytosis in myeloid cells as a disease risk hub

16:40 – 17:00 Joachim Schultze, DZNE Bonn, Germany Deciphering neurodegeneration, cell by cell

Flash talks II (selected poster presentations)

Chair: Christian Haass

17:10 – 17:20 Five two-minute talks with one slide

18:30 Dinner

19:30 Poster session (with free drinks)

Friday, October 28

9:00 – 9:40 Keynote Lecture III

Chair: Dorothee Dormann

Ulrich Hartl, Max-Planck-Institute of Biochemistry, Munich, Germany Molecular chaperones in protein folding and aggregation prevention

9:40 - 11:40 Topic III - Microglia

Chair: Martin Dichgans

9:40 – 10:00 Anne Schaefer, Icahn School of Medicine at Mount Sinai, New York, USA

Negative feedback control of neuronal activity by microglia

10:00 – 10:20 Kathryn Monroe, Denali Therapeutics Inc., South San Francisco, USA

Human genetics indicate novel therapeutic approaches for modulating microglia activity for

Alzheimer's Disease

10:20 - 10:40 Coffee Break

10:40 – 11:00 Jonas Neher, DZNE Tuebingen, Germany
Medin amyloid promotes vascular Aβ deposition in Alzheimer's disease

11:00 – 11:20 Dominik Paquet, Institute for Stroke and Dementia Research, Munich, Germany

iPSC-derived and CRISPR-edited 3D human brain tissue models to investigate neurodegenerative

and neurovascular disorders

11:20 – 11:40 David Holtzman, Washington University, St. Louis, USA

Isoform and cell specific effects of APOE on amyloid-ß and on tau-mediated neurodegeneration

11:40 – 12:00 Farewell lecture

Chair: Christian Haass

Konrad Beyreuther, University of Heidelberg, Germany Looking back, and ahead

12:00 - 14:00 Lunch

14:00 Departure

19:00 Dinner for participants staying until Saturday, October 29