

The eighth EIBSEE Meeting
on
CELLULAR MECHANISMS OF
ALZHEIMER'S DISEASE

October 29 – November 1, 2008

organized by Christian Haass (University of Munich)

key note speaker:

T. Golde (Mayo Clinic Jacksonville)

guest speakers:

G. Basi (Elan Pharmaceuticals)

B. de Strooper (University of Leuven)

H. Li (Brookhaven National Laboratory)

M. Meyer-Luehmann (Harvard Medical School)

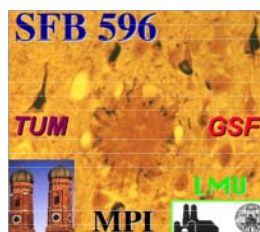
G. Shankar (Harvard Medical School)

R. Vassar (Northwestern University)

P. Wong (Johns Hopkins University)

Deutsche
Forschungsgemeinschaft

DFG



**The eighth Eibsee Meeting
(October 29 – November 1, 2008)**

**"CELLULAR MECHANISMS OF
ALZHEIMER'S DISEASE"**

**funded by the DFG
&
The Hans und Ilse Breuer Foundation**

**organized by:
Christian Haass
Laboratory of Neurodegenerative Disease Research
Adolf Butenandt Institute
University of Munich
Schillerstr. 44
80336 Munich
Germany**

**Phone: ++49-89-2180-75471
Fax: ++49-89-2180-75415
e-mail: christian.haass@med.uni-muenchen.de
<http://haass.web.med.uni-muenchen.de>**

Location

Eibsee Hotel
Am Eibsee 1-3
D-82491 Grainau
Phone: ++49-8821-9881-0
Fax: ++49-8821-82585
Email: info@eibsee-hotel.de
www.eibsee-hotel.de



Travelling

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

by plane: from Munich airport take the S-Bahn to Munich Central station. At the central station take the train to Garmisch (about 1 hr). From here take a cab 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.

Weather

It's fall and there will be a chance for snow (in the skiing area on top of the Zugspitze snow is guaranteed). For those who like to go on the walk: please bring your hiking boots.

Acknowledgements

We thank our sponsors F. Hoffmann-La Roche AG, Elan Pharmaceuticals and Boehringer Ingelheim for their generous financial support.



PROGRAM

Wednesday, October 29

Arrival, Hiking, Opening Lecture

15:00 The traditional “Scientific walk“ around the lake (if weather permits)

17:00 – 17:15 Welcome (C. Haass)

17:15 – 18:15 Key Note Lecture

T. Golde, Mayo Clinic, Jacksonville, USA

Substrate targeting gamma-secretase modulators

18:15 Cocktails

sponsored by the Hans und Ilse Breuer Foundation

19:00 Dinner

Thursday, October 30

9:00 – 13:00 Secretases I

Chair: E. Mandelkow

9:00 – 9:25 B. de Strooper, VIB and K.U. Leuven, Belgium
Heterogeneity of the γ -secretase complex opens new avenues to therapy

9:25 – 9:50 H. Li, Brookhaven National Laboratory, Upton, USA
Cryo-EM structural characterization of γ -secretase

9:50 – 10:15 H. Steiner, University of Munich, Germany
Functional and structural analysis of γ -secretase

10:15 – 10:40 G. Multhaup, University of Berlin, Germany
Molecular dissection of substrate-secretase interactions

10:40 – 11:20 Coffee Break/Poster Session: APP trafficking & processing

Chair: J. Tatzelt

11:20 – 11:45 C. Kaether, Leibniz Institute for Age Research, Jena, Germany
Quality control of γ -secretase assembly in the ER

11:45 – 12:10 J. Walter, University of Bonn, Germany
Lipid-dependent metabolism of the amyloid beta-peptide

12:10 – 12:35 T. Hartmann, University of the Saarland, Homburg, Germany
Sterol and glycosphingolipid regulation of γ -secretase

12:35 – 13:00 R. Fluhrer, University of Munich, Germany
Insight into the cleavage mechanism of GxGD-type aspartylproteases

13:00 – 14:00 Lunch

14:00 – 15:00 Time for recreation (hiking, swimming, sauna)

