

Prion 2005 Program

Tuesday, 18. October 2005

**14: 00 – 16:00 Internal Meeting of the German TSE Research Platform
(Congress Center Duesseldorf/room 3) (members only)**

**17:00 – 20:00 Workshop (CCD/room 3):
2005 – The year of the researcher in Europe
How communication and mobility could support research in
the future** (for further information please download the information
leaflet (see above))

Open to all attendees of the conference, but due to the capacities of the room restricted
up to 250 participants. Please register as soon as possible (registration form see
above).

19:00 Public Lecture: „20 Jahre BSE“ (in German only)
Chair: Prof. Dr. Detlev Riesner, Düsseldorf

Nordrhein-Westfälische Akademie der Wissenschaften,
Karl-Arnold-Haus der Wissenschaften, Palmenstraße 16, 40217 Düsseldorf
Talks by: Prof. Dr. Charles Weissmann, Palm Beach, USA (Thema: "Prionen.
Krankheitserreger kleiner als Viren, aber nicht weniger gefährlich") and
PD Dr. Martin Groschup, Insel Riems (Thema: "BSE: deutsche Hysterie oder weltweites
Problem")

Wednesday, 19. October 2005

09:00 – 09:45 OPENING CEREMONY

Chair: D. Riesner / J.-P. Deslys

Reinhard Junker (Federal Ministry of Education and Research, BMBF)
Heinz Winterwerber (Major of the City of Düsseldorf)

09:45 Stanley Prusiner Biology of Prion Diseases

10:30 – 11:00 Coffee Break

**11:00 – 12:25 GENETICS, STRAINS AND
EMERGING PROBLEMS I**

Chair: NN

11:00	Glenn Telling	Transgenetic studies of chronic wasting disease – an overview
11:25	Jean Manson	The role of PrP in TSE strains and the species barrier
11:50	Martin Groschup	Biochemical and pathogenetic features of BSE and scrapie infections in ruminants
12:10	Umberto Agrimi	Strain variability in small ruminants prion diseases studied by transmission to the bank vole

12:25 – 14:30 Lunch & Poster Session

**14:30 – 15:25 GENETICS, STRAINS AND
EMERGING PROBLEMS II**

Chair: NN

14:30	Hubert Laude	Prion diversity in small ruminants
14:50	Olivier Andréoletti	Natural scrapie and BSE in genetically resistant sheep
15:05	Aline de Koeijer	BSE Risk in Europe: Towards freedom of disease?

15:25 – 16:30 PATHOGENESIS I

Chair: NN

15:25	Adriano Aguzzi	The role of the immune system in peripheral prion pathogenesis
15:50	Corinne Lasmézas	Pathogenesis of CJD in Non Human Primates
16:10	Herbert Budka	Neuropathogenesis of human prion disease

16:30 - 17:00 Coffee Break

17:00 – 18:00 PATHOGENESIS II

Chair: NN

17:00	Richard Bessen	Prion infection of mucosal tissue
17:15	Roberto Chiesa	Transgenic mice expressing the polymorphic variants of the PrP D178N mutation recapitulate the phenotypic variability of inherited prion diseases
17:30	Emmanuel Comoy	Increased susceptibility to oral contamination by BSE due to bacterial enteric disease
17:45	Lucien van Keulen	Pathogenesis of oral BSE infection in sheep

19:30 Reception Dinner and Dancing at K21 in the Ständehaus, Ständehausstr. 1, 40217 Düsseldorf

Thursday, 20. October 2005

8:00 – 9:00 Breakfast Meetings – by Beckman Coulter (CCD/room 8), Prionics (CCD/room 7) and IDEXX (CCD/room 6)

9:00 Kurt Wüthrich Structural Biology of the Cellular Form of Prion Proteins

09:45 – 10:40 STRUCTURE OF PrP AND MOLECULAR DETERMINANTS OF INFECTIVITY I

Chair: NN

09:45	Detlev Riesner	Conformational transitions and membrane interaction of posttranslationally modified PrP
10:05	Human Rezaei	Conformational dynamics and oligomerization pathways of prion protein investigated by rational mutagenesis
10:25	Holger Wille	Probing the structure of PrP ^{Sc} via heavy metal complexes and electron crystallography

10:40 – 11:10 Coffee Break

11:10 – 12:20 STRUCTURE OF PrP AND MOLECULAR DETERMINANTS OF INFECTIVITY II

Chair: NN

11:10	Valerie Daggett	Mapping the early steps in conversion of the prion protein
11:30	Rona Barron	High levels of infectivity can be present in tissues with little or no PrP ^{Sc}

