NeuroNet
Spring-Meeting 2006

Recent Progress in the Genetic Analysis of Common CNS Disorders

31 March – 1 April 2006

Aula of the University of Bonn, Germany

Scope

Medical Genetics is presently experiencing a paradigm shift: In the past 20 years Mendelian phenotypes were the major tools to pin down the 'morbid anatomy of the human genome'. The knowledge of the complete human DNA sequence together with the availability of a host of polymorphisms, advanced methods in genetic epidemiology and powerful functional approaches now allow the genetically complex diseases to be approached successfully. This endeavor requires the close collaboration of scientists from a number of research fields providing clinical competence, the newest technologies in molecular genetics, and the most advanced methodology in information handling and analysis.

Experts in these fields will gather in Bonn to experience a path-breaking event in the field of human neuro-genetics.

The **NeuroNet** is part of the German National Genome Research Network (Nationales Genomforschungsnetz **NGFN)**. The international meeting will be held in the traditional Aula of the University of Bonn, focusing on the analysis of major genetically complex diseases of the central nervous system.

We look forward to welcome you for an exciting scientific event.

Organizing Committee

Peter Propping, Bonn, Coordinator
Thomas Gasser, Tübingen, Co-coordinator
Max Baur, Bonn
Armin Heils, Bonn
Thomas Jentsch, Hamburg
Matthias Riemenschneider, TU Munich
Olaf Rieß, Tübingen
Rainer Spanagel, Heidelberg/Mannheim
Andreas Zimmer, Bonn

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Program

Friday, 31 March 2006 (from 9 am until 7 pm)

Welcome Addresses
Matthias Winiger, Rector of the University of Bonn
Peter Propping, Bonn, Coordinator of the NeuroNet

Session 1: Towards gene identification in complex disorders of the CNS

Alzheimer disease

Identification of Alzheimer's disease genes: multiple approaches to a complex problem
Gerard D. Schellenberg/Seattle

New susceptibility genes in neurodegenerative diseases
Matthias Riemenschneider/Munich

Parkinson disease

Population based approaches for Parkinson disease
Peter Heutink/Amsterdam

Relevance of monogenic variants to Parkinson disease
Thomas Gasser/Tübingen

Epilepsy

Sodium channels and epilepsy: human mutations and mouse models
Andrew Escayg/Atlanta

Linkage studies in human seizure disorders
Armin Heils/Bonn

Affective disorder

New frontiers in the genetics of affective disorder
Francis McMahon/Bethesda

Systematic LD studies in confirmed chromosomal linkage regions
Johannes Schumacher/Bonn

Studies on pharmacogenetics of affective disorder
Bertram Müller-Myhsok/Munich

Session 2: Functional genomics in Mendelian variants of complex disorders

Alzheimer disease

Functional and biochemical genetics of Alzheimer's disease
Peter St. George-Hyslop/Toronto

Amyloid generation and intramembrane proteolysis by GXGD proteases
Christian Haass/Munich

Deciphering physiological function and metabolic pathways of Alzheimer's disease protein
Tobias Hartmann/Heidelberg

Parkinson disease

Protein kinases and familial Parkinson's disease
Mark Cookson/Bethesda

Molecular and cellular mechanisms of α-synucleinopathy
Philipp Kahle/München

Loss of function mutations in the Omi/HtrA2 gene in Parkinson's disease
Rejko Krüger/Tübingen

Session 2: *(continued)*

Epilepsy and Neurodegeneration

Neurodegeneration in mouse models
Thomas J. Jentsch/Hamburg

Ion channel defects in idiopathic epilepsies
Holger Lerche/Ulm

Saturday, 1 April 2006 (from 9 am until 5 pm)

Session 3: Alcohol addiction – animal models and their relevance to humans

The endogenous opioid system and drug addiction
Rafael Maldonado/Barcelona

Systematic analysis of susceptibility genes in drug research
Andreas Zimmer/Bonn

Candidate gene approach in alcohol research
Rainer Spanagel/Mannheim

Session 4: Biometrical solutions in the age of high-throughput genotyping

Two-stage designs in genome-wide association studies
Jaya Satagopan/New York

Linkage mapping and parameter estimation by MOD-score analysis: principles and extensions
Konstantin Strauch/Marburg

Session 5: Methods, concepts, and options in the clinic and the genetic laboratory

Long-range control of gene expression: emerging mechanisms and disruption in disease
Veronica van Heyningen/Edinburgh

Non-coding RNAs and their roles in diseases: hope or hype?
Alexander Hüttenhofer/Innsbruck

Diagnostic uncertainties and advances in psychiatric genetics: the path towards valid diagnoses
Thomas G. Schulze/Mannheim

Session 6: Animal models for common CNS disorders

Study of Na+channel epileptogenic mutations in transfected neurons and animal models
Massimo Mantegazza/Milan

Presenilins in pre- and post-synaptic plasticity
Jie Shen/ Boston

Characterization of inducible α-synuclein overexpressing mouse models
Olaf Riess/Tübingen

Animal models of Parkinson´s disease: induction and maintenance of dopaminergic neurons
Wolfgang Wurst/Munich

Concluding remarks
Thomas Gasser, Tübingen, Co-coordinator of the NeuroNet

Registration
No registration fee will be charged. Own responsibility for travel expenses is required.

Please register until **March 15th 2006**
via e-mail to raff@uni-bonn.de

Contact
Dr. Ruth Raff
Tel. 0228/287-2581
Fax 0228/287-2380
raff@uni-bonn.de

Accommodation
Please contact the tourist office:
Bonn Information
Tel. 0228/775000 and 19433
Fax 0228/775077
Email: bonninformation@bonn.de

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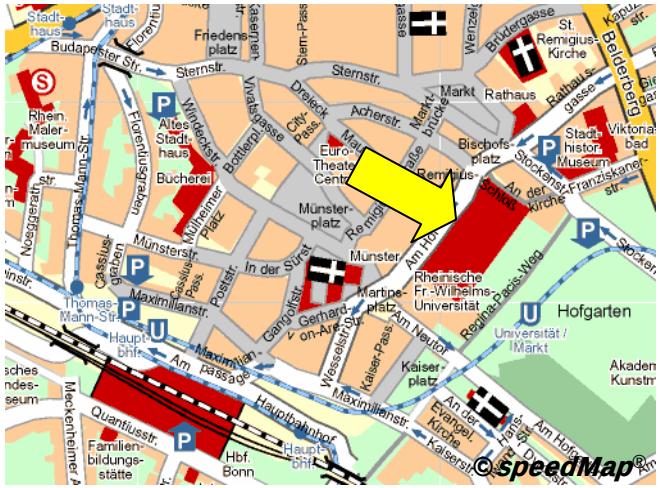
Meeting Location
Aula, Main Building
of the University of Bonn
Regina-Pacis-Weg 3
D-53113 Bonn, Germany



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