15:00 – 18:35 Secretases II

Chair: U. Müller

- 15:00 – 15:25 R. Vassar, Northwestern University, Chicago, USA
The role of BACE1 in Alzheimer's disease
- 15:25 – 15:50 P. Wong, The Johns Hopkins University, Baltimore, USA
Moderate inhibition of both BACE1 and γ -secretase: towards a safe and effective Alzheimer's therapy
- 15:50 – 16:15 M. Willem, University of Munich, Germany
The good and the bad side of BACE1
- 16:15 – 16:40 S. Lichtenthaler, University of Munich, Germany
Secretase inhibitors and modulators in Alzheimer's disease

16:40 – 17:20 Coffee Break/Poster Session: APP trafficking & processing

Chair: T. Hartmann

- 17:20 – 17:45 P. Saftig, University of Kiel, Germany
Function and regulation of ADAM proteases
- 17:45 – 18:10 F. Fahrenholz, University of Mainz, Germany
Transcriptional activation of the α -secretase ADAM10 via nuclear receptors
- 18:10 – 18:35 S. Lammich, University of Munich, Germany
Post-transcriptional regulation of the α -secretase ADAM10

19:00 Dinner

Friday, October 31

9:00 – 10:15 APP function and transport

Chair: H. Steiner

- 9:00 – 9:25 T. Willnow, Max-Delbrück-Center for Molecular Medicine, Berlin, Germany
SORLA - a receptor to sort out APP processing
- 9:25 – 9:50 S. Kins, University of Heidelberg, Germany
Subcellular traffic of APP family members in neurons
- 9:50 – 10:15 U. Müller, University of Heidelberg, Germany
Progress on APP/APLP physiology

10:15 – 10:55 Coffee Break/Poster Session: Aggregation, Toxicity, Aging

10:55 – 12:10 Oligomers and Aggregation

Chair: G. Multhaup

- 10:55 – 11:20 E.M. Mandelkow, Max-Planck-Unit for Structural Molecular Biology, Hamburg, Germany
Inducible tau-transgenic mice: Lessons on phosphorylation, aggregation, and behaviour
- 11:20 – 11:45 E. Mandelkow, Max-Planck-Unit for Structural Molecular Biology, Hamburg, Germany
From tau structure to aggregation inhibitors
- 11:45 – 12:10 G. Shankar, Harvard Medical School, Boston, USA
Amyloid β -protein dimers isolated directly from Alzheimer brains impair synaptic plasticity and memory

12:30 – 14:00 Lunch

14:00 – 15:00 Time for recreation (hiking, swimming, sauna)

15:00 – 15:50 Drug Development & Therapy

Chair: S. Lichtenthaler

- 15:00 – 15:25 G. Basi, Elan Pharmaceuticals, San Francisco, USA
Immunotherapy at atomic resolution
- 15:25 – 15:50 S. Roßner, University of Leipzig, Germany
Inhibition of glutamyl cyclase – a novel concept for the treatment of Alzheimer's disease

15:50 – 19:00 Neuronal Toxicity and Regeneration

Chair: F. Fahrenholz

- 15:50 – 16:15 M. Meyer-Luehmann, Harvard Medical School, Charlestown, USA
Cascade of pathogenic events in Alzheimer's disease: insights from mouse models
- 16:15 – 16:40 J. Herms, University of Munich, Germany
Dystrophic dendrites in neurodegenerative diseases: cause or consequence of synaptic failure?

16:40 – 17:20 Coffee Break/Poster Session: PD & other neurodegenerative diseases

- 17:20 – 17:45 M. Jucker, University of Tübingen, Germany
Mikroglia ablation in APP transgenic mice
- 17:45 – 18:10 O. Garaschuk, Technical University of Munich, Germany
Impaired cortical network function in Alzheimer's disease: the role of microglia
- 18:10 – 18:35 A. Fischer, European Neuroscience Institute, Göttingen, Germany
Deregulation of epigenetic processes during aging and neurodegeneration
- 18:35 – 19:00 J. Tatzelt, University of Munich, Germany
Stress-protective signalling of PrPC is linked to dimer formation and corrupted by PrPSc

19:00 Dinner

Saturday, November 1, 2008

Departure