11:50	Armin Giese	Cell-free generation of prion infectivity by serial PMCA
12:05	Christian Dumpitak	Influences of polysaccharides on aggregation and fibrillisation of the prion protein

12.20 – 14.20 Lunch & Poster Session

14:20 – 15:15 DECONTAMINATION

Chair: NN

14:20	Jean-Philippe Deslys	New insights in Prion decontamination
14:40	Bill Keevil	Use of episcopic DIC/EF microscopy for rapid <i>in situ</i> assessment of prion decontamination procedures of surfaces
15:00	Robert Somerville	Heat inactivation properties of TSE strains

15:15 – 16:40 CELL BIOLOGY OF PrP^C AND PrP^{Sc} I

Chair: NN

15:15	Byron Caughey	The most infectious scrapie particle, neuronal trafficking of PrP-RES, and effects of anchorless PrP on scrapie
15:40	Albert Taraboulos	Prions and raft lipids: cholesterol analogs reduce PrP ^{Sc} in ScN2a cells
16:00	Hermann Schätzl	New cell culture models for study of biogenesis and cellular clearance of prions
16:20	Jörg Tatzelt	Misfolding of PrP in the cytosol: mechanism of toxicity and the role of molecular chaperones

16:40 – 17:05 Short Coffee Break

17:05 – 17:50 CELL BIOLOGY OF PrP^C AND PrP^{Sc} II

Chair: NN

17:05	Sylvain Lehmann	Neural stem cells can propagate prions in culture
17:20	Sam Saghafi	PrP topology as a determinant of pro- or anti-apoptotic functions
17:35	Stefan Weiss	The 37 kDa/67 kDa laminin receptor as a promising target for therapy of prion diseases

17:50 – 19:00 THERAPY

Chair: NN

17:50	Hans Kretzschmar	In search of novel antiprion drugs
18:10	Fabrizio Tagliavini	Therapeutics for human prion diseases: current status and perspectives
18:30	Ronit Sharon	Delayed disease onset and induced neuroprotection in scrapie-infected mice treated with statins
18:45	Mario Salmona	Tetracyclines are effective in the treatment of peripheral prion infection

19:00 – 21:30 Poster Party in the Poster Exhibition Area

Friday, 21. October 2005

8:00 – 9:00 Breakfast Meetings – by Abbott Laboratories (CCD/room 7), Bio-Rad (CCD/room 8) and alicon (CCD/room 6)

09:00 Melitta Schachner Prion protein recruits its neuronal receptor NCAM to lipid rafts to activate p59^{fyn} and to

enhance neurite outgrowth

09:30 – 11:00 HUMAN PRIONS

Chair: NN

09:30	Bob Will	Variant CJD: past, present and future
09:50	John Collinge	Human prion therapeutics
10:10	Giorgio Giaccone	Tauopathy in variant Creutzfeldt-Jakob disease
10:25	Mark Head	Multiple PrP ^{Sc} confirmations in variant Creutzfeldt-Jakob disease
10:40	Piero Parchi	Molecular heterogeneity in human TSEs: PrP ²⁷⁻³⁰ typing and beyond

11:00 – 11:30 Coffee Break

11:30 – 12:30 DIAGNOSIS I

Chair: NN

11:30	Charles Weissmann	Transmission of prions
11:50	Michael Beekes	PrP ^{Sc} routing to muscles and strain differentiation in experimental scrapie and BSE
12:10	Inga Zerr	Improvement of the early diagnosis of Creutzfeldt-Jakob disease

12:30 – 14:00 Lunch & Poster Session

14:00 – 15:30	Chris Patermann	EC workshop and panel discussion: From laboratory to legislation (CCD/lecture hall)
---------------	-----------------	--

15.30 – 15.45 Short Coffee Break

15:45 – 16:20 DIAGNOSIS II

Chair: NN

15:45	Jaques Grassi	The use of anti-PrP antibodies for the diagnosis and therapy of prion diseases
16:05	Hervé Perron	A novel immunoassay for the detection of resistant prion protein (PrPres) in human plasma

16:20 – 17:30 Poster Prizes and Hot Topics

Chair: Chris Patermann / Detlev Riesner / Jean-Philippe Deslys

16:20	Poster prizes and presentations	
16:35	Paula Saá	Prion detection in blood by PCMA
16:50	Cindy Orser	A new diagnostic blood test
	N.N.	
	N.N.	

End of conference 17:30

Saturday, 22. October 2005

9:00 – 12:00 **Internal meeting of the NeuroPrion Executive Committee**
(CCD/room 7) (members only)
